FM 100-5
OPERATIONS

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100-5

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TABLE OF CONTENTS

Page

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Page

Page

PREFACE

The mission of the United States Army is to protect and defend the Constitution of the United States of America. The Army does this by deterring war and, when deterrence fails, by achieving quick, decisive victory on and off the battlefield anywhere in the world and under virtually any conditions as part of a joint team. How the Army thinks about accomplishing its mission is the subject of this manual.

The US Army is doctrine-based doctrinally capable of handling large campaigns as well as combat in a variety of scenarios. FM 100-5 is the Army's keystone warfighting doctrine. It is a guide for Army commanders. It describes how to think about the conduct of campaigns, major operations, battles, engagements, and operations other than war. It addresses fundamentals of a force-projection army with forward-deployed forces. It applies to the Total Army, active and reserve components as well as Army civilians. Finally, FM 100-5 furnishes the authoritative foundation for subordinate doctrine, force design, materiel acquisition, professional education, and individual and unit training.

Army operations doctrine builds on the collective knowledge and wisdom gained through recent conduct of operations combat as well as operations other than war numerous exercises, and the deliberate process of informed reasoning throughout the Army. It is rooted in time-tested principles and fundamentals, while accommodating new technologies and diverse threats to national security.

This keystone manual links Army roles and missions to the National Military Strategy, of which power projection is a fundamental principle. Thus, force projection the military's ability to respond quickly and decisively to global requirements is fundamental to Army operations doctrine. The Army recognizes that it will normally operate in combination with air, naval, and space assets to achieve the overall strategic aim of decisive land combat. It also recognizes that operations outside the United States will usually be in conjunction with allies.

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Unless this publication states otherwise, masculine nouns or pronouns do not refer exclusively to men.

INTRODUCTION

The Army's doctrine lies at the heart of its professional competence. It is the authoritative guide to how Army forces fight wars and conduct operations other than war. As the Army's keystone doctrine, FM 100-5 describes how the Army thinks about the conduct of operations. FM 100-5 undergirds all of the Army's doctrine, organization, training, materiel, leader development, and soldier concerns.

Never static, always dynamic, the Army's doctrine is firmly rooted in the realities of current capabilities. At the same time, it reaches out with a measure of confidence to the future. Doctrine captures the lessons of past wars, reflects the nature of war and conflict in its own time, and anticipates the intellectual and technological developments that will bring victory now and in the future.

Winning wars is the primary purpose of the doctrine in this manual. Since wars are fought for strategic purposes, the doctrine addresses the strategic context of the application of force. Since battle is translated into strategic objectives by operational art, a major portion of the manual addresses the operational level of war. And, since all operations must be based on sound tactics, a major portion of the text covers tactics. The manual also addresses the related fields of joint and combined operations, logistics, the environment of combat, and operations other than war. But, its primary focus is warfighting and how commanders put all the elements together to achieve victory at least cost to American soldiers.

Doctrine derives from a variety of sources that profoundly affect its development: strategy, history, technology, the nature of the threats the nation and its armed forces face, interservice relationships, and political decisions that allocate resources and designate roles and missions. The advent of Active Defense in 1976 was preceded by the emergence of a new order of weapon lethality that was dramatically revealed in the Arab-Israeli War of 1973. The doctrine of that era also reflected a decreased role for the US Army in the evolving national strategy that followed the country's decade-long experience in Southeast Asia. The 1976 doctrine set as its priority the defense of NATO Europe against a quantitatively superior Warsaw Pact. It accepted force ratios as a primary determinant of battle outcomes and argued the virtues of armored warfare and the combined arms team.

By 1982, rising defense budgets and a stronger recognition of the possibility of worldwide commitment of Army forces combined with a sharpened appreciation of operational depth and maneuver to formulate a more fluid doctrine. The notion of stronger interservice integration, introduced as "air-land battle" in 1976, solidified to AirLand Battle doctrine in the 1982 version of FM 100-5. The ability to see deep translated into recognition of the need to fight deep a reality fully achieved after the publication of the Army's revised AirLand Battle doctrine in 1986, which emphasized operational art.

The Army's ideas about warfighting were evolving in a number of key areas: from service independence (an unequivocal claim in the 1954 FM 100-5) to service interdependence; from defense to offense and then to a more proper balance between the two; from battlefield linearity to greater fluidity; from set-piece battle to simultaneous operations throughout the depth of the battlefield. Throughout, doctrine reflects the adaptation of technology to new weapons systems and capabilities, organizations, missions, training, leader development, and soldier support. In this way, doctrine continues to be the Army's engine of change.

The 1993 doctrine reflects Army thinking in a new, strategic era. This doctrine recognizes that the Cold War has ended and the nature of the threat, hence the strategy of the United States as well, has changed. This doctrine reflects the shift to stronger joint operations, prompted by the Goldwater-Nichols Act of 1986. This doctrine considers the high quality of Army leaders and soldiers. It causes AirLand Battle to evolve into a variety of choices for a battlefield framework and a wider interservice arena, allows for the increasing incidence of combined operations, recognizes that Army forces operate across the range of military operations. It is truly doctrine for the full dimensions of the battlefield in a force-projection environment.

This doctrine retains the best of all the doctrine that has gone before and expands upon it as appropriate. The battlefield framework has been revised to allow practitioners of Army operations a wider range of options in which to organize their forces on the terrain. It also recognizes that the Army is the only national contingency force capable of achieving land dominance.

This manual offers a doctrine for full-dimension operations. And, despite the removal of the Army's tactical nuclear weapons from its inventories, this doctrine recognizes that the primary purpose of the Army is deterrence; but, should deterrence fail, the Army's purpose is to win the nation's wars by fighting as part of a joint force of the United States. The doctrine provides for a force-projection army that can build and sustain substantial combat power in remote regions of the globe.

As with all previous Army keystone doctrine, this doctrine provides direction for the Army and reflects its progress through the years. Baron von Steuben's 1779 Regulations for the Order and Discipline of the Troops of the United States (the antecedent of our modern-day FM 100-5) was not penned in a setting of well-ordered formations and well-disciplined troops; but it allowed for their creation and led to a highly professional Army that generations later stands foremost in the world. It reflects the collective wisdom of our Army against the background of history. It reflects the lessons learned from recent experiences and the setting of today's strategic and technological realities. It considers the nature of today's threats. It is a doctrine for the entire Army, one that seeks nothing less than victory for the United States—now and in the future.

vi CHAPTER 1

CHALLENGES FOR THE US ARMY

The United States Army exists to support and defend the Constitution of the United States. It does that by deterring war and, if deterrence fails, by providing Army forces capable of achieving decisive victory as part of a joint team on the battlefield—anywhere in the world and under virtually any conditions.

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THE ROLE OF DOCTRINE

Doctrine is the statement of how America's Army, as part of a joint team, intends to conduct war and operations other than war. It is the condensed expression of the Army's fundamental approach to fighting, influencing events in operations other than war, and deterring actions detrimental to national interests. As an authoritative statement, doctrine must be definitive enough to guide specific operations, yet remain adaptable enough to address diverse and varied situations worldwide.

Doctrine touches all aspects of the Army. It facilitates communications between Army personnel no matter where they serve, establishes a shared professional culture and approach to operations, and serves as the basis for curriculum in the Army school system. Doctrine permeates the entire organizational structure of the Army and sets the direction for modernization and the standard for leadership development and soldier training.

Conditions or events that would cause forces to be employed will challenge Army forces. Such conditions include drug trafficking, natural or man-made disasters, regional conflicts, civil wars, insurgencies, and intimidation by irrational and often ruthless extremists who have available for their use all manner of weapons and systems, including weapons of mass destruction.

Regional challenges will confront Army forces with an adversary whose system of beliefs interprets differently such fundamental ideas as right and wrong, the value of human life, and the concepts of victory and defeat. What appears to be fanatical to Army forces may be completely rational to their opponent. Understanding cultural differences is important if friendly forces are to establish the military conditions necessary to achieve strategic goals. Unlike the Cold War era when threats were measurable and, to some degree, predictable Army forces today are likely to encounter conditions of greater ambiguity and uncertainty. Doctrine must be able to accommodate this wider variety of threats. In so doing, the Army is prepared to respond to these worldwide strategic challenges across the full range of possible operations as part of a joint and combined team.

Given the global range of US national strategy, Army forces may be committed on short notice to action anywhere in the world to confront and overcome a variety of difficult challenges. Doctrine describes how these forces think about applying the basic principles of war and operations other than war and the conditions, circumstances, and influences in which they may

CONTENTS

be called upon to operate. The global realities of today are in a period of significant change. Army forces may find themselves called upon to fight under conditions of rapid force projection that can build to major sustained operations in war and peace or that can terminate quickly only to lead to other commitments elsewhere. Doctrine must be relevant to these conditions to be effective. It must be solid enough to weather the winds of turmoil and, at the same time, sufficiently dynamic to capture the relevant aspects of change.

Doctrine should reflect new technology and its potential for the future, as well as its effects on Army operations. The US has a major strength in technology. When fielded and incorporated into doctrine, technology affords a significant advantage to soldiers one that enables the employment of overwhelming and decisive combat power while minimizing risk to the force. Doctrine seeks to be sufficiently broad and forward looking so that it rapidly accommodates major technological opportunities to give soldiers a battlefield advantage. It sets the conditions to exploit technologies that afford a significant increase in lethality, offers major improvement for protection of forces, exploits key vulnerabilities of potential adversaries, and offers a capability that presents an adversary with multiple threats simultaneously. Advances in technology are continually changing the way warfare is conducted at a pace now greater than ever before. Microprocessing, miniaturization, communications, and space tech- nologies have combined to permit almost real-time intelligence and information sharing, distributed decision making, and rapid execution of orders from a wide variety of forces and systems for concentrated effect. At the same time, however, warfare remains a test of the soldier's will, courage, endurance, and skill. Freezing rain, muddied foxholes, blistering heat, physical exertion, and imminent danger will remain the domain of the soldier.

Resources and force dispositions—themselves reflective of national strategy—contribute to the development of doctrine. Decreases in forward-deployed Army forces necessitate an Army that is prepared to deploy forces anywhere in the world on short notice from the continental United States (CONUS) and from forward-deployed locations. The Army is likely at any time to be involved in contingency operations at home and abroad. Force projection replaces forward defense as a more likely employment of Army elements. Doctrine has to accommodate that reality. Army forces will have to deploy rapidly to operational areas. Doctrine cannot assume that Army forces are in place when the conflict begins. Doctrine must provide an understanding of and prepare Army forces for the difficulty of getting to the region of conflict with the appropriate force to accomplish the mission.

Doctrine seeks to meet the challenges facing the Army by providing the guidance to deal with the range of threats to which its elements may be exposed. It reflects the strategic context in which Army forces will operate, sets a marker for the incorporation of developing technologies, and optimizes the use of all available resources. It also incorporates the lessons of warfare and the wisdom of the Army's collective leadership in establishing a guide to action in war and operations other than war.

THE AMERICAN VIEW OF WAR

The Army reflects the highest ideals of the nation it represents—a nation built on a unique set of values and aspirations expressed in the Declaration of Independence and the Constitution. These enduring values influence virtually every facet of American society, its laws, domestic programs, and foreign relations. A special relationship exists within any nation among the government, the people, and the military; national values address this relationship.

The Constitution of the United States establishes the fundamental parameters of the national defense structure, while national attitudes affect the nature and employment of US armed forces. Members of the Army swear to support and defend the Constitution against all enemies, foreign and domestic. The Army serves as a repository of its national values and embeds them into its professional ethos. Proper subordination to political authority, loyalty, duty, selfless service, courage, integrity, respect for human dignity, and a sense of justice are all part of the Army's identity. These values directly influence the Army's behavior in peace and war.

The criteria for deciding to employ military forces exemplify the dynamic link among the people, the government, and the military. The people of the United States do not take the commitment of their armed forces lightly. They charge the government to commit forces only after due consideration of the range of options and likely outcomes. Moreover, the people

expect the military to accomplish its missions in compliance with national values. The American people expect decisive victory and abhor unnecessary casualties. They prefer quick resolution of conflicts and reserve the right to reconsider their support should any of these conditions not be met. They demand timely and accurate information on the conduct of military operations.

The responsibility for the conduct and use of military forces is derived from the people and the government. The Army commits forces only after appropriate direction from the National Command Authorities (NCA). In the end, the people will pass judgment on the appropriateness of the conduct and use of military operations. Their values and expectations must be met.

In an age of instant communication, capabilities available to the media have had increasingly important impacts on military operations. They serve as a conduit of information not only to the American public but also to the rest of the world. Dramatic visual presentations can rapidly influence public—and therefore political—opinion so that the political underpinnings of and operations other than war may suddenly change with no prior to the commander in the field. The higher the echelon of command, the more likely the impact of media coverage. Strategic direction and, therefore, the range of operations and their duration, may be dramatically affected.

THE STRATEGIC CONTEXT

The detailed formulation of national strategic direction is beyond the scope of this manual. Nevertheless, national military strategy, derived from national security policy, provides the basis for all operations.

THE LEVELS OF WAR

Fundamental to the Army's doctrine is an appreciation of the levels of war tactical, operational, and strategic—that define the entire range of military operations and the links between tactical actions and strategic objectives. The levels of war are defined more by the consequences of their outcome than they are by the echelon of involvement, although, as a general rule, the higher the echelon, the higher the level of war.

The levels of war apply not only to war but also to operations other than war. The strategic perspectives are worldwide and long-range. Strategy is concerned with national or, in specific cases, alliance or coalition objectives. The operational level provides the vital link between strategic objectives and tactical employment of forces. At the operational level, military forces attain strategic objectives through the design, organization, and conduct of campaigns and major operations. Tactical battles and engagements are fought to achieve operational results.

The tactical level of war is concerned with the execution of battles and engagements. On the battlefield, the primary focus of the tactical commander is winning battles and engagements in which he executes maneuvers and fires to achieve a specific objective. Tactical-level commanders are moved in and out of battles and engagements by higher commanders. Successes and failures at the tactical level, as viewed by the operational-level commander, set the conditions for operational maneuver. The interrelationships of the different levels of war are discussed in greater detail in Chapter 6.

NATIONAL SECURITY STRATEGY AND POLICIES

The United States approaches its global commitments with a national security strategy founded on deterrence and the capability to project power to safeguard its national security interests and objectives. Successful military operations may not, by themselves, achieve the desired strategic goals, but their failure will ensure eventual defeat. Operations across the full range of military activities must complement the other elements of national power directed to accomplish political aims. National security policies establish the strategic goals and objectives for specific situations.

NATIONAL MILITARY STRATEGY

The foundations of the national military strategy derive from the national security strategy. The US military fulfills four fundamental demands of the national security strategy:

- Ensuring strategic deterrence and defense.
- Exercising forward presence in vital areas.
- Responding effectively to crises.
- Retaining the national capacity to reconstitute forces.

The Army has a role in each of these requirements.

The national military strategy provides the following strategic principles to guide the employment of military forces:

- Readiness.
- Collective security.
- Arms control.
- Maritime and aerospace superiority.
- Strategic agility.
- Power projection.
- Technological superiority.
- Decisive force.

These principles reflect America's strengths and exploit the weaknesses of its opponents.

STRATEGIC GOALS AND THE USE OF FORCE

The military component of the national security strategy focuses on the use of military force in demonstration or operation as an element of national power. Its combination with other elements of national power seeks to preserve, to protect, and to advance the vital interests of the United States. Military operations in war or operations other than war influence, and are influenced by, other elements of policy. The objective of the military in war is victory over the opposing military force at the least cost to American soldiers. How that victory contributes to the overall policy objectives is determined before the war is joined. War makes the most manifest use of military force. However, successful military operations in any form require that military commanders have a clear sense of strategic policy goals and objectives, how the use of military force fits into the overall national security strategy, and the desired military end state.

THE STRATEGIC END STATE

Military force is only one component of national security strategy. When applied either to deter aggression or prosecute military operations, military force seeks to end conflict on terms favorable to US interests. The objective of military forces in war is victory over the opposing military forces at the least cost to US forces. Integrating that victory with other (economic, political, diplomatic) policy components is an important consideration for policymakers before the war is joined.

While military commanders focus on military victory, they must be aware of the broader concerns of strategy. Tactical and operational execution are designed to support a strategic end state that ensures a lasting victory. Military forces must be prepared to support strategic objectives after the termination of hostilities. In both war and operations other than war, military and specifically Army—units must integrate their efforts to support the overall policy scheme.

THE STRATEGIC ARMY

In peace or in war, the Army is the nation's historically proven decisive military force. A key member of the joint team, the Army serves alongside the Air Force, Navy, and Marine Corps to protect the nation's vital security interests. The Army's primary mission is to organize, train, and equip forces to conduct prompt and sustained land combat operations. It is the Army's ability to react promptly and to conduct sustained land operations that make it *decisive*. The Army is competent in many areas, such as nation assistance, counterdrug operations, security assistance, deterrence, and stability operations, that can combine with other elements of national power to achieve strategic effects favorable to US interests around the world. The Army's capabilities provide the nation a diverse, deployable, and sustainable set of options that include strategic and operational logistics and communications capabilities. Most of all, the Army represents the nation's only military force capable of prolonged land combat. Simply stated, the Army has strategic staying power.

The Army must be capable of *full-dimensional operations.* This means employing all means available to accomplish any given mission decisively and at the least cost—across the full range of possible operations in war and in operations other than war.

The Army must train to *fight as part of a joint, combined, United Nations, or interagency force.* Combatant commanders seek the power inherent in joint operations by synchronizing the complementary warfighting capabilities of all the services and supporting commands into a unified effort. Participation in joint training exercises and joint doctrine development is a prerequisite to joint capability. The Army develops and trains leaders to operate as part of joint and multinational staffs. Forward-presence forces support collective security arrangements and operate as part of multinational formations. Additionally, the Army enhances relationships with regional partners through

combined exercises, continual contacts, and nation assistance.

Army forces must be deployable. Commanders tailor force packages to accommodate land combat requirements of theater commanders in a variety of strategic contingency plans. Deployability is a product of strategic lift coupled with Army force readiness. To ease the burden on strategic lift, the Army pre-positions equipment on land and sea, improves military-related infrastructures in less stable regions, designs forces and equipment that are easily transportable, and trains forces to deploy quickly.

The Army must be expansible. The Army generates forces to respond rapidly to crises with a mix of trained and ready, active and reserve component forces representing the Total Army. How rapidly those forces can be generated depends on a number of variables, since time and training resources needed to hone a fighting edge and prepare combat teams for war are severely limited. Timely mobilization of reserve forces provides the means for sustaining conflict. Deployed forces require reserve component participation for combat arms, combat support (CS) and combat service support (CSS) across Army activities ranging from nation assistance to global war.

The Army must be capable of achieving decisive victory. The Army must maintain the capability to put overwhelming combat power on the battlefield to defeat all enemies through a total force effort. It produces forces of the highest quality, able to deploy rapidly, to fight, to sustain themselves, and to win quickly with minimum casualties. That is decisive victory.

THEATER STRATEGY

Theater commanders translate national, alliance, or coalition direction into theater strategies based on planning requirements for war or operations other than war. Theater strategies are reinforced as required by supporting combatant commanders. Theater strategies provide the basis for all operations plans (OPLANs) and are designed to achieve strategic end states.

THE TRAINING AND READINESS CHALLENGE

On the day of battle, soldiers and units will fight as well or as poorly as they are trained. Training to high standards is essential in both peace and war; never can Army forces afford not to train and maintain the highest levels of readiness. Every commander, every soldier, every unit in a force-projection army must be trained and ready to deploy. Leaders have the responsibility to train subordinates. This may be their most solemn responsibility.

The Army faces a unique set of challenges as it adapts to a world that has changed more broadly and fundamentally than at any other time since the end of World War II. The Army must continue to adapt to ensure success in a rapidly changing strategic environment. Now, more than ever before, it serves as a strategic Army, a land force that the United States and its allies rely on to meet global challenges.

CHAPTER 2

FUNDAMENTALS OF ARMY OPERATIONS

The US Army's warfighting doctrine reflects the nature of modern warfare. It applies the principles of war and combat power dynamics to contemporary and anticipated future battlefields within the strategic policy direction of our government. It is inherently a joint doctrine that recognizes the teamwork required of all the services and the extension of the battlefield in time, space, and purpose through all available resources and campaign design. US Army doctrine is compatible with joint doctrine. It recognizes that a joint force commander (JFC) has a variety of ground, sea, air, special operations, and space options available to accomplish strategic objectives. Nonethe-less, actions by ground-force units, in coordination with members of the joint team, will be the decisive means to the strategic ends.

While the conditions of warfare change with time and circumstance, the qualities of skill, tenacity, boldness, and courage have always marked successful armies and commanders and will continue to do so. Army doctrine exploits those qualities, together with technology, self-reliance, and the spirit of the offense that characterizes the American soldier. While reflecting the increased complexity and lethality of the modern battlefield, Army doctrine recognizes that advanced weapons and technologies are no better than the skill with which leaders and soldiers employ them against the enemy.

THE RANGE OF MILITARY OPERATIONS

The US seeks to achieve its strategic objectives in three diverse environments, using all elements of national power. The Army classifies its activities during peacetime and conflict as operations other than war. During peacetime, the US attempts to influence world events through those actions that routinely occur between nations. Conflict is characterized by hostilities to secure strategic objectives. The last environment that of war involves the use of force in combat operations against an armed enemy.

Often the Army will operate in all three environments at once. Whenever operations in these environments occur simultaneously, the Army integrates and coordinates their effects so they mutually support the attainment of strategic objectives.

OPERATIONS OTHER THAN WAR

Nations use all the resources at their disposal to pursue national objectives. The US promotes the self-development of nations through the measured use of national resources and assistance. The prime focus of the Army is warfighting, yet the Army's frequent role in operations other than war is critical. Use of Army forces in peacetime helps keep the day-to-day tensions between nations below the threshold of conflict. Typi-

CONTENTS

assistance, counterdrug operations, arms control, treaty verification, support to domestic civil authorities, and peacekeeping.

Americans prefer peace. Hostile forces, however, may seek to provoke a crisis or otherwise defeat our purpose by creating a conflict. At the point where diplomatic influence alone fails to resolve the conflict, persuasion may be required. However, at the point the military may be used to resolve the conflict, the US could enter a more intense environment in which it uses the military to pursue its aims.

US forces are used to deter enemy action. Their physical presence, coupled with their potential use, can serve as a deterrent and facilitate the achievement of strategic objectives. Should this deterrence fail, the US can use force to compel compliance. Regardless of the specific type of operation, a return to the environment of peacetime is part of the desired strategic goal.

WAR

Congress and the NCA may decide to protect our national interests with force or the threat of force. War may be of a limited or general nature. Limited war is armed conflict short of general war as was conducted during Operation Just Cause in December 1989. General war, such as World Wars I and II, involves armed conflict among major powers in which the total resources of the belligerents are employed and survival is at stake. In either instance, the Army, as part of a joint team, applies decisive force to fight and win with minimum casualties.

In concert with the other services, and at times with our allies, fighting and winning our nation's wars is the traditional role of the Army the one on which it principally focuses and trains. Even in war, the desired strategic goal remains directed at concluding hostilities on terms favorable to the US and its allies and returning to peacetime as quickly as possible.

STATES OF THE ENVIRONMENT	GOAL	MILITARY OPERATIONS	EXAMPLES
WAR	Fight and Win	WAR	• Large-scale combat operations . . . • Attack • Defend
CONFLICT	Deter War and Resolve Conflict	OTHER THAN WAR	• Strikes and raids • Peace enforcement • Support to insurgency • Antiterrorism • Peacekeeping • NEO
PEACETIME	Promote Peace	OTHER THAN WAR	• Counterdrug • Disaster relief • Civil support • Peace building • Nation assistance

The states of peacetime, conflict, and war could all exist at once in the theater commander's strategic environment. He can respond to requirements with a wide range of military operations. Noncombat operations might occur during war, just as some operations other than war might require combat.

Figure 2-1. Range of Military Operations in the Theater Strategic Environment

2-1 JOINT, COMBINED, AND INTERAGENCY OPERATIONS

The Army will not operate alone. The Army contributes a full range of unique capabilities for combat, CS, and CSS functions for sustained land combat operations as part of a joint, combined, or interagency team. This poses a dilemma for the enemy. As he attempts to avoid the efforts of one service, he opens himself to attack by another. Also, the nature of conflict in regional crises may involve coalitions that could be different from familiar, longstanding alliance structures. Cooperation with allies is the norm. This implies a need for interoperability, accommodation of allied objectives and capabilities, and some policy limitations.

In an environment of joint and combined operations, the Army will also operate with other agencies of the US Government. This is true not only when the military is the prime strategic option -- as it is in war -- but when other agencies are the preferred option and the military provides forces. Army forces must be prepared to conduct a number of operations that integrate warfighting and operations other than war with a variety of government and nongovernment agencies, other services, forces from other nations, and international agencies. Robust liaison will facilitate understanding, coordination, and mission accomplishment. Chapters 4 and 5 discuss joint and combined operations in detail.

INTEGRATION OF ARMY CAPABILITIES

The capabilities of the US Army are best realized through the integration of its many components working in concert with joint and combined forces.

THE TOTAL FORCE

To meet future missions with a smaller force, the US Army conducts operations as a total force of the active component, reserve components, and civilians acting in concert with other services and allies. The total force policy engenders public support in any operation requiring force projection from operations other than war, through war, to postconflict activities.

TYPES OF FORCES

The Army recognizes three general types of combat forces armored forces, light forces, and special operations forces (SOF). With their appropriate CS and CSS units, these forces provide a balanced and versatile force mix, increasing the options available to the field commander. Each type of force is unique and possesses varying degrees of deployability, sustainability, lethality, and survivability. A mix of these forces can provide the overwhelming combat power necessary to meet the unique strategic, operational, and tactical requirements of any contingency. For example, airborne and air assault forces may be inserted to force a lodgment, which will support the later deployment of armored and sustainment elements. To protect the lodgment in depth, SOF provide surveillance and target acquisition until armored forces are available. Each type of Army force complements the others as it contributes to the joint force.

BALANCE

The components of battle can be joined in a limitless array of complex combinations. Often, elements of a defense are within every offense; within every defense, an offense. Army forces maneuver to bring firepower on the enemy, and bring firepower on the enemy in order to maneuver. Army forces tend to focus on the enemy, but will use terrain for positional advantages when warranted. The commander, determined to defeat enemy forces on one day, may find himself responsible for feeding them the next. Unconventional and conventional warfare can exist side by side, the one flowing to the other and back again. Balance and a rich choice of options are key to success.

Army forces seek to increase their options while limiting those of their opponents. Successful commanders do not run out of options; they limit the enemy's options instead. Risks and gambles are part of option decisions. Field Marshal Erwin Rommel defined a risk as a chance you take; if it fails, you can recover. A gamble is a chance taken; if it fails, recovery is impossible. Only with the capability to parry and strike in any direction with sudden and overwhelming combat power can Army forces attain the ideal of quick, decisive victory.

While maintaining his balance, the commander does everything in his power to throw the enemy off balance, to strike the enemy with powerful blows from unexpected directions or dimensions, and to press the fight to the end. Deception, special operations, manipulation of the electromagnetic spectrum, firepower, and maneuver all converge to confuse, demoralize, and destroy the opponent. Denial of the enemy's reconnaissance, intelligence surveillance, and target acquisition activities is essential to protect friendly forces. High-tempo operations set the conditions for battle and

allow the commander to strike the enemy while prepared to adjust as conditions change. The commander strives never to be without options.

COMBINED ARMS

Army forces prefer to fight as a combined arms team. Combined arms warfare is the simultaneous application of combat, CS, and CSS toward a common goal. These arms and services are integrated horizontally at each command echelon, normally battalion through corps, and vertically between these command echelons. Combined arms warfare produces effects that are greater than the sum of the individual parts. The combined arms team strives to conduct fully integrated operations in the dimensions of time, space, purpose, and resources. Combined arms forces operate over increasingly large areas of the battlefield with less force density than in the past.

Modern combined arms warfare puts added stress on maintaining dispersed and noncontiguous formations. Army forces overwhelm the enemy's ability to react by synchronizing indirect and direct fires from ground and air-based platforms; assaulting with armor, mechanized, air assault, and dismounted units; jamming the enemy's communications; concealing friendly operations with obscurants; and attacking from several directions at once. The goal is to confuse, demoralize, and destroy the enemy with the coordinated impact of combat power. The enemy cannot comprehend what is happening; the enemy commander cannot communicate his intent nor can he coordinate his actions. The sudden and devastating impact of combined arms paralyzes the enemy's response, leaving him ripe for defeat.

The application of combined arms in this manner is complex and demanding. It requires detailed planning and violent execution by highly trained soldiers and units who have been thoroughly rehearsed.

TECHNOLOGY

The strength of the US is manifested in part by the breadth and diversity of its technology base. Advances in electronics, communications, automation, reconnaissance and surveillance, contamination avoidance, and precision-guided smart weapons and the exploitation of space-based capabilities have increased the lethality, range, accuracy, and reliability of our weaponry. The Army can best use technology in future conflicts only if it is integrated with doctrine. Understanding the relationship between doctrine and technology begins with the premise that doctrine must be the engine that drives the exploitation of technology.

The Army recognizes how warfare changes with the emergence of newer, advanced, and more sophisticated technologies. This affects its soldiers and the doctrine that governs how it fights. The Army also maximizes its combat power through the horizontal integration of new weapons or components, especially when they can be applied across a family of systems.

DISCIPLINED OPERATIONS

War is tough, uncompromising, and unforgiving. For soldiers, the rigors of battle demand mental and physical toughness and close-knit teamwork. Between the anxiety of battle, soldiers spend long hours doing routine but necessary tasks in the cold, wet weather and mud, moving from position to position, often without hot meals, clean clothes, or sleep. In war, the potential for breakdown in discipline is always present. The Army operates with applicable rules of engagement (ROE), conducting warfare in compliance with international laws and within the conditions specified by the higher commander. Army forces apply the combat power necessary to ensure victory through appropriate and disciplined use of force.

Discipline begins with trained leaders whose personal example, standard of conduct, concern for soldiers, and loyalty to subordinates create well-disciplined units and proper conduct of operations on the battlefield. The Army develops disciplined noncommissioned and officer leaders who teach their soldiers to do the right thing even during the absence of their leaders.

Exercising discipline in operations includes limiting collateral damage -- the inadvertent or secondary damage occurring as a result of actions by friendly or enemy forces. FM 27-10 provides guidance on special categories of objects that international law and the Geneva and Hague Conventions protect. It also governs appropriate soldier conduct in war. FM 41-10 provides guidance on control and treatment of displaced civilians.

A nation state that disregards the human rights of individuals makes warfare unnecessarily harsh, increases the resolve of its enemy, and changes the nature of the conflict. How the Army fights is a mark of what it is and what it stands for. Laws of war are only

effective in reducing casualties and enhancing fair treatment of combatants and noncombatants alike so long as trained leaders ensure those laws are obeyed. The commander ensures the proper treatment of prisoners, noncombatants, and civilians by building good training programs that reinforce the practice of respecting those laws and ROE.

Commanders build good training programs that force the practice of law-of-land warfare and ROE. ROE specify the circumstances and limitations in which forces may engage the enemy. Many factors influence ROE, including national command policy, mission, operational environment, commander's intent, and law-of-land warfare. ROE always recognize the soldier's right of self-defense. Properly written ROE are clear and tailored to the situation. ROE may change over the duration of a campaign. A force-projection army tends to face a wide array of ROE. For example, ROE during Operations Just Cause, Desert Shield, Desert Storm, and Provide Comfort were widely diverse; within each operation, the ROE were different and changed over time.

The commander's understanding of his mission and his higher com-mander's intent will help protect the force and decrease the chance of unnecessary casualties. Every soldier is responsible for preventing violations of the law-of-land warfare. Success results from leadership, discipline, esprit, and professional training.

THE FOUNDATIONS OF ARMY OPERATIONS

Fundamental to operating successfully across the full range of military operations is an understanding of the Army's doctrinal foundations—the principles of war and the tenets of Army operations.

THE PRINCIPLES OF WAR

The nine principles of war provide general guidance for the conduct of war at the strategic, operational, and tactical levels. They are the enduring bedrock of Army doctrine. The US Army published its first discussion of the principles of war in a 1921 Army training regulation. The original principles adopted by the Army, although slightly revised, have withstood the test of time. Today's force-projection Army recognizes the following nine principles of war.

Objective

Direct every military operation toward a clearly defined, decisive, and attainable objective.

The ultimate military purpose of war is the destruction of the enemy's armed forces and will to fight. The ultimate objectives of operations other than war might be more difficult to define; nonetheless, they too must be clear from the beginning. The linkage, therefore, between objectives at all levels of war is crucial; each operation must contribute to the ultimate strategic aim.

The attainment of intermediate objectives must directly, quickly, and economically contribute to the operation. Using the analytical framework of mission, enemy, troops, terrain, and time available (METT-T), commanders designate physical objectives such as an enemy force, decisive or dominating terrain, a juncture of lines of communication (LOCs), or other vital areas essential to accomplishing the mission. These become the basis for all subordinate plans. Actions that do not contribute to achieving the objective must be avoided.

Offensive

Seize, retain, and exploit the initiative.

Offensive action is the most effective and decisive way to attain a clearly defined common objective. Offensive operations are the means by which a military force seizes and holds the initiative while maintaining freedom of action and achieving decisive results. This is fundamentally true across all levels of war.

Commanders adopt the defensive only as a temporary expedient and must seek every opportunity to seize the initiative. An offensive spirit must therefore be inherent in the conduct of all defensive operations. The side that retains the initiative through offensive action forces the enemy to react rather than act.

Mass

Mass the effects of overwhelming combat power at the decisive place and time.

Synchronizing all the elements of combat power where they will have decisive effect on an enemy force in a short period of time is to achieve mass. To mass is to hit the enemy with a closed fist, not poke at him with fingers of an open hand. Mass must also be sustained so the effects have staying power. Thus, mass seeks to smash the enemy, not sting him. This results from the proper combination of combat power with the proper application of other principles of war.

Massing effects, rather than concentrating forces, can enable numerically inferior forces to achieve decisive results, while limiting exposure to enemy fire.

Economy of Force

Employ all combat power available in the most effective way possible; allocate minimum essential combat power to secondary efforts.

Economy of force is the judicious employment and distribution of forces. No part of the force should ever be left without purpose. When the time comes for action, all parts must act. The allocation of available combat power to such tasks as limited attacks, defense, delays, deception, or even retrograde operations is measured in order to achieve mass elsewhere at the decisive point and time on the battlefield.

Maneuver

Place the enemy in a position of disadvantage through the flexible application of combat power.

Maneuver is the movement of forces in relation to the enemy to gain positional advantage. Effective maneuver keeps the enemy off balance and protects the force. It is used to exploit successes, to preserve freedom of action, and to reduce vulnerability. It continually poses new problems for the enemy by rendering his actions ineffective, eventually leading to defeat.

At all levels of war, successful application of maneuver requires agility of thought, plans, operations, and organizations. It requires designating and then shifting points of main effort and the considered application of the principles of mass and economy of force. At the operational level, maneuver is the means by which the commander determines where and when to fight by setting the terms of battle, declining battle, or acting to take advantage of tactical actions. Maneuver is dynamic warfare that rejects predictable patterns of operations.

Unity of Command

For every objective, seek unity of command and unity of effort.

At all levels of war, employment of military forces in a manner that masses combat power toward a common objective requires unity of command and unity of effort. Unity of command means that all the forces are under one responsible commander. It requires a single commander with the requisite authority to direct all forces in pursuit of a unified purpose.

Unity of effort, on the other hand, requires coordination and cooperation among all forces even though they may not necessarily be part of the same command structure toward a commonly recognized objective. Collateral and main force operations might go on simultaneously, united by intent and purpose, if not command. The means to achieve unity of purpose is a nested concept whereby each succeeding echelon's concept is nested in the other. In combined and interagency operations, unity of command may not be possible, but the requirement for unity of effort becomes paramount. Unity of effort coordination through cooperation and common interests is an essential complement to unity of command.

Security

Never permit the enemy to acquire unexpected advantage.

Security enhances freedom of action by reducing vulnerability to hostile acts, influence, or surprise. Security results from the measures taken by a commander to protect his forces. Knowledge and understanding of enemy strategy, tactics, doctrine, and staff planning improve the detailed planning of adequate security measures. Risk is inherent in war; however, commanders must not be overly cautious. To be successful, commanders must take necessary, calculated risks to preserve the force and defeat the enemy. Protecting the force increases friendly combat power.

Surprise

Strike the enemy at a time or place or in a manner for which he is unprepared.

Surprise can decisively shift the balance of combat power. By seeking surprise, forces can achieve success well out of proportion to the effort expended. Rapid advances in surveillance technology and mass communication make it increasingly difficult to mask or cloak large-scale marshaling or movement of personnel and equipment. The enemy need not be taken completely by surprise but only become aware too late to react effectively. Factors contributing to surprise include speed, effective intelligence, deception, application of unexpected combat power, operations security (OPSEC), and variations in tactics and methods of operation. Surprise can be in tempo, size of force, direction or location of main effort, and timing. Deception can aid the probability of achieving surprise.

Simplicity

Prepare clear, uncomplicated plans and concise orders to ensure thorough understanding.

Everything in war is very simple, but the simple thing is difficult. To the uninitiated, military operations are not difficult. Simplicity contributes to successful operations. Simple plans and clear, concise orders minimize misunderstanding and confusion. Other factors being equal, the simplest plan is preferable. Simplicity is especially valuable when soldiers and leaders are tired. Simplicity in plans allows better understanding and troop leading at all echelons and permits branches and sequels to be more easily understood and executed.

THE TENETS OF ARMY OPERATIONS

Whenever Army forces are called upon to fight, they fight to win. Army forces in combat seek to impose their will on the enemy; in operations other than war, they seek to alter conditions to achieve their purpose. Victory is the objective, no matter the mission. Nothing short of victory is acceptable. The Army's doctrine describes its approach to generating and applying forces and force at the strategic, operational, and tactical levels.

The Army's success on and off the battlefield depends on its ability to operate in accordance with five basic tenets: *initiative, agility, depth, synchronization,* and *versatility*. A tenet is a basic truth held by an organization. The fundamental tenets of Army operations doctrine describe the characteristics of successful operations. All training and leadership doctrine and all combat, combat support, and combat service support doctrine derive directly from, and must support, the fundamental tenets. The US Army believes that its five basic tenets are essential to victory. In and of themselves they do not guarantee victory, but their absence makes it difficult and costly to achieve.

Initiative

Initiative sets or changes the terms of battle by action and implies an offensive spirit in the conduct of all operations. Applied to the force as a whole, initiative requires a constant effort to force the enemy to conform to commanders' operational purposes and tempos, while retaining freedom of action. It means depleting the enemy's options, while still having options of their own. This requires leaders to anticipate events on the battlefield so that they and their units can act and react faster than the enemy. Applied to individual soldiers and leaders, initiative requires a willingness and ability to act independently within the framework of the higher commander's intent.

In the attack, initiative implies never allowing the enemy to recover from the initial shock of the attack. Attacking commanders gain and maintain the initiative by surprise in their selection of the time and place of attack and the violence with which they execute it. They concentrate forces and execute with speed, audacity, and violence, continually seeking soft spots and shifting their main effort when required. They are prompt in transitioning from the attack to exploitation and back, if necessary. Commanders press the fight tenaciously and aggressively, accepting risks and pushing soldiers and systems to the limits of their endurance for as long as necessary. The goal is to create a fluid situation where the enemy loses the coherence of the defense. Retaining the initiative over time requires thinking ahead, planning beyond the initial operation, and anticipating key events on the battlefield hours, days, and weeks in advance.

In the defense, initiative implies quickly turning the tables on the attacker. Defending commanders act rapidly to negate the attacker's initial advantages. They gather intelligence to gain advance warning and anticipate likely enemy courses of action. They set the tempo and restrict, as much as possible, enemy options. Once the attacker commits to a particular course of action, defenders frustrate it and then preempt any adjustments by the attacker, thereupon seizing the initiative.

In battle, initiative requires the decentralization of decision authority to the lowest practical level. At the same time, decentralization risks some loss of synchronization. Commanders constantly balance these competing risks, recognizing that loss of immediate control is preferable to inaction. Decentralization demands well-trained subordinates and superiors who are willing to take risks.

In operations other than war, initiative implies controlling the environment rather than letting the environment control events. In responding to a natural disaster, commanders direct their forces to the critical points or facilities where prompt action is needed to stabilize the environment. The objective is to allow local governments to assume control at an appropriate time while the community regains control of basic services. Commanders direct their military activities in

combination with other elements of national and coalition power to restore stability.

Agility

Agility is the ability of friendly forces to react faster than the enemy and is a prerequisite for seizing and holding the initiative. It is as much a mental as a physical quality. Greater quickness permits the rapid concentration of friendly strength against enemy vulnerabilities. Forces may need to concentrate repeatedly so that by the time the enemy reacts to one action, another has taken its place, disrupting the enemy's plans and leading to late, uncoordinated, and piecemeal responses. This process of successive concentration against locally weaker or unprepared enemy forces enables smaller forces to disorient, fragment, and eventually defeat much larger opposing formations. To achieve such a defeat, leaders and units must be agile.

Friction is the accumulation of chance errors, unexpected difficulties, and confusion of battle that impede both sides. It can never be completely eliminated, but left unchecked, it can have a devastating effect on unit agility. To reduce friction, leaders must continually read the battlefield, know when to decide, and act without hesitation.

In operations other than war, as commanders perceive changes to their environment, they devise imaginative methods of applying their resources to those changes and act quickly to gain or maintain control of the environ-ment. For example, Army forces in disaster relief operations can use tactical vehicles and communication systems to reach isolated locations, to direct efforts, and to restore services to supplement the efforts of local governments whose normal resources are overwhelmed.

In peacekeeping operations, Army forces might defuse conditions that would otherwise lead to a resumption of fighting by recognizing the inherent dangers and by resolving grievances before they ignite into open combat. A situational awareness that perceives and anticipates changes in the environment, combined with the ability to act quickly within the intent of higher commanders, leads to an agility in operations other than war that is vital to successful outcomes.

Depth

Depth is the extension of operations in time, space, resources, and purpose. These factors vary by echelon and by constraints given to commanders. What is most important, however, is the fact that in any operation the Army must have the ability to gain information and influence operations throughout the depth of the battlefield. This ability highlights the joint nature of deep operations, which means participation by the other services.

To think in depth is to forecast and to anticipate so that the enemy can be attacked simultaneously throughout the depth of the battlefield. Commanders consider the effects of distance on operations. They determine how far operations must extend and how long their LOCs and those of the enemy will be. They consider the effect of depth on force densities throughout the length and breadth of their area of operations (AO). They calculate the effective range of supporting functions such as intelligence, fire support, logistics, air defense, and aviation.

Depth allows commanders to sustain momentum and take advantage of all available resources to press the fight, attacking enemy forces and capabilities simultaneously throughout the battlefield. Momentum in the attack and elasticity in defense derive from depth. Successful commanders are always concerned with the outcome of current operations and the anticipation of future operations; they think in depth, understanding that war is the province of uncertainty and chance. They look beyond the requirements of the moment and forecast the actions needed in the future.

In pursuit of operational objectives, commanders employ joint assets with Army forces to extend their ability to attack the enemy throughout the battlefield. Key are multiple modes of attacks on different targets in some reasonable sequence to achieve a common objective. By extending the depth of the fight, commanders force the enemy to fight on their terms. With joint resources, commanders observe enemy movements and activities and protect their forces throughout the theater. In conjunction with air and naval operations, they employ maneuver, fires, space assets, and SOF to attack the enemy.

In offensive and defensive tactical actions, commanders fight the enemy throughout the depth of his disposition with fires and with attacks on his flanks and rear. They attack committed and uncommitted forces and synchronize the attack of enemy artillery in depth with close operations. Such in-depth operations degrade the enemy's freedom of action, reduce his flexibility and endurance, and upset his plans and

coordination. Most importantly, these operations prevent the enemy from impacting on friendly actions. Commanders retain reserves and adjust their main efforts to exploit tactical opportunities and carry the fight into the depths of the enemy's formations or defenses. At the same time, commanders guard their own freedom of action by protecting their forces and the means needed to sustain combat operations.

In operations other than war, depth extends activities in time, space, resources, and purpose to affect the environment and the conditions that are to be resolved. Seldom are short-term situations conclusive. Commanders envision simultaneous activities and sequential stages that lead to a long-term outcome. For example, to solve the problem of feeding the local population, commanders may set up kitchens and distribute food in the first stage, assist in the reestablishment of commercial food distribution points in the second stage, and finally assist in improving road networks as the local government regains the ability to provide a steady supply of food. Similarly, peacekeeping operations may begin with an initial objective of observing a cease-fire, then move to support of an economic recovery program, and finally conclude in support of an international agency program that results in cultural assimilation and the resolution of the underlying conflict. Just as in war, commanders anticipate future situations and decide how to coordinate activities in depth that will achieve the desired end state.

Synchronization

Synchronization is arranging activities in time and space to mass at the decisive point. For example, integrating the activities of intelligence, logistics, and fire support with maneuver leads to synchronized operations. It means that the desired effect is achieved by arranging activities in time and space to gain that effect.

Synchronization includes, but is not limited to, the massed effects of combat power at the point of decision. Some of the activities that commanders synchronize in an operation, such as jamming enemy communications, suppressing enemy air defenses, and shifting reserves, might occur before the decisive moment. They may take place at locations distant from one another. Though separated in time and space, these activities must be well synchronized if their combined effects are to be felt at the decisive time and place. Synchronization seeks to gain overwhelming combat power.

Attacking commanders have synchronized their supporting fires with maneuver when they have shifted an artillery strike to a target series of enemy direct fire systems while maneuvering forces rapidly to the enemy's flanks and rear. Or, on a larger scale, commanders have synchronized their main and supporting attacks when the supporting attack takes place at precisely the right time and place to divert enemy forces and fires from the main effort as they strike the enemy. An operational commander has synchronized two major operations if one diverts the attention of the bulk of enemy forces, thus uncovering a key objective for decisive attack by the other.

Synchronization usually requires explicit coordination among the various units and activities participating in any operation. By itself, however, such coordination is no guarantee of synchronization unless commanders first visualize the consequences to be produced and how they sequence activities to produce them. Staffs must understand their commander's intent since they make a large part of the synchronization plan happen. Synchronization thus takes place first in the minds of commanders and then in the actual planning and coordination of movements, fires, and supporting activities. Rehearsals are key to successful execution of synchronized operations.

In a force-projection army, the ability to synchronize operations becomes paramount. When forces are not already forward deployed in the AO, the following considerations of early—and, if necessary, forced— entry become highly complex: protection, intelligence preparation, logistics, force buildup, infrastructure access, and the attainment of overwhelming combat power. Joint and combined operations demand careful synchronization of operations to effect intertheater and intratheater logistics flow, mutual support, efficient use of all available resources, and the ultimate application of force to achieve the strategic purpose.

Early decisions that put the operation in motion need to consider the array of branches and sequels that may ensue. The need to synchronize effects in the sequencing of operations is equally important in operations other than war. In all matters, the enemy will attempt to disrupt operations at the most inopportune time. Throughout the depth of the operation—from the CONUS base, through the many time zones and regions, to the lodgment, and to the points of decisive combat commanders will have to synchronize events to maximize the probability of success.

In the end, the product of effective synchronization is maximum use of every resource to make the greatest contribution to success. This is true in operations other than war as well as in war. Synchronization implies judgment in choosing among simultaneous and sequential activities. Commanders make this distinction clear to their staffs and subordinate commanders when effects of one activity are a precondition for subsequent action. To achieve this requires the anticipation that comes with thinking in depth, mastery of time-space-purpose relationships, and a complete understanding of the ways in which friendly and enemy capabilities interact. Most of all, synchronization requires a clear statement of the commander's intent.

Versatility

Versatility is the ability of units to meet diverse mission requirements. Commanders must be able to shift focus, tailor forces, and move from one role or mission to another rapidly and efficiently. Versatility implies a capacity to be multifunctional, to operate across the full range of military operations, and to perform at the tactical, operational, and strategic levels.

Versatility is to the decathlete as agility is to the boxer. The decathlete trains for and competes in ten separate events; the boxer, one. Army units are capable of rapidly realigning forces and refocusing on widely divergent missions. Disciplined units, highly trained and competent throughout the range of military operations, are the wellspring of versatility.

Versatility is the ability of tactical units to adapt to different missions and tasks, some of which may not be on unit mission-essential task lists (METL). Army forces have always been versatile; in World War II, Korea, and Vietnam, they adapted quickly to the environment and the tactics of the enemy. In a force-projection army, however, the demands for versatility increase. Operations Just Cause, Desert Shield, Desert Storm, and Provide Comfort introduced Army forces to dynamic environments that called for quick, successful action across a wide range of war and operations other than war. Forces must be prepared to move rapidly from one geographical region to another and from one type of warfare to another in quick succession.

The same is true for operations other than war. Military police (MP), for example, can provide a mobile, lethal show of force, restore civil order, process prisoners of war, and assist peacekeeping operations. Engineer units, with some reorganization and retraining, can transfer their skills from combat missions to other tasks such as rebuilding infrastructures or restoring water and power supplies. Field artillery or infantry units can be committed to fighting forest fires on short notice with minimal training.

Versatility denotes the ability to perform in many roles and environments during war and operations other than war. It allows for the smooth transition from one mission to another. Versatility requires competence in a variety of missions and skills. It suggests that all military organizations must have the ability to organize in different combinations of units and the capacity to redeploy from one area or region to another without the loss of focus. Versatility is the result of well-led, well-trained, and well-equipped forces; high standards; and detailed planning. Versatility ensures that units can conduct many different kinds of operations, either sequentially or simultaneously, with the same degree of success.

COMBAT POWER

Combat power is created by combining the elements of maneuver, firepower, protection, and leadership. Overwhelming combat power is the ability to focus sufficient force to ensure success and deny the enemy any chance of escape or effective retaliation. The enemy is killed, wounded, captured, or not capable of influencing future battlefield events; he is frozen by fear and uncertainty, confused, and isolated. Overwhelming combat power is achieved when all combat elements are violently brought to bear quickly, giving the enemy no opportunity to respond with coordinated or effective opposition.

Commanders seek to apply overwhelming combat power to achieve victory at minimal cost. They integrate and coordinate a variety of functions with the elements of combat power to sustain it at the operational and tactical levels. They strive to convert the potential of forces, resources, and opportunities into actual capability through violent, coordinated action at the decisive time and place. They attempt to defeat the enemy's combat power by interfering with his ability to maneuver, apply firepower, or provide protection. Commanders multiply the effects of combat power through the integrated efforts of combat, CS, and CSS arms, as well as the forces of the Air Force, Marine Corps, and Navy.

Unlimited resources are seldom, if ever, available to the commander. He fights with what he has against whatever force he is committed. But in so doing, he seeks to attain overwhelming combat power as best he can at the decisive point and time. Battle should not be a fight between two relatively equal foes. When tactics are successful, commanders gain a combat power advantage over the enemy and are able to defeat him quickly with minimal losses to their own troops. Army forces seek to overwhelm the enemy with a combination of factors, key among which are superior equipment, training, leadership, doctrine, and the qualities and courage of the American soldier. Combat is the traditional role of the Army, and the one on which it principally focuses and trains. Winning in battle depends on an understanding of the dynamics of combat power and putting them together to ensure defeat of the enemy.

THE DYNAMICS OF COMBAT POWER

Four primary elements—*maneuver, firepower, protection,* and *leadership*—combine to create combat power—the ability to fight. Their effective application and sustainment, in concert with one another, will decide the outcome of campaigns, major operations, battles, and engagements. Leaders integrate maneuver, firepower, and protection capabilities in a variety of combinations appropriate to the situation.

Maneuver

Maneuver is the movement of combat forces to gain positional advantage, usually in order to deliver—or threaten delivery of—direct and indirect fires. Maneuver is the means of positioning forces at decisive points to achieve surprise, psychological shock, physical momentum, massed effects, and moral dominance. Successful maneuver requires anticipation and mental agility.

Commanders may achieve the effects of maneuver without movement by allowing the enemy to move into a disadvantageous position. Moving and positioning units during deployment to a theater and within a theater prior to operations are forms of maneuver if this movement gains a positional advantage and can influence the outcomes of battles and campaigns. Maneuver is rarely effective without firepower and protection. Maneuver keeps the enemy off balance, protecting the force. Maneuver continually poses new problems for the enemy, rendering his reactions ineffective, and eventually leading to his defeat.

The positional advantages and staying power gained by ground maneuver forces are unique and cannot be replaced by other means. Army combat aviation assets can also offer the ground commander greater flexibility and unique advantages in reconnaissance, protection, and lethality; however, the temporary nature of these platforms cannot replace the permanence of ground forces. Maneuver and firepower are inseparable and complementary dynamics of combat. Although one might dominate a phase of the battle, the synchronized effects of both characterize all operations. Their joint use makes the destruction of larger enemy forces feasible and enhances the protection of a friendly force. Maneuver may also exploit the effects of nuclear weapons.

Firepower

Firepower provides destructive force; it is essential in defeating the enemy's ability and will to fight. It is the amount of fire that may be delivered by a position, unit, or weapon system. Firepower may be either direct or indirect. Integrated as part of the commander's concept, firepower includes the fire support functions that may be used separately from or in combination with maneuver to destroy the enemy. The extended range and precision of direct and indirect fire weapon systems, using laser-guided munitions and integrated target acquisition systems, make firepower more lethal than ever before. Firepower can be integrated with smoke or electronic warfare systems to disrupt or disorganize the enemy, producing specific physical and psychological effects.

Firepower effects occur at the strategic, operational, and tactical levels and must be synchronized with other attack systems against the enemy. Maximum firepower effects require the full integration of Army and joint-service systems and procedures for determining priorities; locating, identifying, and tracking targets; allocating firepower assets; and assessing fire effects. Finally, firepower is most effective when combined with the maneuver force.

Protection

Protection conserves the fighting potential of a force so that commanders can apply it at the decisive time and place. Protection has four components.

- The first component of protection is OPSEC and deception operations, which help keep the enemy from locating friendly units. Skillful reconnaissance and counterreconnaissance aid

force protection. Reconnaissance precedes all successful operations. Proper dispersion helps reduce losses from enemy fires as does the use of camouflage, discipline, counterreconnaissance, security operations, and fortified fighting positions. These measures help commanders protect their force from enemy observation and are used throughout the conduct of operations. These are mostly passive measures, but they should also be combined with such active measures as cunning, guile, and craftiness. At the operational level, air and missile defense, protection of air bases, and friendly force lodgment areas are all important activities associated with force protection.

• The second component of protection keeps soldiers healthy and maintains their fighting morale. It includes guarding their equipment and supplies from loss or damage. Tactical commanders take care of their soldiers' basic health needs and prevent unnecessary exposure to debilitating conditions. They consider the welfare, morale, and spirit of soldiers as they build cohesion and esprit in units. They supervise preventive maintenance and quick repair of equipment. Operational commanders ensure systems are in place for adequate health service support, quick return of minor casualties to duty, and preventive medicine. They provide effective systems for maintenance evacuation and rapid replacement or repair of hardware.

• The third component of protection, safety, is part of all combat operations and operations other than war. Commanders at all levels should embrace safety as a principal element in all they do. Sustained, high-tempo operations can put soldiers at risk. Strong command and high levels of discipline and training lessen those risks. Safe procedures represent a skill—a product of enforced standards and training. Safety in training, planning, and operations is crucial to successful combat operations and the preservation of combat power.

• The fourth component of protection is the avoidance of fratricide—the unintentional killing or wounding of friendly personnel by fire. The destructive power and range of modern weapons, coupled with the high intensity and rapid tempo of the battlefield, increase the likelihood of fratricide. Commanders must be aware of those tactical maneuvers and terrain and weather conditions that increase the probability of fratricide and take measures to reduce those probabilities. The primary mechanisms limiting fratricide are strong command, disciplined operations, detailed situational awareness, and anticipation of operations when conditions raise the probabilities. With this knowledge, commanders can exercise positive control over fires, control timing of troop movements, and use disciplined operational procedures. Commanders seek to lower the probability of fratricide without overly constricting boldness and audacity in combat.

Leadership

The most essential dynamic of combat power is *competent and confident officer and noncommissioned officer leadership*. Leaders inspire soldiers with the will to win. They provide purpose, direction, and motivation in combat. Leaders determine how maneuver, firepower, and protection are used, ensuring these elements are effectively employed against the enemy. Thus, no peacetime duty is more important for leaders than studying their profession, understanding the human dimension of leadership, becoming tactically and technically proficient, and preparing for war. These help them understand the effects of battle on soldiers, units, and leaders. The regular study and teaching of military doctrine, theory, history, and biographies of military leaders are invaluable.

Commanders are selected for their tasks because of their moral character, firm willpower, and professional ability. They must imbue their commands with their ideas, desires, energy, and methods. The personal influence and competence of the commanders of large joint and combined forces, field armies, corps, and divisions have a positive bearing on the outcomes of battles and campaigns.

Professional competence, personality, and the will of strong commanders represent a significant part of any unit's combat power. While leadership requirements differ with unit size and type, all leaders must demonstrate character and ethical standards. Leaders are first soldiers, and they must know and understand their subordinates. They must act with courage and conviction in battle. Leaders build trust and teamwork. During operations they know where to be to make decisions or to influence the action by their personal presence.

Strong leaders and trained, dedicated soldiers are the greatest combat multipliers. When opposing forces are nearly equal, the moral qualities of soldiers and leaders—sense of duty, courage, loyalty, and discipline, combined with stamina and skill—provide the decisive edge.

Once the force is engaged, superior combat power derives from the courage and competence of soldiers, the excellence of their training, the capability of their equipment, the soundness of their combined arms doctrine, and, above all, the quality of their leadership.

COMBAT FUNCTIONS

A variety of functions help the commander build and sustain combat power. Commanders integrate and coordinate these functions to synchronize battle effects in time, space, and purpose. The combat functions are —

- Intelligence.
- Maneuver.
- Fire support.
- Air defense.
- Mobility and survivability.
- Logistics.
- Battle command.

To synchronize forces and effects on the battlefield, Army leaders examine large, complex operations in terms of functional operating systems that exist at each level of war. At the tactical level the battlefield operating systems (BOSs), for example, enable a comprehensive examination in a straightforward manner that facilitates the integration, coordination, preparation, and execution of successful combined-arms operations. The BOS has other applications at the operational and strategic levels.

Intelligence

Intelligence is fundamental to effective planning, security, and deception. Intelligence operations are the organized efforts of a commander to gather and analyze information on the environment of operations and the enemy. Obtaining and synthesizing battlefield information prior to beginning operations is a vital task. Assembling an accurate picture of the battlefield requires centralized direction, simultaneous action at all levels of command, and timely distribution of information throughout the command. Intelligence operations may employ any of the unit's resources. Unit resources include units in contact with the enemy, cavalry units, patrols, air defense sensors, military intelligence (MI) units, reconnaissance units, engineer topographic units, field artillery radars, and attached liaison officers.

In force-projection operations, intelligence operations routinely rely on higher levels of Army command and significant joint intelligence capabilities for intelligence support. This is especially true prior to deployment and continues in theater if tactical units are offset from their anticipated battle area. Local population and government agencies also add to the intelligence picture.

In peacetime and in war, the MI effort uses signals, human, imagery, measurement, and signature collection and production and counter-intelligence services to provide commanders at all levels with the information they need to apply their available forces wisely, efficiently, and effectively. The MI effort also provides more specialized and detailed information to operators and staffs across the full range of MI disciplines to enable them to cooperatively fulfill the commander's intent.

Intelligence provided to the commander to aid his decision making must be clear, brief, relevant, and timely. Wartime, especially battlefield, support to the commander must be anticipatory and precise. The intelligence system should maximize and synchronize the support offered to the commander while minimizing the demands it makes on him.

The commander drives the intelligence effort. He must ask the right questions and focus the intelligence work. He must know the enemy; the commander's personal involvement and knowledge have no substitutes. He helps his intelligence system work effectively by clearly stating his intent and decisively designating his priority intelligence requirements. Targeting guidance need not always identify specific targets, but it must boldly prioritize the types of targets to attack. Finally, the commander must understand the capabilities and real limitations of the intelligence system to exploit its full effectiveness without holding unrealistic expectations.

Joint Publications in the 2-0 series discuss intelligence support to joint operations. The 34-series FMs discuss Army doctrine for intelligence support.

Maneuver

Maneuver is both an element of combat power and a principle of war and is discussed at length under those headings elsewhere in this manual. Maneuver is movement relative to the enemy to put him at a disadvantage. Commanders maneuver their forces to create the conditions for tactical and operational success. By maneuver, friendly forces gain the ability to destroy the enemy or hinder his movement through the direct or indirect application of lethal power or threat thereof. Tactical maneuver is done to gain operational results. As the commander develops his concept of operation and considers the maneuver of all his forces, he is careful to retain a balance in the application of maneuver, firepower, and protection. The nature of this balance establishes the priorities and relationships of maneuver to the other combat functions as the commander translates the art of his vision of operations to the science of detailed planning and execution of combat functions.

Maneuver refers to the employment of forces through offensive or defensive operations to achieve relative positional advantage over an enemy force to achieve tactical, operational, or strategic objectives. Generating combat power on the battlefield requires combining the movement of combat forces and employment of their direct fires in combination with fire support. The more immediate the combat in time and space, the more intertwined are maneuver and firepower. An assaulting platoon maneuvers under supporting fires, while putting forth a base of fire of its own. The higher the level, the more one establishes the conditions for the other. The breakout of American ground forces at St. Lo in 1944 was achieved in the wake of carpet bombing by the allied air forces; the encirclement of German forces by allied ground forces some time thereafter set up the punishing air attacks that decimated the trapped enemy. In either case, maneuver and firepower were parts of the same whole.

Fire Support

Synchronizing fires with maneuver is critical to the successful prosecution of combat operations. Commanders synchronize organic and supporting joint fire assets with their scheme of maneuver through the combat function of fire support.

Fire support is the collective and coordinated employment of the fires of armed aircraft, land- and sea-based indirect fire systems, and electronic warfare systems against ground targets to support land combat operations at both the operational and tactical levels. Fire support is the integration and synchronization of fires and effects to delay, disrupt, or destroy enemy forces, combat functions, and facilities in pursuit of operational and tactical objectives.

Generating effective firepower against an enemy requires that organic and supporting fires be coordinated with other combat functions such as intelligence, logistics, and battle command. Subordinate systems and processes for determining priorities, identifying and locating targets, allocating fires assets, attacking targets, and assessing battle damage must be fully integrated. Fire support provides for the planning and execution of fires so the right targets are adequately attacked to achieve the commander's intended effects.

Commanders are responsible for fighting their fire and maneuver assets. They fight much of their fires through the function of fire support, because much of the combat power of fires is not from within their chain of command but from external resources. Consequently, the ability to employ all available fires throughout the depth of the battlefield as an integrated and synchronized whole is done through the process of fire support planning, coordination, and execution. Fire support is the function that binds fire resources together so that the multiple effects of each asset are synchronized with the force commander's intent and concept of operation.

Air Defense

Air defense operations are key when generating combat power. They provide the force with protection from enemy air attack, preventing the enemy from separating friendly forces while freeing the commander to fully synchronize maneuver and firepower.

Air defense operations are performed by all members of the combined arms team; however, ground-based air defense artillery (ADA) units execute the bulk of the force-protection mission. These units protect deployed forces and critical assets within a theater area of responsibility (AOR) by preventing enemy aircraft, missiles, and remotely piloted and unmanned aerial vehicles (RPV/UAV) from locating, striking, and destroying them.

The threat to friendly forces and combat functions is significantly greater than in the past due to weapons of mass destruction and the proliferation of missile technology. The potential for catastrophic loss of soldiers, time, or initiative, forcing a change to operational objectives, requires a greater role for

theater missile defense when generating combat power at the operational level.

Air defense operations represent the Army contribution to counterair operations. The theater air commander is normally the area air defense commander. He integrates the capabilities of different services and establishes counterair ROE and procedures for the theater. A control and reporting center (CRC) usually exercises control of theater counterair operations.

Mobility and Survivability

Mobility operations preserve the freedom of maneuver of friendly forces. Mobility missions include breaching enemy obstacles, increasing battlefield circulation, improving existing routes or building new ones, providing bridge and raft support for crossing rivers, and identifying routes around contaminated areas. By denying mobility to enemy forces (countermobility), Army forces can destroy them with fire and maneuver. These efforts limit the maneuver of enemy forces and enhance the effectiveness of fires. Countermobility missions include building obstacles and using smoke to hinder enemy maneuver.

Survivability operations protect friendly forces from the effects of enemy weapon systems and from natural occurrences. Hardening of facilities and fortification of battle positions are active survivability measures. Deception, OPSEC, and dispersion can increase survivability. Nuclear, biological, chemical (NBC) defense measures are also key survivability operations.

Logistics

Logistics incorporates a variety of technical specialties and functional activities, to include maximizing the use of available host nation infrastructure and contracted logistics support. It provides the physical means with which forces operate, from the production base and replacement centers in the US, to soldiers in contact with the enemy. It applies across the full range of military operations and at all levels of war. As the scale and complexity of Army operations increase, the importance of logistics to their success increases too. Chapter 12 covers logistics in greater detail.

Battle Command

In modern battle, the magnitude of available information challenges leaders at all levels. Ultimately, they must assimilate thousands of bits of information to visualize the battlefield, assess the situation, and direct the military action required to achieve victory. Thinking and acting are simultaneous activities for leaders in battle.

Visualizing the battlefield is a continuing requirement for commanders. In larger tactical and operational formations, the headquarters normally is the focal point for the flow of information and the resulting planning efforts. Yet, commanders of neither large nor small units can visualize the battlefield and direct and synchronize the efforts of their units from a computer screen at the command post. Commanders are frequently away from their command posts and in the field to assess the state of battle face-to-face with subordinate commanders and their soldiers. Command remains a very personal function. The commander goes where he can best influence the battle, where his moral and physical presence can be felt, and where his will to achieve victory can best be expressed, understood, and acted upon. Commanders command while the headquarters and staff coordinate and make necessary control adjustments consistent with the commander's intent.

To command is to direct. Command at all levels is the art of motivating and directing soldiers and their leaders into action to accomplish missions. Command means visualizing the current and future state of friendly and enemy forces and then formulating concepts of operations to accomplish the mission. Commanders are aware that battle is two-sided and that the enemy is trying to influence the outcome. Commanders influence the outcome of battles, campaigns, and engagements by assigning missions; prioritizing and allocating resources; assessing and taking risks; deciding when and how to make adjustments; committing reserves; seeing, hearing, and understanding the needs of subordinates and seniors; and guiding and motivating the organization toward the desired end. In battle, command is being with soldiers, sharing their hardships, feeling their pride—and often their pain—and continuing to think and act to accomplish the mission with the least cost to them.

Command has two vital components—decision making and leadership.

- Decision making is knowing *if* to decide, then *when* and *what* to decide. These are tactical, operational, and strategic judgments. Being in command means anticipating the activities that will be put into motion once a decision is made; knowing how irretrievable

some commitments will be once put into motion; knowing the consequences of the act of deciding; anticipating the outcomes that can be expected from the implementation of a decision.

- Leadership is taking responsibility for decisions; being loyal to subordinates; inspiring and directing assigned forces and resources toward a purposeful end; establishing a teamwork climate that engenders success; demonstrating moral and physical courage in the face of adversity; providing the vision that both focuses and anticipates the future course of events.

As such, command is more an art than a science. In battle, it is often guided by intuition and feel gained from years of practice and study.

Command occurs from the location of the commander, whether he is at a command post, infiltrating at night with his forward light infantry elements, or in a main battle tank moving with the main effort. The battle command system must permit tactical leaders to position themselves wherever they can best command without depriving them of the ability to respond to opportunities and changing circumstances. For example, a division commander operating forward with a lead brigade must be able to visualize the battlefield and, if he so decides, be able to shift his main effort to capitalize on the unexpected success of a supporting attack without sacrificing the momentum of the division effort.

The need for flexibility in command is greatest for the committed maneuver unit commander. He can neither cope with constant direction from above nor can he constantly provide detailed direction to his staff and subordinate commanders. He and his organization must know the intent of the commander two levels above, understand the concept of operation and intent of the immediate commander, and know the responsibilities of flanking and supporting units. Then, the unit commander can fight his unit confidently. He can anticipate events and act freely and boldly to accomplish his mission with minimal guidance, particularly when he cannot communicate with his commander.

Control is inherent in battle command. Control monitors the status of organizational effectiveness and identifies deviations from set standards and corrects them. Commanders acquire and apply means to accomplish their intent. Ultimately, commanders provide a means to measure, report, and correct performance.

Control serves its purpose if it allows the commander freedom to operate, delegate authority, lead from any critical point on the battlefield, and synchronize actions across his entire AO. Moreover, the battle command system must support the ability of the commander to adjust plans for future operations, even while focusing on the current fight. Skilled staffs work within command intent to direct and control units and resource allocations to support the desired end. They also are alert to spotting enemy or friendly situations that require command change and see to it that the commander is so advised. The related tools for implementing command decisions include communications, computers, and intelligence.

Space-based systems provide commanders reconnaissance, surveillance, navigation, and positioning that greatly facilitate battle command. These systems significantly upgrade the speed and accuracy of information that commanders exchange with subordinates.

Reliable communications are central both to battle command and to control. General Omar Bradley once said, Congress can make a general, but only communications can make him a commander. Effective battle command requires reliable signal support systems to enable the com-mander to conduct operations at varying operational tempos. Signal planning increases the commander's options by providing the requisite signal support systems to pass critical information at decisive times, thus leveraging and exploiting tactical success and facilitating future operations. Nonetheless, battle command style is dictated by the commander, not by his supporting communication system.

Communication and technology may assist command, and accurate and timely intelligence may advise it. But at its core, in land combat, when distance to the enemy can be measured from meters to hundreds of kilometers, command remains an expression of human will the will embodied in the commander charged to accomplish the mission. The following historical example from the Battle of Gettysburg illustrates the leadership component of battle command.

JOINT CAPABILITIES AND MISSIONS

The Army does not fight alone. It integrates its efforts within the theater commander's unified

operations along with the other services, other national agencies, and often allied and coalition forces. By doing so, the Army's operational capabilities are enhanced, victory comes quicker, and friendly casualties are reduced. The capabilities described below are essential to success on the battlefield.

Space Operations

Army forces depend on space-based systems in joint and combined operations. Space-based systems offer significant political and technical advantages to force-projection operations, allowing quick access to certain capabilities without concern for national boundary restrictions. Normally, Army units are offset from an AO and rely on space-based systems to gain intelligence and to track deployment and early employment. Intelligence, early warning, communication, navigation, mapping, environmental monitoring, missile warning, weather, imagery, and data processing are all enhanced by uninterrupted space operations. Position and navigation satellites enable forces equipped with passive receivers to know their exact

Historical Perspective

At 1630, 2 July 1863, near Little Round top, a rocky hill near Gettysburg, Pennsylvania, Colonel Joshua Chamberlain's 358 remaining soldiers of the 20th Maine Regiment were ordered into a defensive line. Minutes later, they came under a violent frontal assault by the 47th Alabama Regiment. While the 20th Maine was repulsing this assault, an officer rushed up to Chamberlain and informed him that another large enemy force was moving to attack their exposed left flank.

Chamberlain immediately ordered a new defensive line at right angles to his existing line, shifting the entire regiment to the left and back, while maintaining continuous fire to the front, masking the movement of his left flank. Minutes later the 20th Maine was assaulted by the 15t Alabama Regiment. During that assault, the 20th Maine fired 20,000 rounds, suffering 30 percent dead and wounded. Chamberlain, wounded in the foot by a shell fragment, was bleeding. HIs right thigh was severely bruised where a musket ball had struck his scabbard. The 20th Maine miraculously withstood six charges before they ran out of ammunition.

Chamberlain, fearing an overwhelming, decrimating rebel attack, realized that by withdrawing he would be giving up key terrain and the battle too. To the astonishment of his company commanders, he ordered a bayonet charge with the enemy, beginning another fierce charge from only 30 yards away. The left half of his regiment began the charge, stunning the confederates before them. As they came abreast of their own right half,

Chamberlain raised high his saber and shouted, "Fix bayonets! Charge! Fix bayonets! Charge! Fix bayonets! Charge!" Running downhill like a thundering herd of raging animals, Chamberlain and his men had the clear advantage over the tired rebels. The Alabama men were shocked and fell back. A company of Chamberlain's men who had formed a screen line on the left flank began firing into the panic-stricken confederates who, even though they outnumbered the 20th Main 3 to 1, did not realize the strength of their numbers.

Fearing the worst for his troops, Oates, the commander of the Alabama regiments, ordered a breakout that turned into a rout and the capture of more than 400 of his men. Afterwards, Colonel Chamberlain was awarded the Congressional Medal of Honor. His actions serve as one of the finest examples of what a combat leader must be able to be and do to exercise effective battle command.

location. Military and civilian communication satellites provide responsive, worldwide, line-of-sight communications links to tactical forces.

The Tactical Exploitation of National Capabilities Program also provides reconnaissance, surveillance, and target acquisition support to tactical units. The Defense Meteorological Satellite Program and civilian environmental monitoring satellites provide weather and terrain information. The efficiencies resulting from the use of these space capabilities have dramatic effect on ground combat operations. For example, precise knowledge of the location of friendly units allows for rapid decision making, quick adjustments of fires, and greater protection of the force. When married with precise knowledge of enemy locations, this capability allows the Army forces to dominate the battlefield. These capabilities are further defined in four military space functions.

Force Enhancement. This function is analogous to combat support with space capabilities that improve the effectiveness of forces across the full range of military activities. It includes, but is not limited to, commun- ications, navigation, weather, and surveillance support. Commanders use the capabilities of force enhancement to reduce uncertainty, to facilitate command and control (C2), and to moderate the effects of friction.

Commercial and allied space capabilities may augment US military space systems if military capabilities are lost or unavailable. Immediate worldwide connectivity can be provided to all forces in combat, regardless of the level of commitment, physical location, weather conditions, or type of operation. For example, during Operations Desert Shield and Desert Storm and joint task force (JTF) operations in Somalia, satellite communications, military and commercial, provided the backbone for long-haul and intratheater connectivity. In regions with limited communications infrastructure, satellite communications are the only means to provide reliable, high-capacity services. Also, successful contingency operations rely on highly mobile satellite communications terminals for rapid insertion and flexible C2 links.

Force Application. This function is the conduct of combat operations from, in, or through space. Consistent with treaty obligations and national policy, this capability currently uses space- and ground-based defenses to provide protection from ballistic missiles. Technology development creates other capabilities to support national power projection through this function. With its potential global positioning, space-based firepower can suppress, neutralize, or destroy enemy offensive and defensive capabilities. In addition, the threat of potential space to ground fires could create a position of advantage at the strategic, operational, and tactical levels.

Space Control. This function is the conduct of offensive and defensive space operations directed against the enemy's space forces to gain and maintain space superiority. It ensures freedom of action in space for friendly forces while denying it to the enemy.

Space Support. Space support provides the military infrastructure to deploy and maintain military space systems. This function includes Army forces and activities responsible for maintaining telemetry, tracking and commanding space systems, recovering spacecraft, and providing logistics support for space, ground control, and launch elements.

As the United States makes further advances in space, the interdependence between space and Army systems will become even greater. Commanders must seize the opportunity to enhance ground capabilities, while guarding against vulnerabilities to enemy space operations. Joint Publication 3-14 and FM 100-18 discuss space operations.

Electronic warfare (EW) uses the electromagnetic spectrum to locate enemy units and facilities, to intercept enemy communications, and to disrupt enemy C2 and target acquisition systems at critical moments. Commanders employ joint EW systems as they employ fires. They use the effects of these systems to slow, misdirect, or confound enemy operations and synchronize them accordingly. EW operations occur concurrently at all levels.

Commanders can use joint EW to generate false signals of friendly forces that confuse, mask, or deceive. They synchronize these efforts with one another and with other functions—particularly maneuver, firepower, and air operations—to obtain the best results. Since the enemy has an EW capability also, commanders must degrade it while protecting their own. OPSEC, as a passive form of protecting the presence

and use of our EW system, is as important as the active measures taken.

When developing the concept of operation, tactical commanders should consider EW assets the same as they do artillery assets. They should deploy EW assets to committed units based on their missions, the capabilities of available systems, and potential enemy actions. Plans should reflect the relative scarcity of EW weapons, their limitations, and the transient nature of their effects. Joint Publication 3-51 discusses electronic warfare.

Interdiction

Interdiction destroys enemy forces, delays and disrupts their maneuver, and diverts their resources from the main effort. Interdiction is a means to direct combat power simultaneously throughout the depth of enemy forces and hasten enemy loss of initiative and ultimate destruction. Effective interdiction occurs when it is synchronized with maneuver to support the concept of operation of a single commander. All forces—ground, air, space, maritime, and special operations—are capable of interdiction. When their operations are integrated and synchronized with maneuver, they present the greatest dilemma to the enemy. The enemy cannot move against his objective without absorbing losses or eroding resources, nor can he synchronize his combat power. Joint Publication 3-03 discusses interdiction.

Air Operations

A primary consideration in employing joint forces is gaining and maintaining the freedom of action to conduct operations against the enemy. Control of the air gives commanders the freedom to conduct successful attacks that can neutralize or destroy an enemy's warfighting potential. A continuous effort exists to gain and maintain the capability to use the enemy's airspace to perform combat missions and to deny the enemy the use of friendly airspace. Control of the air enables land forces to execute operations without interference from an enemy's air forces. Without this control, tactical flexibility is lessened. Ground commanders must have access to sufficient airspace to employ Army helicopters, drones, and airborne sensors.

Strategic Attack.

Strategic attacks are carried out against an enemy's center of gravity, which may include national command elements, war production assets, and supporting infrastructure (for example, energy, transportation, and communications assets). Strategic attacks focus on degrading the enemy's capability and possibly its will to wage war. They are designed to affect the entire war effort rather than a single campaign or battle. Even nations without a significant industrial base, that rely on imported weaponry, may have vulnerable leaders or economic targets, ports, or sea lines of communications (SLOCs). In some less-developed states, transportation and communications nets may be primitive or extremely resilient, and enemy command elements may be difficult to target. In such cases, strategic attacks may not be as effective as against industrialized nations but nonetheless will have an impact on war-sustaining capabilities and help protect the force.

Counterair. US forces cannot count on air supremacy. Enemy air forces will contest US control of the air, creating conditions of temporary or local air superiority, air parity, or even temporary enemy domination in some areas. The objective of counterair operations is to gain control of the air environment. Counterair operations are inherently joint, with Army air defense contributing to the effort of the other services. Counterair operations protect friendly forces, ensure freedom to use the aerospace environment to perform other air missions and tasks, and deny the use of that environment to the enemy. The ultimate goal of counterair is to control the airspace to allow commanders to execute their operational plans. The three types of complementary and mutually supportive operations that establish and maintain air superiority are offensive counterair, suppression of enemy air defenses (SEAD), and defensive counterair.

Offensive counterair missions seek out and neutralize or destroy enemy air forces at the times and places the joint commander chooses. In these missions, US forces destroy the enemy forces shortly after hostilities begin. They conduct operations in the enemy's airspace and neutralize or destroy enemy air forces and the infrastructure supporting their air operations.

Suppression of enemy air defenses missions neutralize, destroy, or temporarily degrade enemy air defensive systems in a specific area by physical and electronic warfare. The goal of SEAD is to allow friendly forces to perform other missions effectively without interference from enemy air defenses.

Defensive counterair missions detect, identify, intercept, and destroy enemy air forces that attempt to attack friendly forces or penetrate friendly airspace.

These missions, combined with Army air defense systems, defend friendly LOCs, protect friendly bases, and support friendly land forces while denying the enemy the freedom to carry out offensive operations.

Air Interdiction. Air interdiction (AI) missions delay, disrupt, or destroy an enemy's military potential before it can be brought to bear effectively against friendly forces. AI can greatly benefit ongoing Army deep operations when synchronized with Army interdiction efforts. AI may be used against enemy surface forces; LOCs; command, control, and communications (C3) networks; and combat supplies. AI can also delay the arrival or buildup of enemy forces and supplies, disrupt the enemy commander's concept of operation and control of forces, or cause him to divert valuable resources to other uses.

Close Air Support. Close air support (CAS) missions support land operations by attacking hostile targets close to friendly ground forces. CAS can support offensive operations with preplanned or immediate attacks. All preplanned and immediate CAS missions require timely intelligence information. CAS missions require positive identification of friendly forces and positive control of aircraft. CAS can enhance ground force operations by delivering a wide range of weapons and massed firepower at decisive points. It can surprise the enemy and create opportunities for the maneuver or advance of friendly forces through shock action and concentrated attacks. CAS can also protect the flanks of friendly forces, blunt enemy offensives, enhance economy-of-force operations, and protect the rear of land forces during retrograde operations. Air Force, Navy, and Marine Corps aviation may be required to provide significant air support to Army forces during the entry stage of force-projection operations.

Maritime Operations

Operations in the maritime and littoral environment contribute to gaining and maintaining freedom of action, just as do air operations. Sea control gives commanders the freedom to project power through the strategic and operational movement of forces by sea, to protect SLOCs, to secure littoral areas from sea-based threats, and to execute air and land operations from the sea. Maritime functions that contribute to land operations are sea control and power projection.

Sea Control. US forces cannot count on unchallenged sea control. Enemy naval forces will contest control of the sea, seeking conditions of temporary or local sea superiority, parity, or even enemy domination in some areas. The purpose of sea control operations is to gain control of defined sea areas in the air, on the surface, and under the surface. Ultimately the purpose of sea control operations is to gain and maintain sea supremacy. Naval forces perform antiair warfare, antisubmarine warfare, and antisurface ship tasks in sea control operations.

Power Projection. Power projection supports air and land operations ashore through the application of offensive naval capabilities. These include carrier-based aircraft, amphibious assault forces, naval bombardment, and fleet ballistic and cruise missiles. Attacks from the sea to gain early entry or to support forces ashore can combine Army, Marine Corps, and Navy capabilities in both fire and maneuver throughout the contested battle space. For example, Navy and Army air defense, along with attack helicopter assaults from sea-based platforms, might occur to complement early entry Marine Corps forces. A Marine Corps forcible-entry capability is essential to opposed-entry operations from the sea. Naval forces perform strike warfare, amphibious warfare, and mine warfare in power-projection operations.

Surveillance and Reconnaissance

Army, Air Force, Navy, and Marine Corps surveillance and reconnaissance efforts are a part of national intelligence gathering and the systematic observation process. These missions are effected to collect information from airborne, space-based, surface-based, and subsurface sensors. Surveillance and reconnaissance operations provide a wide variety of information necessary to the development of national security policy, force posture, planning actions, force employment, and informed responses in times of crisis.

Surveillance operations are effected to collect information continuously from the air, land, and sea. *Reconnaissance operations* are directed toward specific targets. Through surveillance and reconnaissance, varied data, such as meteorological, hydrographic, geographic, electronic, and commun- ications characteristics, can be collected on any given area of the earth's surface. The products of these operations have strategic, operational, and tactical applications in both peace and war. Surveillance and recon- naissance combine at all levels to provide timely notification of hostile intent and actions as well as other information vital to the NCA and combatant commanders. These operations are instrumental in identifying the

composition and capability of hostile and potentially hostile forces. The US can thus assess the total capability of foreign nations to conduct war and tailor its forces to effectively counter the threat.

Airlift and Sealift

Army forces depend upon airlift and sealift to project their capabilities into the theater of operations and to sustain themselves throughout the assigned mission. They are critical elements of the Army's force-projection strategy. Airlift provides quick insertion and limited capability to move supplies and equipment for Army elements. Sealift provides the movement of large tonnages of supplies, heavy equipment, and weapons systems over the length of a campaign. Sealift also allows for the projection of power through amphibious landings and transport to ports within or adjacent to the theater of operations.

Airlift and sealift can be strategic (intertheater) or operational/tactical (intratheater). Both extend the range of options available to military forces engaged in operations in peace and war. They enable a strategic army to project forces anywhere in the world.

Airlift provides rapid and flexible movement of forces and limited amounts of equipment and supplies to the theater. It provides the best means of movement for replacement personnel and time-sensitive resupply and equipment. Airlift requires careful management, overflight agreements, host nation support, and security of air lines of communication (ALOCs).

Sealift complements airlift with its ability to move armored forces, heavy equipment, and the vast majority of the materiel for sustained operations. Although slower than airlift, sealift operations can begin without prerequisite diplomatic negotiations required for overflight. Sealift can concentrate forces and supplies near the theater of operations prior to their commitment. Sealift operations depend upon security of the SLOCs.

Special Operations

Special operations are actions conducted by specially organized, trained, and equipped military and paramilitary forces to achieve military, diplomatic, economic, or psychological objectives by unconventional means. US SOF consist of Army, Navy, and Air Force units. Special operations occur frequently in hostile, denied, or politically sensitive areas across the full range of Army operations. In operations other than war, they may substitute for the commitment of general-purpose military forces. Joint Publication 3-05 discusses special operations.

The theater SOF commander executes special operations as part of the theater commander's joint special operations effort. Preestablished command arrangements help determine how the combatant commander assigns missions to his SOF. The five principal missions of special operations are unconventional warfare, direct actions, special recon- naissance, foreign internal defense, and counterterrorism. In addition, SOF may participate in collateral activities of security assistance, humanitarian assistance, antiterrorism, counterdrug operations, personnel recovery, and special activities with other components.

Special operations during war and in other hostile environments usually occur deep in the enemy's rear area or in other areas void of conventional maneuver forces. They may also extend into the territory of hostile states adjacent to the theater. While each special operations action may be tactical in nature, its effects often contribute directly to theater operational or strategic objectives in support of the theater campaign plan. Special operations may seek either immediate or long-range effects on the conflict.

Typical SOF missions include interdicting enemy LOCs and destroying military and industrial facilities. SOF detachments may also have missions associated with intelligence collection, target acquisition, terminal guidance for strike aircraft and missile systems, personnel recovery, and location of weapons of mass destruction. These detachments conduct psychological operations (PSYOP) to demoralize the enemy and collect information in the enemy's rear areas. SOF organize, train, equip, and advise resistance forces in guerrilla warfare for evasion and escape, subversion, and sabotage. They add depth to the campaign, forcing the enemy to deploy significant combat forces to protect his rear area.

SOF are an invaluable tool across the range of military operations. In war and operations other than war they work with indigenous people in regions of conflict in support of US national interests. They are also highly capable of unilateral actions of extreme sensitivity. They can be relied upon for quick, decisive action at long ranges, as well as protracted operations in remote regions of the world.

Naval Special Warfare Forces. Naval Special Warfare (NSW) forces support the requirements of sea

control and power projection of theater conventional naval forces. Sea-air-land (SEAL) teams, SEAL delivery vehicle teams, special boat units, and NSW units comprise NSW groups. NSW forces conduct direct action, special reconnaissance, coastal patrol and interdiction, and beach intelligence for amphibious landings, in addition to foreign internal defense, counterterrorism, and military training with other nations.

Air Force Special Operations Forces. Air Force Special Operations Forces (AFSOF) provide aircraft for a variety of SOF missions: infiltrating, exfiltrating, and resupplying SOF; aerial refueling; PSYOP; and fire support. AFSOF units are special operations wings and groups, special tactics groups, and special operations weather teams.

Army Special Operations Forces. Army Special Operations Forces (ARSOF) have five types of units: Special Forces (SF), rangers, Army special operations aviation, PSYOP, and civil affairs (CA). ARSOF are effective in insurgencies and counterinsurgencies, contingency operations, peace operations, and counterterrorism operations. In peacetime, ARSOF participate in foreign internal defense efforts, in humanitarian and civic assistance programs, and in demonstrating US presence in troubled regions.

Special Forces units are organized, trained, and equipped to conduct special operations. They conduct all of the principal special operations missions and collateral activities.

Ranger units are rapidly deployable, airborne-capable, and trained to conduct joint strike operations with, or in support of, special operations units of all services. They can also conduct strike missions in support of conventional operations and can operate as conventional light infantry units when properly integrated with other combined-arms elements.

Army special operations aviation units are specialized aviation assets dedicated to conducting special operations missions. They provide a mix of short-, medium-, and long-range lift and limited light-attack capabilities. They support all principal and collateral mission areas and can conduct autonomous special reconnaissance and direct-action missions.

PSYOP forces are employed to influence favorably the attitudes and behaviors of specific foreign audiences and reduce the will, capacity, or influence of hostile forces to wage war or otherwise threaten US interests. PSYOP forces are equipped with audiovisual, print, loudspeaker, and radio and TV broadcasting capabilities to support friendly forces. Their activities often are sensitive and have significant political implications. Joint Publication 3-53 and FM 33-1 cover PSYOP in detail.

CA forces are employed to enhance relationships between military forces and civilian authorities and populations in friendly, neutral, or hostile AOs. CA forces are used to reduce civilian interference and to gain popular understanding, support, and compliance with measures required to accomplish the mission. CA forces engage in the type of activities associated with the operation of civil government and its institutions, population, and resources. Joint Publication 3-57 and FM 41-10 cover CA operations in detail.

TACTICAL UNITS

Army commanders use a variety of Army units to generate combat power. Commanders may task-organize maneuver units for a particular mission to improve their combined arms capabilities. Battalions and companies defend, attack, or execute retrograde operations in cooperation with other battalions and companies. These units support their maneuver with their own mortars and also receive fire support from field artillery units as well as the support of engineer, ADA, chemical, and EW units.

Division and brigade commanders fight combined arms battles and engagements employing every tactical means available. They integrate and coordinate different kinds of maneuver battalions, field artillery, aviation, engineer, ADA, tactical air support, and, sometimes, naval fire support to accomplish brigade and division missions. Thus, organic and supporting combat, CS, and CSS units all combine to make vital contributions to these operations.

Corps commanders combine arms in a similar fashion. They employ different types of divisions, separate brigades, and cavalry regiments. They arrange CS and CSS and integrate the support of other services to accomplish their missions. The corps may be responsible for operational planning and execution.

Corps, division, and brigade commanders get battalions to the right places at the right times and in the right combinations to defeat the enemy decisively. At all but most basic echelons, units consist of elements of

different branches. In this way, the strengths of each branch are enhanced.

Infantry

The five types of infantry forces are *light, airborne, air assault, ranger,* and *mechanized*. Each has its own special skills and specific organizational design, but all share the common mission to close with and destroy the enemy. Airborne and air assault forces are most readily distinguished by their means of entry into battle. Rangers serve both as a type of infantry and as SOF. Regardless of their mode of conveyance—by aircraft, by armored vehicle, by truck, or by foot—they all serve as a key element of combat power in close combat.

Light Infantry. Light infantry units can operate effectively in most terrain and weather. They may be the dominant arm in fast-breaking operations because of their rapid strategic deployability. In such cases, they can wrest the initiative early, seize and hold ground, and mass fires to stop the enemy in restrictive terrain. They are particularly effective in urban terrain. They can infiltrate and move rapidly to the enemy rear. Their tactical mobility is enhanced through the use of helicopter support and tactical airlift.

Light infantry units are capable of rapid deployment due to their austere but lethal design. They may operate throughout the battlefield and can be rapidly augmented for almost any task or situation. Light infantry units are especially useful for operations in difficult terrain and urbanized areas. They operate primarily at night or during periods of limited visibility in close or restrictive terrain. Light infantry units achieve decisive results through the employment of organic and supporting forces and weapons systems.

Airborne Infantry. Airborne infantry units have the greatest capability for large-scale force-projection operations. They rapidly deploy over great distances and conduct combined arms combat parachute or air landing assaults to seize and secure vital objectives. These units can be projected to virtually any objective area under almost any weather condition. Once on the ground, their capabilities and lethality are similar to other infantry units.

Air Assault Infantry. Air assault infantry units have great tactical and operational-level mobility. They train to fight across the range of military operations. Their significant antiarmor capability, coupled with their strategic deployability, makes them particularly well-suited as an early deploying force in contingency operations against heavy forces. They train and fight as a team in combination with air assault artillery and attack and lift aviation and are capable of penetrating deep into enemy territory to cut LOCs, seize airfields, destroy C2 nodes, block reinforcing units, or seize key terrain. Because of their agility and mobility, air assault infantry units are well-suited for covering force operations.

Ranger Units. Ranger units plan and conduct special military operations in support of national policies and objectives. They have the capability to support conventional military operations, or they may conduct operations independently when conventional infantry cannot be used. Ranger units are highly trained and well-disciplined and capable of being employed in any environment.

Mechanized Infantry. Mechanized infantry has the same mobility as armor forces, but less firepower and protection. Armor and mechanized infantry train and fight as a team to defeat enemy armored forces. When equipped with infantry fighting vehicles, the mechanized infantry can accompany tanks in mounted assault, although commanders must be careful in determining if, when, and where infantrymen must dismount to accomplish their mission. In the attack, mechanized infantrymen can act as fixing forces. In the defense, they act as pivot points for maneuvering tank-heavy forces. Mechanized infantry forces seek to integrate fast, protected mobility; lethal, vehicle-mounted, fire-support systems; and dismounted infantry skills into an effective fighting system that enhances the striking power of armor forces.

Armor

In mounted warfare, the tank is the primary offensive weapon. Its firepower, protection from enemy fire, and speed create the shock effect necessary to disrupt or defeat the enemy. Tanks can destroy enemy armored vehicles, infantry units, and antitank guided missile units. Tanks can break through suppressed defenses, exploit the success of an attack by striking deep into the enemy's rear areas, and pursue defeated enemy

forces. Armored units can also blunt enemy attacks and launch counter-attacks as part of a defense.

Light armored units can participate in a variety of Army operations, including rapid worldwide deployment, throughout a wide range of environments. Tactical missions include providing security, reconnaissance, and antiarmor firepower to the light infantry or airborne division. Light armored units also conduct standard armor operations, including the destruction of enemy forces in coordination with other arms.

Cavalry

The basic missions of cavalry units are reconnaissance, security, and economy of force. The ability of cavalry units to find the enemy, to develop the situation, and to provide the commander with reaction time and security also make them ideal for operating in an economy-of-force role. Cavalry forces can delay an attacking enemy as well as assist in a withdrawal. Air cavalry units perform the same missions of reconnaissance and security as ground cavalry and are organic to all cavalry units. Because of their greater mobility, air cavalry troops can reconnoiter and maintain surveillance over a much larger area in a shorter period of time than ground troops. During security operations, the air cavalry reconnoiters, screens forward and to the flanks of ground forces, and acts as a rapid reaction force.

Army Aviation

The firepower, agility, and speed of Army aviation permit ground com-manders to close with and defeat a wide range of enemy forces. Attack helicopters are ideally suited for rapid reaction in close, deep, or rear operations. They are also used where the terrain restricts or prohibits ground-force occupation. Attack helicopters can favorably influence the battle when ground forces are decisively engaged.

Scout helicopters provide a wide range of armed and unarmed recon-naissance and security capabilities. Whether autonomous or operating with a cavalry organization, air scout assets are essential in detecting and identifying enemy forces throughout the battlefield—an important source of real-time battlefield information. On-board radars and digital commun-ications are key in winning the information war at the tactical and operational levels.

Utility aircraft provide airmobile and air assault capabilities for dismounted infantry and ground antitank units. Dismounted forces achieve greatly increased mobility and can gain positional advantage when rapidly airlifted across the battlefield. As the commander requires, utility assets can quickly move towed artillery and light elements of the combined arms team and perform lifesaving medical evacuation (MEDEVAC) missions. Utility aircraft provide a full range of critical CSS to forces throughout the battlefield.

Field Artillery

A principal means of fire support in fire and maneuver is the field artillery. It not only provides fires with cannon, rocket, and missile systems but also integrates all means of fire support available to the commander. Field artillery can neutralize, suppress, or destroy enemy direct fire forces, attack enemy artillery and mortars, and deliver scatterable mines to isolate and interdict enemy forces or protect friendly operations. Field artillery units contribute to attacking the enemy throughout the depth of his formations and suppress enemy air defense systems to facilitate ground and air operations. As mobile as the maneuver force it supports, field artillery provides continuous fires in support of the commanders' schemes of maneuver.

Commanders exercise overall control of the fire support system. In integrating fire support into operations, their most important considerations are adequacy, flexibility, and continuity. In offensive operations, the main attack gets priority fire support, while long-range systems strike in-depth defenses, enemy reserves, or targets such as command posts, bridges, and enemy artillery. In the defense, a broader balance of fire support is necessary, but the main effort is still allocated stronger fire support. Commanders should change priority of support when they shift their main effort.

When maneuver forces conduct raids, deep attacks, or covering-force operations that take them beyond supporting distance of the main body, commanders must provide for their fire support. They may do so with supporting field artillery brigades, division artilleries, battalions, dedicated batteries, or mortars, depending on the size of the force and its mission.

Air Defense Artillery

ADA units provide tactical and operational-level force protection. Tactical air defense supports the overall objectives of divisions and corps. Operational air defense protects the force and supports joint service counterair objectives. The commander must retain organic capabilities to meet his inherent responsibility of force protection. ADA air and missile defense units protect maneuver forces and vital assets. Divisional ADA units normally provide forward area air defense (FAAD) protection for maneuver units conducting tactical combat operations. Corps ADA brigades have both FAAD and high-to-medium altitude air defense (HIMAD) missile defense units to protect corps assets as well as reinforce divisional ADA units.

ADA units make a variety of contributions to the battle. They contribute to the intelligence and electronic warfare (IEW) effort by gathering and disseminating information about the enemy air order of battle. They also contribute to the deep battle by denying the enemy his own reconnaissance and C2 aircraft. Additionally, they provide information on enemy surface-to-surface missile launch points to our deep-attack systems.

Engineers

Engineers operate as an integral member of the combined arms team throughout the theater of operations to provide full range of engineering capabilities. Engineers execute mobility, countermobility, and survivability missions in the forward combat zone and provide sustainment engineering for support forces. Topographic engineers provide terrain analysis and map products.

In offensive operations, engineers normally concentrate their efforts in supporting maneuver by breaching and crossing obstacles, assisting in the assault of fortified positions, and emplacing obstacles to protect the flanks of friendly attacking forces. In the defense, engineers reinforce the terrain to anchor the defense in critical areas, to maximize the effects of defenders' fires, to provide maximum protection to friendly fighting positions, and to facilitate the movement of counterattack forces. In all types of operations, engineers advise the maneuver commander on the effective use of terrain; construct, improve, and maintain routes, bridges, airfields, and other facilities; and reorganize to fight as infantry when required.

Military Intelligence

MI units are capable of exploiting signals, imagery, signatures, counterintelligence, and human intelligence to provide the commander with early warning of enemy intentions, intelligence-preparation-of-the-battlefield, situation development, target development, force projection, and battle damage assessment. They can also direct EW against enemy C2, fire direction, and electronic guidance systems, as well as provide critical counterintelligence support to friendly command force protection programs. These capabilities contribute both directly and indirectly to the effectiveness of combined arms operations.

Supporting Units

Other units perform CS or CSS functions in wartime and offer a variety of mission capabilities in operations other than war. Chemical, finance, legal, health service support, MP, personnel, maintenance, ammunition, public affairs, signal, supply, field services, and transportation units are all indispensable to operations and offer a range of capabilities necessary to a versatile force. They can comprise the early entry component in strategic deployments.

Health service support and transportation units were the first Army elements deployed to Croatia in 1992. MPs can facilitate large unit movements, assist in the restoration of civil order, provide counterdrug and antiterrorism capabilities, and support peacekeeping and disaster relief operations. Their organic combat power enhances their protection capability in both wartime and peacetime operations.

Signal units enable effective battle command. In force-projection operations, signal units make split-based operations possible through the employment of satellite downlink equipment, which is vital to the integration of the total force. Chemical units support the mobility and survivability battlefield function. Decontamination units, NBC reconnaissance elements, and smoke units contribute to force protection and mission accomplishment.

Each element of the Total Army is an important piece of the overall effort. Units are task-organized and employed according to the mission and the situation. They integrate their capabilities to ensure victory across the entire range of military operations, while providing the maximum protection and care to American soldiers.

CHAPTER 3

FORCE PROJECTION

Force projection is the demonstrated ability to rapidly alert, mobilize, deploy, and operate anywhere in the world. It is a key element of power projection—the ability of the nation to apply all or some of the elements of national power to act in crises, to contribute to deterrence, and to enhance regional stability. Power projection is a central element of US national security and national military strategy. The Army contributes to this strategy as part of a joint team through force projection. Force projection applies to the entire Army, active and reserve components, based in or outside the continental United States (OCONUS), and supported by civilians.

Combatant commanders often attempt to resolve crises within their AOR with forward-presence forces. A quick response may preclude escalation of crises. When such a response is not enough, the projection of forces from CONUS or another theater may be the only recourse.

During Operation Just Cause, the armed forces of the United States rapidly assembled, deployed, and conducted an opposed entry operation. The well-tailored force involved in this operation simultaneously seized multiple key targets in Panama, virtually eliminating organized resistance in the space of a few hours. The operation demonstrated the capability of the US military to project forces rapidly against opposition while synchronizing multiple elements of combat power.

Operations Just Cause and Desert Shield/Storm dramatically demonstrated the capability of the US to synchronize assets at all levels of war and to respond to crises by rapidly projecting forces. Though these operations differed in terms of the threat faced, forces involved, and duration of deployment, both provided insights for future force-projection operations.

Force projection is inherently joint in nature. Key to success is the synchronized employment of land, air, sea, special operations, and space forces and assets that provide the combatant commander a wide range of operational and tactical options.

Force projection usually begins as a contingency operation—a rapid response to a crisis. Alert may come without notice, bringing with it tremendous stress on soldiers and systems, accompanied by pressure from the media for information. In any event, rapid, yet measured response is critical. A combatant commander may be able to resolve the crisis and achieve theater aims faster by committing a smaller forward-presence force than by waiting for a larger but less timely response option.

The Army participates in force projection in both war and operations other than war. US forces may be either opposed or unopposed. Opposed operations require a lethal and survivable forcible entry capability with forces prepared to fight immediately upon entry. Unopposed operations may afford an opportunity following arrival in theater to continue to build combat

CONTENTS

Historical Perspective

During the 1991 Persain Gulf Conflict, the military was once again called upon to respond to crisis. In the early hours of 2 August 1990, an Iraqi force of more than 100,000 soldiers, spearheaded by three armored divisions, invaded Kuwait.

On 7 August, the NCA directed the deployment of US forces in response to Saudi Arabia's request for assistance. USCENTCOM responded rapidly, placing the first US solider on the ground within 31 hours of the initial alert order.

Operation Desert Shield was a two-phase operation. The first phase involved the initial deployment of forces to deter further Iraqi aggression and to defend Saudi Arabia. The second phase included the subsequent deployment of forces to resource the coalition with a robust counteroffensive capability that could evict the Iraqi Army from Kuwait. Although some units did not begin to deploy until late November, they were in place and combat-ready by early February 1991.

The tailoring of a proper force mix for this operation required the mobilization of 140,000 Army guardsmen and reservists - the largest mobilization since World War II. During this force-projection operation, the Army, supported by the other services, deployed a force equivalent in size to eight divisions and their supporting forces -some 300,000 soldiers and 60 days of supplies - from the United States and Europe, all within a period of six months.

Operation Desert Storm also consisted of two primary phases. CENTCOM initiated a 34-day air operation on 17 January 1991 to gain the initiative by attacking critical Iraqi targets, such as C2 facilities, missile sites, nuclear facilities, and chemical and biological weapons sites, before shifting its focus to the attrition of Iraqi ground units. These operations set the stage for land operations which began in the early morning hours of 24 February 1991. Less than 100 hours later much of the Iraqi Army in the Kuwaiti theater was destroyed, and the remainder was in flight. Organized resistance ceased, and the allied coalition won a victory of unprecedented dimensions.

The destruction of the Iraqi Army did not end the campaign in the Persian Gulf. Units rapidly began to focus on postconflict activities. Task Force Freedom began operations to restore Kuwait. The task force was charged with assisting in explosive ordance disposal, public safety, health service support, food and water distribution, sanitation, conversion of currency, reopening of banking and public school systems, and restoration of telephone, radio, and television service.

Task Force Freedom provided invaluable assistance in restoring the Kuwaiti infrastructure and returning a degree of normalcy to the country. Within occupied Iraq, for a period of more than six weeks, US Army forces provided humanitarian assistance, restored order, opened schools, and resettled almost 20,000 Iraqi refugees into Saudi Arabia.

Operation Provide Comfort, a joint and combined postconflict activity with extensive SOF involvement, focused on providing humanitarian relief and protection to the displaced Kurdish population of Iraq, following an unsuccessful attempt by Kurdish rebels to overthrow the Iraqi government.

Even as this postconflict activity continued, units no longer needed for the campaign began to redeploy to home stations and to reconstitute in preparation for future operations. Reserve component individuals and units no longer needed an active duty demobilized. The Persian Gulf campaign—a force-projection operation—thus went full cycle.

power, to train, and to acclimate. Both demand a versatile mix of light, armored, and special operations forces that are organized, trained, equipped, and poised to respond quickly. To ensure a rapid response capability, yet retain the flexibility to contend with situations requiring a larger military response, the Army designates units as *forward presence, crisis response, initial reinforcement, follow-on reinforcement,* and *reconstitution*. FM 100-17 discusses these units in detail.

FORCE-PROJECTION CONSIDERATIONS

Force-projection operations will challenge Army leaders. Early critical decisions, set against a backdrop of uncertainty and friction, will be required at every level—strategic, operational, and tactical—in war and in operations other than war. The commander and the force will routinely be required to plan and execute multiple concurrent activities. Decisions made early will begin to set conditions for successful mission accomplishment.

Mobilization and deployment may occur simultaneously or sequentially. Senior leaders will decide when and whom to mobilize based on national policy, force requirements, and strategic aims. Seldom will each of the three be clear at the outset.

The purpose of force projection is mission accomplishment and not merely entry into the area of operations (AO). The entire flow and commitment of force is focused to that end. Deployment itself—its method and embarkation and debarkation points—depends on the type and timing of available lift, urgency of the crisis, LOCs, and destination. Enemy capabilities, however, affect all of the above. Operational design and tactical execution in force projection are designed to overcome the latter, as well as any other obstacles that impede success.

Force projection is a complex process in which each action impacts upon many others. Units should not expect to move cleanly from one stage of force projection to the next. The initial entry of forces into the contingency area could lead immediately to direct combat. Deployed forces and LOCs require protection. Intelligence might lack detail, especially in the initial period, since tactical units must pull intelligence from national data bases. The capabilities and extent of cooperation from the host nation may be unknown. Missions might change at any point in the operation. For example, a humanitarian relief mission might change to peacekeeping, which in turn could transition to peace enforcement or actual wartime operations.

Despite the complexity of force-projection operations, Army forces are able to execute them successfully. The fundamentals discussed in Chapter 2 apply fully to force projection. The following additional key considerations also apply.

LETHALITY FOR THE DEPLOYING FORCE

An important strategic consideration for planning contingency operations that involve the potential for combat is to introduce credible, lethal forces early. Commanders should be prepared to deploy sufficient combat power to resolve a crisis on favorable terms. From a strategic perspective, the rapid insertion of highly lethal forces can convince a potential adversary that further aggression is too costly, paralyzing the enemy's initiative before he can consolidate his gains. These forces must be interoperable and flexible to take into account unforeseen circumstances as the main body closes into the objective area.

In all contingencies, the early entry force must possess the required lethality to accomplish the mission and to protect the force the moment it arrives in theater. Commanders cannot always depend on having the time to build up lethal forces in a theater. A tailored force with enough assets—such as SOF, airborne and air assault forces, attack aviation, electronic warfare assets, long-range precision munitions, and access to and influence over strategic and theater intelligence assets—might enable the deploying force to deter the enemy from attacking critical functions such as C2 nodes, logistics sustainability, and maneuver formations.

ANTICIPATION

The first rule of anticipation in a force-projection era is to expect to be alerted and deployed. Commanders everywhere in the Army must hold that view. Such a level of anticipation causes military forces to mentally and physically prepare for force projection. If units have been assigned a region of focus in peacetime, planning can occur long before alert and deployment. Appropriate actions include ordering and posting

Historical Perspective

During the weekend of 18-19 August 1990, the vice chief of staff of the Army and senior Department of the Army staff officers met with the commander of the XVIII Airborne Corps on the green ramp at Pope Air Force Base. The 82d Airborne Division had already prepared soldiers and equipment for immediate deployment to secure an air base in Saudi Arabia. Having considered the factors of operational METT-T, the immediate concern of the senior officers present was the threat of an Iraqi armor attack on the initial deploying force of infantrymen.

As the soldiers waited on the ramp for whatever aircraft would arrive, C-141, C5A, or Civilian Reserve Air Fleet (CRAF), the officers decided that sufficient protection was needed to deploy with the light forces. This was task-organization on the move. Sections or platoons—not company- or battalion-size units—were already on the ramp, waiting to be woven into the hastily improvised time-phased force deployment list (TPFDL). These were sections or platoons of Sheridans with antitank capability, long-range multiple launch rocket systems (MLRS), some deep intelligence satellite downlink equipment, and other BOSs. This additional equipment was critical to the operation in order to protect the force and hold the airhead that would be vital for the rest of the Army's deploying forces.

maps, studying available infrastructures, familiarizing soldiers with the language, training soldiers for deployment, and sensitizing soldiers to a particular culture. Key to successful anticipation is continuous force tracking, total asset visibility during deployment, and continuous intelligence preparation of the battlefield (IPB) of the contingency area.

In addition to direct broadcast from collection platforms, analyzed, predictive, and all-source intelligence (ASI) reports and assessments must be transmitted to the tactical commander. These activities help units maintain a high state of combat readiness. If possible, officers and noncommissioned officers should conduct an early leaders' reconnaissance of the AO.

Generally, decisions made after the alert as to size, composition, and deployment sequences of Army forces will begin to set the conditions for later success. Senior commanders and staffs must provide immediate and intense problem solving and forecasting, based on known METT-T. Commanders must ensure that they do not foreclose options the deployed force may need later. Proper planning should give the operational commander the resources and dispositions to deal with any eventuality that might jeopardize either mission accomplishment or protection of the force. Uncertainty and chance combine to confound the best plans. Even with extensive planning, the nature of the operation will often change significantly before satisfactory execution. Plans must be simple, deployment options redundant, and deployment flow sufficiently versatile to generate alternative options. Simplicity in planning and the ability to adapt will help ensure success.

Early deploying forces must have the combat capability to establish and protect lodgments from the moment of arrival. The ability to fight at the outset is crucial to the successful execution of the theater campaign plan since hostilities can begin at any time.

FORCE TAILORING AND TEAMWORK

Force tailoring is the process of determining the right mix and sequence of units. Forces on quick alert may have little opportunity to tailor forces. Predesignated load plans might not precisely match the contingency for which they deploy. Their force packages, however, should include sufficient combat power to sustain and protect them for the short term, wherever they might go. Follow-on forces can then be tailored to meet the specific concerns of the long-term mission.

Commanders consider the factors of METT-T, strategic lift, pre-positioned assets, and host nation support when they tailor forces. For an unopposed entry operation, for example, a commander might schedule logistics, engineer, MP, and special operations units to deploy early, particularly if faced with limited host nation support and infrastructure. Faced with an opposed entry operation, the commander would tailor his flow and mix differently, placing more combat units in the early deploying echelons. Commanders might find they need to substitute one type of unit for another or to add units that have never trained together before. This places a premium on early and continuous teamwork. Such early and continuous teamwork, emphasized by visits and other contacts, builds the cohesion in the new team that is essential for mission success. Whether planning for war or operations other than war, commanders must select a force composition appropriate for the mission, build the team, and plan for simultaneous deployment and expeditious employment of the force.

INTELLIGENCE

The rapid introduction of US forces requires accurate, detailed, continuous, and timely intelligence, especially during the critical early deployment decision windows. Therefore, key intelligence personnel and equipment must arrive in the theater early. Combatant commanders, in their peacetime regional intelligence assessments, and host nation support personnel should determine the availability of infrastructure such as roads and railroads, ports and airfields, materials handling equipment, construction materials, water, storage facilities, and similar resources. They should also assess the capabilities of potential enemies. In the early days of a crisis, uncertainties and higher risks dictate the need for rapid intelligence updates. Planning time is typically short, and units may have to operate in areas where few intelligence-gathering capabilities exist. Therefore, tactical commanders and units will not normally be able to produce answers to their intelligence requirements, but will rely on more senior echelons. They will need to gain timely intelligence from the full integration of national and theater assets.

Early deploying units usually face a maze of complex information requirements—some relating to the enemy, others to local laws, bureaucratic procedures, availability of facilities, and similar considerations. This ability of theater or national intelligence sources to fulfill tactical intelligence requirements and to remain responsive to dynamic, lower-echelon needs is key to the success of early deploying tactical echelons. Force-projection operations need accurate and responsive tactical intelligence. In any case, commanders must include in the tailoring considerations how to satisfy their intelligence requirements for the mission either by providing early arriving intelligence units, ensuring connectivity with national assets, or both.

BATTLE COMMAND

Force-projection operations will greatly tax battle command. The deployment phase of an operation may result in the physical separation of units in space and time, thus causing units to be separated from the next higher headquarters. Soldiers may arrive by air, while their equipment arrives by sea at a separate location, particularly if the deployment is unopposed. Some units might not arrive in the order anticipated, while others might report to new organizations upon arrival in theater. The enemy may attack unexpectedly before deployment is complete. This may cause some commanders to fight without their entire complement of forces present.

Commanders must contend with the simultaneous challenges of deployment, entry, and combat, retaining the capability to adjust to evolving conditions of each. Simplicity and the ability to adapt and adjust are key considerations. Tactical commanders must adapt to the nature of the deployment flow and prepare plans that rapidly build combat power, provide for security of the force, and facilitate future operations.

Commanders and staffs must have robust command and intelligence means during force projection. Army and joint systems must accurately track friendly forces and forecast their arrival in the theater so that commanders can react to last-minute adjustments. These forecasts provide flexibility and help commanders keep their options open. Space-based systems can greatly facilitate the commander's real-time knowledge of unit status and visibility of other key assets, as well as supplement other intelligence systems. Establishing adequate communications networks may require linking with compatible commercial systems.

Commanders require home station, en route, and in-theater communications means that are secure, reliable,

and timely. They should be compatible with the mix of supporting forces and services within the region, including civilian agencies of the US Government. Units must rapidly establish communications channels with other organizations and services participating in the operation.

Battle command in force projection requires considerable initiative at the small-unit level since command echelons are frequently separated. It also requires leaders to wargame possible deviations from plans caused by deployment problems or enemy action. A teamwork-oriented command climate that encourages initiative and a reasonable tolerance for unexpected friction-caused imperfections will ensure success.

LOGISTICS

Successful force projection requires tailorable, flexible logistics. The nature of logistical projection depends upon the size of the force, the maturity of the theater, the availability of in-theater stockage, and host nation support capabilities. Existing theater infrastructure greatly affects both logistics and operational planning. The availability of ports, roads, and other assets will affect the sequencing of units and tempo of entry operations. Chapter 14 discusses infrastructure considerations in detail, while Chapter 12 describes host nation support.

Force projection may require the development of forward support bases, intermediate staging bases, and lodgments in theater with associated over-the-shore or airflow requirements. Contracted logistics may provide some initial support and augment military capabilities. Split-based logistical operations reduce the burden on the deployment flow and preclude unnecessary stockage in theater. A split-based logistics concept relies on assured communications systems that allow much of the logistics base to remain in CONUS, receive and act on information, and send necessary supplies forward.

Logistical capabilities are critical during postconflict activity. Logistical units are often among the last to redeploy, due to the continuing need for their services during this turbulent period. Logistical units may become the main effort during and after conflict termination.

TRAINING

Demanding and relevant training is important. When alerted to deploy, units build upon home-station training by focusing on missions and conditions they expect to encounter during a contingency. Given time and mission requirements, commanders might choose to use better training facilities at home stations, thus deploying some units later. Commanders and units must also anticipate soldiers being separated from their equipment during movement and plan training accordingly. Leaders must use time to their advantage by conducting mission-essential individual and collective training during deployment.

Although training begins at home stations, it continues throughout the entire operation. Units continue to train to standard and to rehearse following arrival in theater and throughout the conduct of operations as time, the enemy, and other conditions permit. Lessons learned should be passed from unit to unit and from early deploying units to those deploying later. This task requires extensive planning and coordination even when units are not in combat. In order to maintain readiness for future operations, training continues after hostilities cease. Units must consider the priority for ranges and the allocation of training ammunition for weapons that need to be test-fired, zeroed, and bore-sighted.

COMBINED OPERATIONS

Combined operations occur when two or more nations combine their efforts in a military operation. Force-projection operations will almost always involve operations with other nations. Measures taken to achieve unity of effort and mutual trust—such as interoperability, well-understood C2 structures, liaison, and interpreters—greatly facilitate operations. Commanders and soldiers should be sensitive to cultural differences that may impact on operations. Assets that can facilitate a smooth transition to combined operations may already be in the theater. Among these could be the US ambassador and his country team, US foreign-area officers stationed in country, and US civilian contractors who may know the area well and are proficient in the local language.

MEDIA IMPACT

The impact of visual media on the conduct of military operations is substantially greater today than in any previous time. During the Vietnam War, the American public was exposed for the first time to the horrors of war on the evening news. However, the scenes covered by the news media during that war were recorded on film or tape, edited, then shown as much as 48 hours later. Despite the great impact those scenes had on the public, they were not nearly as powerful as the impact global network news has as it transmits ongoing action live into the homes of millions of people around the world. News coverage of the destruction on the Kuwait City-to-Basrah road during Operation Desert Storm clearly had an impact on military commanders and policymakers. When hostilities begin, tactical field commanders are normally separated from the media's visual presentations, which are usually available at the theater and national levels. Since these images might condition the tempo of the operation, tactical commanders need to be aware of them so they can better anticipate.

The importance of understanding the immediacy of the impact of raw television coverage is not so that commanders can control it, but so they can anticipate adjustments to their operations and plans. Providing early and continuous access to the press throughout the force-projection stages enhances operations and strengthens public support. Misuse of this element can endanger units and weaken public support. Within the command, an effective internal information program also enhances the morale of soldiers, reinforces training and safety messages, and corroborates media reports for both soldiers and their families.

POSTCONFLICT CONSIDERATIONS

Even during the predeployment activity stage, senior Army and joint commanders, together with the State Department and other agencies, consider issues related to the strategic end state, postconflict activities, and the transition to peace. Early decisions regarding the mobilization of specific assets and their place in the deployment flow provide an important foundation for operations after the fighting stops. At every level, analysis of the strategic objectives for the operation should always include consideration of the anticipated consequences of the war to help smooth the transition from active combat to postconflict operations.

FORCE-PROJECTION OPERATIONS

Force-projection operations follow a general sequence, although the stages often overlap in space and time. These operations seldom begin with a clear idea of the entire package or purpose. Often, deployment requirements develop by bits and pieces, with a few false starts and subsequent large adjustments. Enemy actions further change the equation. Force-projection operations do not end when units arrive in theater. They end when the mission is completed and the last soldier returns.

Commanders should assume no set arrangement of events. Rather, they should be prepared to deal with many activities. They should conceptualize a logical flow through stages, as long as the force remains physically and mentally prepared to adjust as the situation develops. The stages usually include mobilization (if necessary), predeployment activities, deployment, entry operations, operations, postconflict or postcrisis operations, redeployment, and demobilization.

These stages may not be distinct. Activities of one stage will often blend with another. Force buildup and preparation for major operations, for example, may blend into deployment and entry operations. Also, combat operations might begin well before the entire force arrives in theater. The following paragraphs discuss potential stages of force-projection operations.

MOBILIZATION

Mobilization is a process in which the armed forces augment the active component capability in preparation for war or other national emergencies. Mobilization includes activating all or part of the reserve components as well as assembling and organizing personnel, supplies, and material and certifying the proficiency of individuals and units.

The Army Mobilization and Operations Planning and Execution System (AMOPES) provides a guide for Army mobilization planning and participation in joint operations. This system supports the rapid mobilization of selected assets for specific, limited contingencies such as Operation Just Cause. It also accommodates the extended mobilization necessary to

support large, protracted conflicts such as World War II. The mobilization system includes five levels:

- Selective mobilization.
- Presidential selected reserve call-up (PSRC).
- Partial mobilization.
- Full mobilization.
- Total mobilization.

These levels might not be implemented sequentially. Rather, a flexible decision-making process referred to as graduated mobilization response (GMR) controls the pace and extent of mobilization. GMR triggers readiness and response actions incrementally to provide timely yet reversible steps to increase the US national security emergency preparedness posture. The actual mobilization flow for a unit includes five phases: *planning, alert, home station, mobilization station,* and *port of embarkation.* Details of the mobilization process are in FM 100-17.

Historical Perspective

The projection of American military power to the Republic of Korea in July 1950 provided a costly lesson in strategic and military unreadiness. Ambiguous national policy had clouded the issue of South Korea's inclusion under the US defense umbrella when North Korean armies crossed the 38th Parallel on 25 June. Lack of planning for conventional war in the new nuclear age, together with postwar occupation concerns and weak defense budgets, had left the US Army understrength and undertrained to project forces quickly.

In June 1950, active Army strength stood at 593,000, with 10 active divisions: 5 in the CONUS general reserve (140,000 soldiers), 4 in Japan (111,000), and 1 in Germany. All units were far understrength. Infantry regiments had only 2 of their 3 battalions, most artillery battalions had only 2 of their 3 firing batteries, and organic armor was generally lacking.

Planners had to fill out the Far East divisions by stripping the CONUS general reserve of infantry battalions, other untis, and individual replacements. In two months, the strength of the general reserve had fallen to 90,000, losing most of its capacity to react to a major contingency. Since the active Army, with global defense responsibilities, could not focus on Korea alone, reserve component troops and units were called to duty. They were used both to reconstitute the depleted general reserve and to provide a reservior of units and individuals to reinforce Far East Command and strengthen European defenses. Eight Army National Guard divisions were federalized during the course of the conflict.

Fortunately, the United States could project forces initially from Japan. But the four divisions under General Douglas MacArthur's Far East Command were severely undermanned, and the early US response was perilously weak. Task Force Smith, the initial, lightly equipped contingent of the 24th Division, suffered heavy casualties against enemy armor in a costly delaying action. Three of the Japan-based divisions deployed in July 1950, the fourth being stripped for fillers and replacements before eventually following. Only one additional division could be spared from unready and depleted CONUS general reserve deploying in September 1950. But the buildup was painful.

Years of undertraining and neglected weapon development placed Army units in battle against a better-equipped enemy that was superior in numbers. The time needed to fill out and train the half-strength Guard division delayed deployment of the first two Guard divisions to March 1951. One year after the outbreak of hostilities, the Eight Army reached the level of eight divisions, which maintained for the duration of the conflict.

MacArthur's brilliant amphibious flanking stroke at Inchon in September 1950 broke the initial North Korean thrust. But almost three years of arduous combat up and down the Korean peninsula - ending in a stalemate in July 1953 - was the price paid for American unreadiness to meet the force-projection challenges of American's global leadership responsiblities.

PREDEPLOYMENT ACTIVITY

Successful force-projection capabilities rely on a foundation of fully trained, well-led, properly equipped and sustained units and soldiers. All units in the Army, whether active or reserve components, within CONUS or OCONUS, are an integral part of the force-projection strategy. Thus, unit METLs must reflect appropriate mobilization and deployment tasks. Also, unit training must emphasize and integrate critical aspects of force projection.

When required to deploy forces in response to a crisis, the Army tailors them based upon the mission assigned by the combatant commander and available resources. The theater campaign plan will specify the command, intelligence, and logistics relationships among the services. It should also specify any combined operations relationships, if known. Intelligence preparation must begin as early as possible to allow commanders to develop adequate plans. The deploying force achieves this through split-based operations, which integrate CONUS-based national systems with forward-deploying tactical systems. Anticipatory logistics planning during this stage is key to successful execution of later stages. While always important, OPSEC is critical during this stage to deny the enemy intelligence that he may use against friendly forces during deployment and entry operations.

Army commanders must prioritize lift requirements consistent with METT-T. The combatant commander or JFC can then establish the sequence in which Army units should deploy relative to the movement of forces of the other services. Early decisions on sequencing will solidify the time-phased force and deployment data (TPFDD), determine the time required to deploy the force, and initialize the theater distribution plan.

DEPLOYMENT

The Joint Operation Planning and Execution System (JOPES) provides the umbrella structure for the deployment of Army units. Deployment planning tools must allow commanders to adapt to rapidly changing circumstances. Sealift and airlift assets are limited yet critical to the successful projection of the force. The Army therefore makes every effort to integrate the capabilities of the deploying force with host nation support and forward-presence capabilities to maximize the available airlift and sealift. US Army forces are trained, structured, and postured for rapid deployment. Light forces are based close to major airports. Armored forces are located near major rail nets, assisting rapid displacement to seaports.

Army forces, capable of striking worldwide regardless of weather, terrain, location, or threat, provide the predominant ground element to joint forces. Commanders must balance the factors of METT-T against available airlift and sealift assets to determine the composition of the initial response force. When time is critical, light and SOF Army units may be the best for initial deployment.

Light-armored, cavalry, and selected aviation units can deploy more quickly than heavier armored units and enhance the firepower and flexibility of early deploying forces. Armored forces, if required, will

simultaneously upload for deployment by sea. Each crisis will have unique demands, causing commanders to balance the speed with which light and SOF units can deploy against the greater lethality and protection provided by heavier forces. In deployment, commanders must maintain versatility and agility in force mix, combat capability, sustainment, and lift, along with the need to forecast future events that call for decisions early in the deployment stage.

ENTRY OPERATIONS

The requirements of entry operations following deployment will vary. Entry may be in direct support of host nation or forward-presence forces. In some instances conditions may dictate that operations be conducted in the absence of either. Entry may be either opposed or unopposed. Commanders sequence combat units and supporting structures into the contingency area in a manner that enables them to gain and sustain the initiative and protect the force.

Unopposed Entry

Whenever possible, US forces seek unopposed entry, entering the theater peacefully with the assistance of the host nation. Early deploying units may flow through airports or seaports into a lodgment area. From this area, they will prepare to assist forward-presence or host nation forces, protect the force, reconfigure, build combat capability, train, and acclimate to the environment. Entry during operations other than war will normally be unopposed. However, even in an apparently benign entry operation, protection of the force remains a critical command consideration.

Opposed Entry

An opposed entry requires combat operations to land deploying forces in the theater. If the circumstances are right, the entry and combat operations stages could combine in a *coup de main*, achieving the strategic objectives in a single major operation. Operation Just Cause, conducted in Panama in 1989, is such an example. When this type of operation is not possible, Army forces will typically gain, secure, and expand a lodgment as part of the joint team before conducting combat operations. The operation is at greatest risk during opposed entry operations in which units move directly to combat operations. Often this will be the first contact between US forces and the enemy.

Commanders make maximum use of joint capabilities to ensure early lethality and security of the force by engaging the enemy in depth. Early entry forces may have to move immediately to combat operations to take advantage of an opportunity, protect the force, or even conduct retrograde operations to gain time for additional force buildup. Situations are likely to arise with little or no advance warning. Opposed entry operations will require the full synchronization of joint capabilities in order to place large ground forces in the theater.

Early Entry Decisions

The initial decisions in force-projection operations will often be the most critical. These decisions normally fall into an early deployment time window. Once decisions are made and the operation begins, adjustments, while necessary, become more difficult. Thus, it is vital that commanders and staffs focus immediately on deployment, early entry, and force placement in the theater decisions. The essential trade-off is between projecting force rapidly and projecting the right mix of combat power and resources to accomplish the mission. The selection of the earliest arriving units will have far-reaching implications.

If the right units deploy early, they may help the force maintain a balanced posture, ready to respond to unforeseen events. In areas with substantial infrastructure, the commander may more heavily weight his force with combat units. When entry is made into an area requiring infrastructure enhancement, CS and CSS units will be needed early in the flow and will reduce the number of combat units arriving early in theater.

These decisions are most difficult when combat has not begun, yet the enemy is capable of sudden, effective opposition. In such cases, the commander must seek a balance that provides protection of his force, efficient deployment, ad a range of feasible response options—should the enemy attack. Joint force cooperation is particularly critical in this phase. Air and naval forces may have to compensate for an initial lack of ground combat power that can reach deep.

Forces are most vulnerable and the success of the contingency operation at greatest risk during initial entry. This vulnerability is acute when the enemy possesses weapons of mass destruction. Defensive and offensive operations to counter these weapons will affect both Army and joint planning. Protecting the force

will be critical to the success of this phase of the operation because of extreme vulnerability.

Even as the commander begins entry operations, his main focus shifts to building up his capabilities in preparation for operations. Projection of the force and rapid buildup may include establishing forward operating and logistics bases, closing the remainder of the force, expanding the lodgment, linking up with other forces, and preparing for future operations.

Placement of the force on the ground must not only achieve initial mission success but also have forces arrayed on the ground to maximize future employment options. The commander works to acclimate and train arriving soldiers. Whether or not units are in combat, the emphasis is on seizing the initiative early and controlling events from this point in time forward. To do so, commanders at all levels generate as many options as possible by skillfully positioning maneuver and support assets, protecting the force, refining intelligence assessments, and using fires appropriately. Sustaining the tempo of operations is especially important. The success of operations may hinge on swift response in peacetime or on the rapid generation of combat power in conflict to prevent losing the initiative.

OPERATIONS

In operations involving combat, the JFC will at some point decide to move against the enemy. This point in time may be predetermined and stated in the campaign plan, or it may be tied to specific enemy actions. In either case, the commander bases his decision on sufficient information and a clear picture of the enemy. Occasionally, commitment might be required before such a picture is available. At this point, the ground commander might reposition forces to facilitate the imminent start of combat.

The arrangement of forces on the ground in relation to one another, the terrain, and the enemy should allow the maximum number of employment options. Sometimes such positioning will be at a significant offset from the actual operational area, thus continuing the reliance tactical commanders must place on theater and national intelligence assets. In order to paralyze the enemy and rapidly gain the initiative for friendly forces, commanders normally seek to engage enemy forces simultaneously throughout the depth and space of the operational arena.

As he begins operations, the ground commander assembles sufficient, sustained combat power to win the decisive battles. He allocates enough combat power to supporting efforts to ensure overall victory. Force agility, initiative, and synchronized operations in depth characterize the rapid generation of combat power for ground operations. The ground commander may have initially dispersed his maneuver forces out of range of most enemy direct-fire and indirect-fire systems. In order to conduct decisive action, he maneuvers them to gain the best positional advantage over the enemy. This maneuver eventually results in close combat with enemy forces.

Reconnaissance and force protection remain crucial to the joint and ground commanders' plans as they engage the enemy in combat operations. Actions to counter the enemy's reconnaissance, intelligence, surveillance, and target acquisition efforts help maintain the conditions created earlier for decisive operations. Deception operations continue to mislead the enemy commander as to the timing, intent, and location of friendly forces, as well as to the objectives of the operation. Commanders conduct their operations against the backdrop of a sound logistics concept integrated with their concept of combat operations. Conduct of combat operations within the theater is described in detail in later chapters. Commanders also seek decisive results in operations other than war, although the approach may be quite different than for obtaining successful results in war.

WAR TERMINATION AND POSTCONFLICT OPERATIONS

Successful combat operations are designed to bring an end to the war. When a cessation of hostilities or a truce is called, deployed forces transition to a period of postconflict operations. This transition can occur even if residual combat operations are still underway in parts of the theater of operations. Anticipation and appropriate planning during earlier stages will smooth the transition during this critical period immediately after the fighting stops.

The postconflict operations stage focuses on restoring order and minimizing confusion following the operation, reestablishing the host nation infrastructure, preparing forces for redeployment, and continuing presence to allow other elements of national power to achieve the overall strategic aims. Postconflict operations make demands at every level of command. Company- and even squad-sized units may be called upon to conduct emergency humanitarian assistance and population control, especially in remote areas. At

higher echelons, commanders must engage in joint planning with the State Department, relief agencies, and host nation officials to prepare for a smooth and rapid transition to host country rule.

Army forces are extremely well-suited for postconflict operations. The Army has the skills and staying power to control prisoners, handle refugees, mark mine fields and destroy unexploded ordnance, provide emergency health service support, provide humanitarian assistance and support the social needs of the civilian population, provide emergency restoration of utilities and other civil affairs, and perform other required humanitarian assistance activities. During the postconflict stage, commanders emphasize those activities that reduce postconflict or postcrisis turmoil and help stabilize the situation until other US, international, interagency, or host nation agencies assume control.

The postconflict stage may be interrupted by the resumption of hostilities. Thus, units must rapidly consolidate, reconstitute, train, and otherwise prepare to remain in theater should fighting resume. During this time, force protection is vital in order to prevent isolated enemy individuals or forces from engaging in destructive operations.

REDEPLOYMENT AND RECONSTITUTION

The objective in this stage is to redeploy assets no longer needed. Postconflict requirements have a direct impact on the redeployment flow. The extent of this impact is dependent upon the amount of disruption caused by the crisis and the measures and forces required to resolve it. Commanders contend with the same challenge as in deployment, balancing the factors of METT-T against available lift assets. Forces and materiel not required for subsequent operations will redeploy to CONUS or their home theater and prepare for future missions. Redeploying forces must also prepare for deployment to areas other than home stations on short notice. Protection of the force during redeployment is as critical as during deployment or any other stage of the operation. Planners must also consider the significant resources required for packaging and preparation. Successful redeployment may require contractor and host nation support.

Reconstitution activities can begin in the theater prior to redeployment. These include rebuilding unit integrity and accounting for soldiers and equipment. These activities continue after arrival in CONUS or home theater, with focus on the reconstitution of units to premobilization levels of readiness, the regeneration of logistics stockpiles, and the accountability of mobilized equipment and supplies.

DEMOBILIZATION

Demobilization is the process by which units, individuals, and materiel transfer from active to a premobilization posture or to some other approved posture. Although the overall focus of demobilization is generally on units and individuals, the demobilization of logistics also requires significant resources such as supplies, materiel, and support activities.

CHAPTER 4

JOINT OPERATIONS

Joint operations are the integrated military activities of two or more service components—Army, Navy, Air Force, Marine Corps—of the US military. This chapter describes considerations associated with planning and executing these integrated operations. Modern warfare is fluid and dynamic. Future circumstances are difficult to predict with any certainty. A force-projection army requires extraordinary flexibility in thinking about operations because of the variety of combinations of joint forces available and the range of possible circumstances for their employment. Army doctrine stresses unified air, land, sea, and special operations—all supported by space operations—throughout the theater of war. Army doctrine is compatible with and supports joint doctrine as described in Joint Publications 1 and 3-0.

JOINT RELATIONSHIPS

When the Army operates outside the United States, the area to which Army forces deploy will always be the responsibility of a unified combatant commander. He provides strategic direction and operational focus to his forces by developing strategy, planning the theater campaign, organizing the theater, and establishing command relationships for effective unified and joint operations.

COMMAND RELATIONSHIPS

A combatant commander may or may not be responsible for a geographical area. When he is, he is referred to as a theater commander. This designation indicates that the President has assigned him a geographical AOR or theater. Combatant commanders exercise combatant command of unified and joint forces in accordance with applicable law and the *Unified Command Plan*. Joint Publication 0-2 provides additional guidance. Joint forces consist of service components working together, subordinate unified commands, JTFs, and joint functional component commands.

Each military service operates in accordance with service and joint doctrine and is responsible for providing a contingent of forces to the joint commands. These contingents are service components, but they may have other titles such as theater army, naval fleet, fleet marine force, or theater air force. A CINC normally assigns his forces to JTFs as he deems appropriate.

Joint forces operate within two distinct chains of command—one for operations and another for administrative and logistical matters (see Figure 4-1). For operations, the NCA issues orders through the Chairman of the Joint Chiefs of Staff (CJCS) to commanders of unified and specified commands and to existing JTFs that are established by and report directly to the NCA. The CJCS, working with other members of the JCS, prepares plans and provides strategic direction to the armed forces, including commanders of unified and specified commands and existing JTFs. These commanders are responsible to the NCA for accomplishing their assigned tasks.

The military departments are responsible for training, administration, and logistical support of their forces wherever employed. They exercise this responsibility

CONTENTS

through a separate service component chain of command. Forces assigned to joint commands work directly with their respective departments and services on these matters. Joint Publication 0-2 provides detailed information on command relationships; however, a brief discussion of the most common types of command relationships follows:

Combatant Command Authority

The commanders of unified and specified commands exercise combatant command (COCOM) authority over all assigned and attached forces. This broad authority allows them to perform a variety of functions, including organizing and employing commands and forces, assigning tasks, designating objectives, and directing military operations, joint training, and logistics necessary to accomplish assigned missions. During contingencies COCOM can be expanded to give the combatant commander the authority to reorganize service component forces as necessary and to consolidate logistics support within the command.

Operational Control

Subordinate JFCs and service component commanders normally exercise operational control (OPCON). This command relationship provides full authority to organize commands and forces and employ them as the commander considers necessary to accomplish assigned missions. OPCON does not normally include authority to direct logistics, administration, internal organization, or unit training. JFCs usually exercise OPCON through the service component commanders.

Tactical Control

Tactical control (TACON) is the detailed and usually local direction and control of movement and maneuver necessary to accomplish missions and tasks. TACON allows commanders below combatant command level to apply force and direct the tactical use of logistics assets but does not provide authority to change organizational structure or direct administrative and logistical support. Functional component commanders frequently exercise TACON over their forces.

Support

Support is the action of a force that aids, protects, complements, or sustains another force. JFCs may establish support relationships to emphasize or clarify priorities, provide a subordinate with an additional capability, and combine the effects of similar assets. Joint Publication 0-2 provides a detailed description of the types of support (general, direct, close, and mutual).

TYPES OF COMMANDS

Unified and specified commands, subordinate unified commands, and JTFs are the three types of joint forces. Each joint force will normally have a service component for each of the services represented within the joint force. Each force may also include one or more functional components, such as a joint force land component commander (JFLCC) or a joint force special operations component commander (JFSOCC). Combatant commands and existing JTFs receive administrative and logistics support from their respective military departments.

Unified Command

The President establishes a unified command (a combatant command) through the Secretary of Defense, with the advice and assistance of the CJCS, to perform a broad, continuing mission. Forces of two or more services comprise this organization and operate under the COCOM of a single, unified combatant commander. He receives strategic guidance from the JCS and is responsible to the Secretary of Defense for accomplishing his mission. The *Unified Command Plan* assigns some CINCs specific AORs that include all associated land, sea, and air space. Other unified commanders are given certain functional responsibilities such as transportation and special operations. Functionally oriented unified commands operate across all geographic regions. As an example, the US Special Operations Command (USSOCOM) can provide forces to operate under the control of other JFCs, or the NCA can direct it to conduct relatively independent operations worldwide. Joint Publication 3-05.3 and 3-05.5 and FM 100-25 discuss the specifics of the process.

A unified combatant commander normally exercises COCOM through service component commanders and the theater special operations command. He may establish a subordinate unified command to accomplish a broad, continuing mission within the combatant command or a JTF to conduct specific missions. In an emergency, the combatant commander has the authority to use all facilities and supplies of assigned forces to accomplish the mission. US European Command (USEUCOM) and US Pacific Command (USPACOM) are examples of geographical unified commands.

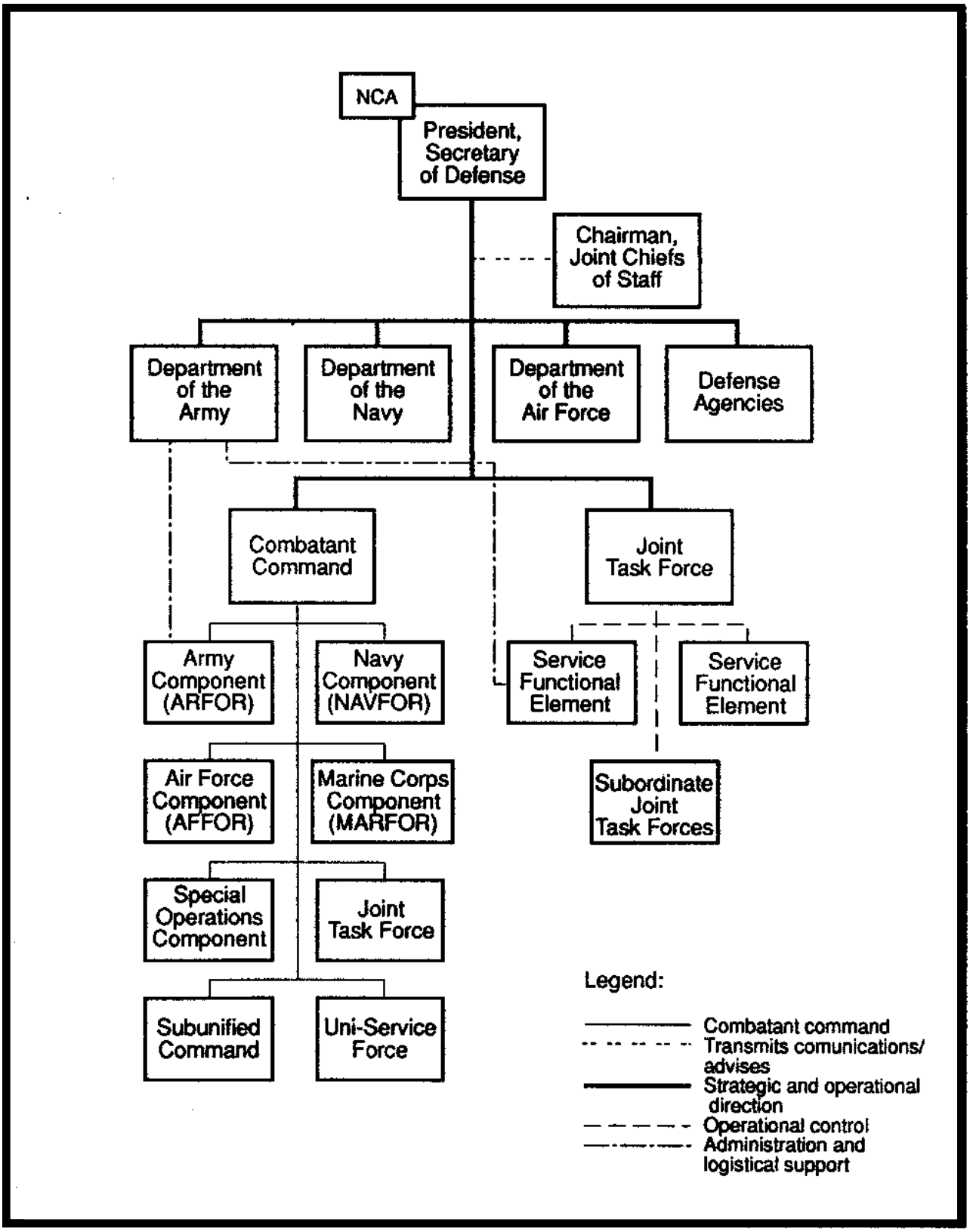


Figure 4-1. Joint Force Relationships.

Specified Command

The NCA may also direct the establishment of specified commands (combatant commands) to accomplish broad, continuing missions. A specified command is primarily a single-service command, although it may have elements of other services assigned. Like a unified command, a specified command receives strategic direction from the JCS.

Joint Task Force

The Secretary of Defense and the commanders of unified and specified commands, subordinate unified commands, and existing JTFs may establish joint task forces. Elements of two or more services operating under a single JTF commander comprise the task force. It performs missions having specific, limited objectives or missions of short duration. It normally dissolves when it achieves its purpose. The JTF commander is responsible to the JTF establishing authority and has OPCON of assigned and attached forces. He normally augments his own staff with representatives from component forces.

Operation Urgent Fury—the 1983 US contingency operation in Grenada—illustrates the JTF concept. US Atlantic Command (LANTCOM) formed two JTFs for this operation:

- JTF 123 combined Navy and Army SOF.
- JTF 120 consisted of a Navy task group, a Navy task force composed primarily of a Marine expeditionary unit, and an Army task force composed of two brigades from the 82d Airborne Division.

A JTF could have both Marine and Army components assigned and operating independently as in the example above. It also could have a JFLCC with all or selected land forces under his OPCON or TACON. The size of the ARFOR within the JTF varies with the mission of the JTF, but a brigade, division, or corps headquarters normally commands and controls ARFOR. Many actions of the JTF may be tactical, but the entire JTF operation is normally operational. The JTF may often be the preferred organization for C2 during the early stages of force-projection operations.

If the JTF operation requires the commitment of large land forces over a large land AO, the Army component commander may be the JTF commander. He could be a corps or numbered army commander. Thus, while usually fighting at the tactical or operational level, a corps commander (as a JTF commander) could be required to plan and conduct a joint campaign to achieve strategic objectives, employing forces from multiple services. In this event, the JTF establishing authority should provide additional communications, intelligence, and planning capabilities.

Component Command

Each unified and subordinate unified command has an Army component. The Army service component commander (ASCC) is responsible for properly employing his forces and accomplishing operational tasks assigned by the joint commander. The ASCC establishes the link between ARFOR and the joint command, plans and executes operations in support of the joint campaign, plans and executes support operations to sustain subordinate ARFOR, and provides support to other services in accordance with executive agent responsibilities.

The ASCC is also responsible for overseeing internal administration and discipline; training Army doctrine, tactics, techniques, and procedures; designating specific units to meet joint force requirements; providing logistics functions normal to the component; ensuring tactical employment of service components; and providing service component intelligence operations.

The choice of a functional command (for example, land component) or a component (for example, ARFOR) belongs to the theater commander. Due to the more straightforward supporting relationships between the parent services and the combatant command structure, ARFOR generally prefer the latter. However, at times, operational considerations and geographical conditions make functional command relationships more appropriate. Major operations on land that have immediate impact on one another, for example, may best be coordinated under a single land component commander. In forced-entry operations, functional command may be the preferred method in order to best synchronize limited combat power in early stages of the buildup. However, for sustained operations over time, component command offers some advantages for long-term support arrangements.

Army execution of these roles can vary across the full range of military operations. During peacetime, the ASCC is responsible for all of the ARFOR assigned to his command. During war and operations other than war, the combatant commander may elect to alter the peacetime structure. For example, he might establish an Army command that reports directly to him and

contains only the combat and CS forces assigned to the Army service component. The ARFOR headquarters would respond directly to the combatant commander by planning and executing major operations in support of the theater campaign. In this arrangement, the ASCC would plan and execute operations to sustain these forces and other Army elements in the theater.

The combatant commander might also designate the senior commander of Army combat and support forces as the JFLCC. The combatant commander could then place other land forces (US Marines or allies) under OPCON or TACON of the JFLCC. Likewise, Army forces could be placed under a JFLCC who is an officer from the US Marine Corps.

Finally, the combatant commander could establish a subordinate theater of operations for a subunified command or a joint operations area (JOA) for a JTF, using an Army command as the controlling headquarters. In this case, the Army commander would have OPCON or TACON of forces from at least two services and would plan and execute campaigns or major operations in support of the theater campaign. The theater army commander would continue to sustain Army forces in the theater.

THEATER STRUCTURE

Through the application of operational art, the CINC achieves theater focus by applying structure to the theater. Theater structure is a product of the CINC's strategic objective, the forces allocated for the theater, the strategy for employment, the factors of METT-T, and the presence of alliance or coalition structures.

In operations other than war, CINCs focus their efforts through the designation of an AO. If required, the AO may be further subdivided into a *JOA, joint zone (JZ),* or *joint special operations area (JSOA)*.

In war, the CINC achieves focus through the designation of a *theater of war*. Within that theater, single or multiple theaters of operation can be formed. Multiple theaters of operation are formed when there are multiple major threats. A JSOA can also be designated. The JSOA within the theater of war can overlap into the theater of operations.

A theater of war does not normally encompass the theater commander's entire AOR. The theater commander may thus conduct combat operations within a theater of war and react to a separate contingency in a theater of operations or JOA elsewhere in his AOR. Finally, he would continue normal peacetime activities throughout the remainder of his AOR. Nation assistance and similar activities do not cease when higher levels of violence arise. The theater environment is often one of simultaneous activities across the full range of military operations.

The theater commander could also establish a *combat zone (CZ)* and *communications zone (COMMZ)*. The CZ is an area required by combat forces to conduct operations; it normally extends forward from the Army rear boundary. The COMMZ constitutes the rear portion of a theater of operations, reaching back to the CONUS base or perhaps to another combatant commander's AOR. The COMMZ contains those theater organizations, LOCs, and other agencies required to support forces in the field. The COMMZ includes air and seaports that support the flow of forces into the theater. It is usually contiguous to the CZ but may be separate—connected only by thin LOCs—in very fluid, dynamic situations.

In writing the concept for the campaign, the theater commander and his staff need a clear picture of the potential theater organization and command relationships. This picture helps them clarify the different phases of the campaign, determine priorities, and assign tasks. The theater commander has various options available for exercising his COCOM authority. He can

- Task his service component commanders to conduct the major operations of the phases of the campaign.
- Organize a functional component (such as a joint force land component or maritime component) and task its commander.
- Activate a subordinate unified command and designate forces for employment in a particular area.
- Organize a JTF.
- Task a single-service force.
- Exercise COCOM over specific operational forces (usually when they must remain immediately responsive to him).

After visualizing the theater organization and command relationships, the theater commander can complete his sequencing decisions, allocate forces, and

prepare his campaign plan. Theater of war commanders prepare campaign plans and their subordinate theater of operations commanders prepare subordinate campaign plans. Functional component commands prepare operations plans (OPLANs) for major operations that support the campaign plan. A JTF may write a campaign plan when assigned a strategic objective. An Army corps commander might write a campaign plan if he is also the JTF commander. Theater service components and other supporting commands prepare supporting plans (such as reinforcement or logistics) and OPLANs (such as employment of forces).

During the planning of campaigns and major operations, the possible use of weapons of mass destruction by the enemy is a significant consideration. Such use can affect the commander's decisions on initial theater organization. Friendly forces may be particularly vulnerable during the entry phase of a force-projection operation. Chapter 6 discusses planning considerations associated with the potential use of these weapons by an enemy.

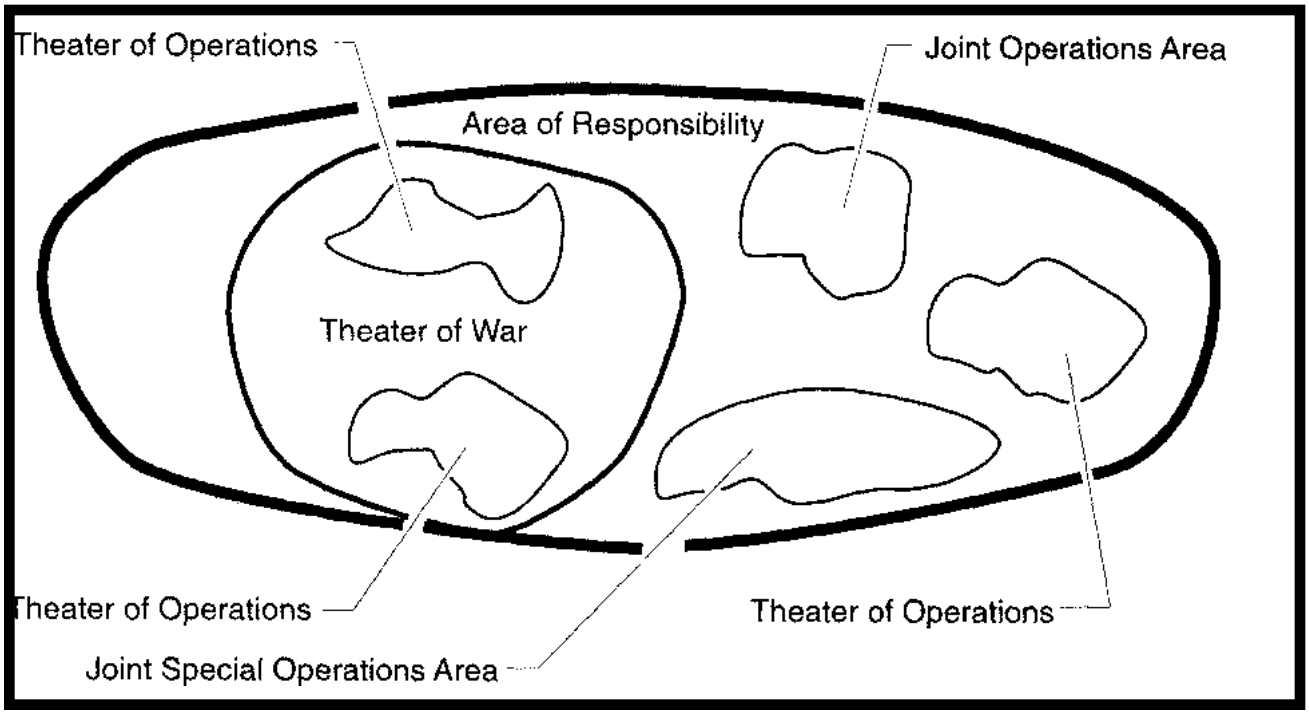


Figure 4-2. Area of Responsibility

CHAPTER 5

COMBINED OPERATIONS

Combined operations involve the military forces of two or more nations acting together in common purpose. If the relationship is longstanding and formalized by mutual political, diplomatic, and military agreements, it is referred to as an alliance. If the relationship is short term, ad hoc, and less formal, it is referred to as a coalition.

From the American victory at Yorktown in 1781 and throughout the US Army's history, combined operations have remained central to its experience. Combined operations occur both in war and in operations other than war. World War II, the Korean War, and the 1991 Persian Gulf conflict are examples of combined warfare.

The US will often pursue its objectives through coalitions and alliances. In Operations Desert Shield and Desert Storm, more than 800,000 military personnel from 36 nations combined their will, forces, and resources to oppose the Iraqi military. These operations, like many before them, demonstrated the advantage of successful combined warfare over the unilateral efforts of a single nation. The coalition increased the size of the overall force, shared the cost of waging the war among the nations, and enhanced the legitimacy of the strategic aims.

Nations usually form coalitions for focused, short-term purposes. *Ad hoc* methods are often required to deal with potential coalition issues. Occasionally, coalitions mature into more formal alliance relationships.

Alliances afford the participant nations the time to establish formal, standard agreements for broad, long-term objectives. Alliance nations strive to field compatible military systems, structure common procedures, and develop contingency plans to meet potential threats in a fully integrated manner. As these nations plan and train together, they become more comfortable with one another, earning mutual respect and trust. The North Atlantic Treaty Organization (NATO) and the Combined Forces Command in Korea are examples of such alliances.

CONSIDERATIONS

Regardless of their structure, successful alliances and coalitions exhibit similar traits. Commanders should understand the difficulties in forming a strong combined force and consider the following factors when preparing for combined operations.

GOALS AND OBJECTIVES

No two nations share exactly the same reasons for entering into a coalition or alliance. Furthermore, each nation's motivation tends to change during the life of the union. National goals can be harmonized with an agreed-upon strategy, but often the words used in expressing goals and objectives intentionally gloss over differences. Even in the best of circumstances, nations act according to their own national interests. Differing goals, often unstated, cause each nation to measure progress differently. Thus, participating nations in the coalition must agree to clearly defined and mutually attainable objectives.

Successful coalitions and alliances build upon common purpose in combined operations. By emphasizing commonalities, coalitions can reduce friction and hold

CONTENTS

themselves together for the duration of operations. Maintaining cohesion and unity of effort requires understanding and adjustment to the perceptions of all allied nations, allowing them to do those tasks they feel politically and militarily comfortable doing. Maintaining such cohesion among a coalition is an important factor for US Army forces to consider in both planning and conducting operations.

MILITARY DOCTRINE AND TRAINING

All nations have different vital interests and military capabilities. Thus, their strategic aims and military doctrines vary. The armed forces of one nation may possess a doctrine with a full treatment of strategic, operational, and tactical issues. Other nations may possess a doctrine for forces of brigade-size or smaller. US Army doctrine endeavors to be compatible with joint and combined operations requirements.

Other nations' doctrines may focus on a single service. Some doctrines emphasize offensive operations; others defensive. Some nations prepare for highly mobile, mechanized operations; others concern themselves with insurgent or other forms of warfare. US Army doctrine stresses rapid, agile operations emphasizing ingenuity and improvisation within the guidelines provided by the commander's intent. Others discard this approach as too risky. Training, equipment, and technologies vary. Commanders carefully consider which national units are best suited for particular missions. In combined operations, as in unilateral operations, US Army commanders employ units according to their capabilities or advise the senior allied commander of the need to do likewise with US units.

EQUIPMENT

Commanders consider equipment capabilities when employing allied units. Among nations, equipment will vary in modernization levels, maintenance standards, mobility, and degree of interoperability. Commanders of combined units may face a large technological disparity between units, resulting in a mixture of systems. They can exploit interoperability by placing like units with similar capabilities adjacent to, or reinforcing, one another. Nonetheless, they will usually have to overcome some measure of incompatibility. Selected coalition units may have some systems similar to that of the enemy, making measures to preclude fratricide vital. Operational planners should expect difficulties such as incompatible communications and differences in the cross-country mobility of vehicles. Commanders must understand the actual capabilities of allied or coalition partners.

CULTURAL DIFFERENCES

Each partner in combined operations possesses a unique cultural identity, the result of language, values, religious systems, and economic and social outlooks. Nations with similar cultures are more likely to have similar aspirations. Further, their armed forces will face fewer obstacles to interoperability in a combined force structure. Nations with divergent cultural outlooks have to overcome greater obstacles in a coalition or alliance.

Armies reflect the national cultures that influence the way they operate. Sources of national pride and cultural sensitivities will vary widely, yet the combined force commander must accommodate them. Differences in work ethic, standards of living, religion, and discipline affect the way nations approach war. Commanders cannot ignore these differences because they represent potential major problems. Even seemingly minor differences, such as dietary restrictions or officer/soldier relationships, can have great impact. Commanders may have to accommodate religious holidays, prayer calls, and other unique cultural traditions that are important to allies.

LANGUAGE

Language barriers represent a significant challenge. Because Americans are used to English-speaking counterparts, they generally do not understand the difficulties faced by non-English-speaking allies. Specifying the official coalition language may be a sensitive issue. One should not assume the language will automatically be English. After a language is selected, all written documents must be translated for tactical execution by units of different nations. The effort detracts from planning time and has the potential for mistakes or misunderstanding. Few linguists have both the technical expertise and depth of understanding to cross both language and doctrinal boundaries and be fully understood. Loss of meaning in translation can be high. The problems that can arise due to miscommunication are potentially disastrous. A possible solution is a significant resource commitment to dedicated liaison and linguist teams.

TEAMWORK AND TRUST

Nations build coalitions and alliances on mutual trust, understanding, and reliance which bind the

combined force together. Teamwork and trust are essential. Shared hardships; missions that are reasonably achievable in accordance with capabilities; access to reserves and reinforcements, to include CAS and air interdiction; and frequent face-to-face command and soldier exchanges build trust and a shared sense of mission.

Common purpose not only requires well-articulated goals shared by all members of the coalition or alliance, it demands the efforts of leaders capable of inspiring, motivating, and directing multicultural forces in execution. The force of personality in combined operations is often key to multinational cooperation directly influencing the strength of the coalition or alliance. If all participating nations understand clearly stated objectives and have trust and confidence in their leaders, the combined forces should succeed. Building a team and establishing trust before, during, and after the battle and campaign are vital to success.

PLANNING AND CONDUCT

The US Army has extensive experience in planning and conducting combined operations. Its participation in peace, conflict, and war over the past 200 years has provided insights into how to synchronize combat power and achieve unity of effort in cooperation with allies. These insights are summarized below and discussed in greater detail in FM 100-8.

COMMAND

Successful combined operations center on achieving unity of effort. Each participating nation must agree to provide the commander of the alliance or coalition sufficient authority to achieve this. In turn, the commander and his staff use this authority to unify the efforts of the combined force toward common objectives. This authority, however, is seldom absolute. Consensus will be important to the overall commander.

National contingents normally retain command of their own forces, relinquishing only operational command or OPCON to the alliance or coalition military leadership, even though staffs might be combined. The 1st (UK) Armored Division under TACON of the VII (US) Corps in Operation Desert Storm is an example wherein British staff members were totally integrated into the VII Corps staff. The combined force commander may not be a US Army officer. He could be a senior US officer from another service or a commander from another nation. Army commanders fight at the direction of the allied or coalition commander, retaining all of the command authority and responsibility inherent in the command relationships (OPCON, TACON, attached, direct support) of the forces they have been provided. Missions should be perceived as appropriate and achievable for the forces to which they are given and equitable in terms of burden and risk-sharing.

The factors mentioned earlier in this chapter influence the C2 structure of the combined force. If the nations are very similar in culture, doctrine, training, and equipment, or if extensive cooperative experience exists, a combined headquarters may be effective. This direct approach requires each armed force to receive, understand, plan, and implement missions at the same level as the other nations. However, in planning combined operations, commanders have to accommodate differences in planning capabilities. Some armies have large staffs and the technical means to support planning. Others have austere staff structures and do not possess the means to process, reproduce, or rapidly disseminate many contingency plans. Moreover, decision authority of staffs and subordinate commanders varies between armies. The sophistication and nature of missions assigned to each nation may vary to accommodate differences between nations, but the combined staff should provide guidance directly to each nation's forces.

A coalition of dissimilar nations may require an indirect approach to achieving unity of effort. The theater commander may use a primary staff for planning and an auxiliary staff to absorb, translate, and relay straightforward, executable instructions to members of the coalition. USCENTCOM used such an approach in the 1991 Persian Gulf War as the coalition coordination, communications, and integration center (C3IC) was formed to coordinate the efforts between Islamic and non-Islamic command structures.

MANEUVER

To best achieve strategic and operational aims, plans should reflect the special capabilities of each national contingent in the assignment of missions. Mobility, intelligence collection assets, size and sustainability of formations, air defenses, capabilities for long-range fires, SOF, training for operations in special environments, and preparation for operations involving nuclear and chemical weapons are among the significant factors at this level.

To overcome differences in doctrine, training, or equipment, leaders may assign selected functions to the forces of a smaller group of allied or coalition partners. For example, the combined commander may assign home defense or police forces missions such as rear area security. The commander may also entrust one member of the combined force with air defense, coastal defense, or some special operation, based on that force's special capabilities. In fact, some coalition partners might not provide army, air force, or naval forces at all, but contribute through alternative means such as the political power provided by their membership in the coalition.

Tactical cooperation requires more precision since it deals with immediate combat actions. Among the disparities that adjacent and supporting commanders must reconcile are dissimilar TACON measures, differences in tactical methods and operating procedures, differences in using other service capabilities such as CAS, varying organizations and capabilities of units, and differences in equipment.

Liaison, equipment exchanges, and training can offset some of these problems. Combining staffs, rather than just exchanging liaison parties, is another option. The commander of a combined force plans and conducts operations in ways that exploit complementary strengths and minimize coordination problems. When the combined force commander assigns one nation's forces to another nation for an extended period, these forces should establish habitual relationships between units in order to help foster cohesion and understanding. Detailed planning with emphasis on rehearsals and careful wargaming should precede operations in which units are working together for the first time. Back-briefs become especially important for understanding. Tactical plans should address unit recognition, people and equipment, fire control measures, air support arrangements, communications, signals, liaison, and movement control. The commander's intent and the concept of the operation should also receive special attention to avoid confusion that might occur because of differences in doctrine and terminology.

FIRES

The focus of fire support at the operational and tactical levels is on the synchronization of the full range of fires provided by all friendly forces. The integration of artillery, armed aircraft, nonline-of-sight fires, naval gunfire, close air support, interdiction, and electronic countermeasures requires the development, full understanding, and rigid adherence to a common set of fire control measures. In an alliance these measures may be routine. However, in a coalition ad hoc procedures may have to be developed. Commanders give this early and continuous emphasis to ensure timely, effective fires and to minimize fratricide.

INTELLIGENCE

The collection, production, and dissemination of intelligence are major challenges. Allied and coalition partners normally operate separate intelligence systems in support of their own policy and military forces. These national systems may vary widely in sophistication and focus. Most allies cannot approach the range of US capabilities to collect and process intelligence. Nonetheless, each nation can contribute human intelligence (HUMINT). Commanders of combined units should rapidly establish a system that takes advantage of each nation's contributions and provides all units an accurate intelligence picture.

For operational and tactical purposes, commanders arrange for the rapid dissemination of military intelligence and the use of available intelligence assets by all partners. This arrangement usually requires the formation of a combined intelligence staff at theater level. It also necessitates establishing an intelligence network with dedicated communications and liaison officers to link various headquarters. Few nations will have the technical means to link with US systems. The provision of the appropriate interfaces will be an early and major concern.

LOGISTICS

Combined logistics present a major challenge. Problems include differences in logistics doctrine, stockage levels, logistics mobility, interoperability, and infrastructure and national resource limitations. Nonetheless, allied and coalition commanders have to coordinate the use of facilities such as highways, rail lines, ports, and airfields in such a way as to ensure mission accomplishment. The concept that logistics is primarily a national responsibility cannot supplant detailed logistics planning within a theater of operations. For these reasons, combined commanders should form a combined logistics staff section as early as possible.

Movement control, operation of ports and airfields, theater logistical communications, and specific supply functions are significant matters often coordinated

above the level of national contingents. To assure coordination and prevent duplication, commanders of combined forces establish clear responsibilities for such functions. Lower level commanders and staff officers responsible for operating in the theater resolve the problems of liaison, language, and equipment compatibility that are inherent in these multinational logistical operations.

Transportation, construction services, medical support, and some classes of supply may be available from the host nation. US forces may rely upon host nation support to supplement or substitute for US services, supplies, and facilities. Central allied or coalition agencies may obtain and provide water, food, and construction materials to be shared between national contingents. Civil affairs officers can assist commanders in identifying and coordinating requirements for local resources, facilities, and support.

The US often supplies allied and coalition forces with materiel and receives combat support or combat service support in exchange. This can lead to significant economies of force and effort. US forces seek such support agreements early in a combined operation.

When allies or coalition partners use similar equipment, they plan for resupply, maintenance, or other support operations across national lines. This occurs routinely, whenever feasible, and always in the case of tactical emergency. Members of an alliance or coalition can use such common items as petroleum, oils, and lubricants (POL), medical supplies, barrier materials, mines, and some tools and vehicles. The combined force commander, at appropriate times, allows combined forces to obtain and distribute these items through a single, combined supply agency to facilitate simple operations and economy of effort.

LIAISON AND COMBINED STAFFS

During combined operations, US units establish liaison early with forces of each nation and the next higher headquarters. Where appropriate, coalition commanders might choose to combine staffs of two or more nations to better coordinate the complementary capabilities. This fosters the understanding of missions and tactics, facilitates transfer of vital information, and enhances mutual trust and confidence.

Combined forces that employ units or equipment with which they are unfamiliar exchange liaison personnel such as aviation staff officers, fire support officers, engineers, or intelligence specialists. Whenever possible, such liaison or coalition staff personnel should be familiar with the staff and operational organizations, doctrine, and procedures of the force with which they will work. They should either speak the language of that force or be accompanied by interpreters. Also, civil affairs staff officers can assist in the control of operations that require the cooperation of host nation civilian authorities.

The Army provides specialized training (for example, language) to liaison officers. Coalitions and alliances should pursue standardized procedures, equipment, and doctrine as time and national capabilities permit. The use of mobile training teams, the development of standardization agreements (STANAGs), and the exposure and ultimate integration of staffs promote standardization and enhance the ability of forces from many nations to fight alongside one another. STANAGs already in existence may also be used to form the basis for detailed coalition agreements and procedures.

CHAPTER 6

PLANNING AND EXECUTING OPERATIONS

In a force-projection army, planning and conducting operations at both the tactical and operational levels have become more complex since the end of the Cold War. In Cold War Europe, many strategic, operational, and even tactical choices had long ago been made. A strategic theater in a force-projection environment with few or no US forces creates operational circumstances where planners have many more strategic, operational, and tactical options than they were used to having in the Cold War.

Such a diversity of available options should, in the end, give US commanders the means to confuse, confound, and rapidly defeat armed enemies of the United States in full-dimensional operations. This chapter discusses principles of planning and executing operations that, when applied, should achieve that end.

CONTENTS

THE STRATEGIC LINK

In peacetime the *National Security Strategy* and *policies, National Military Strategy, Unified Command Plan*, and *Joint Strategic Capabilities Plan (JSCP)* are key sources of guidance for the combatant commander. The commander's theater strategy supports the accomplishment of US and coalition objectives within the theater AOR.

These strategic objectives and guidance become the basis for the theater campaign plan. While every effort is made to anticipate conditions for employing US forces and to frame a plan, the probabilities are that some plans might be formulated just prior to or concurrent with employment of US forces. Concurrency of deliberate and crisis action planning at strategic, operational, and tactical levels is an established part of joint doctrine.

THEATER-STRATEGIC PLANNING

Theater-strategic planning during peace provides

essential for rapid transition to war and force-projection operations.

In time of war or conflict, planners develop strategic end states tailored to the particular situation. The combatant commander modifies existing strategic and contingency plans and alters portions of his theater strategy using crisis action procedures. The theater strategy is written in terms of military objectives, military concepts, and resources (ends, ways, and means) and provides guidance for a broad range of activities throughout the AOR, including provisions for both war and operations other than war.

The theater commander and his staff conduct theater-strategic planning by using the Joint Operation Planning and Execution System (JOPES). The assigned planning requirements are formulated into a family of OPLANs to meet strategic and contingency requirements in the theater. The ASCC develops the supporting plan as part of the family of plans. The theater commander's OPLAN can be a theater campaign plan. All theater OPLANs achieve strategic goals. The theater commander uses operational art in his theater design to influence the strategic intent found in both the theater strategy and campaign plan.

THE USE OF FORCE IN SUPPORT OF STRATEGIC POLICY OPTIONS

When the nation commits its armed forces, it should clearly understand the overall policy goal and how the use of force helps achieve that goal. Determining how war (or military operations) accomplishes the national objectives is the critical first step in the operational planning process. In order to describe clearly how the use of force contributes to the overall political objectives, planners must consider what may be necessary to end the conflict, as well as the likely consequences of warfare and the period of conflict activities that follow.

Commanders at all levels must have a common understanding, prior to hostilities, of the conditions that constitute success. Decisions to stop military operations and to transition from active combat to postconflict operations will necessarily require the input and experience of both operational and tactical-level commanders. The situation brought about by successful military operations should conform to the political decision makers' view of how victory in war brings the country closer to its strategic goals. Therefore, military planners must understand the desired military end state to be achieved as part of the overall strategy.

STRATEGIC END STATE AND SUPPORTING MILITARY CONDITIONS

When the nation commits its armed forces, it should clearly understand what military end state it wants to achieve. A military end state includes the required conditions that, when achieved, attain the strategic objectives or pass the main effort to other instruments of national power to achieve the final strategic end state. That end state describes what the NCA wants the situation to be when operations conclude—both military operations, as well as those where the military is in support of other instruments of national power.

While the military end state conditions will normally represent what the combatant commander wants his campaign to achieve, he rarely concerns himself with only those conditions. Often, the combatant commander is required to support the other instruments of national power that the NCA and coalition leaders designate. He must first understand the desired end state, then plan the means to achieve it. Neglecting to do so could result in a military victory that fails to achieve strategic objectives.

Determining the end state and ensuring that it accomplishes the national objectives are the critical first steps in the operational planning process. Failure to make this determination will waste scarce resources and put the entire effort at risk.

THE LEVELS OF WAR

The levels of war help clarify activities by echelons within the theater across the full range of military operations. The levels of war—strategic, operational, and tactical—provide a useful framework for ordering activities within AORs. The levels of war help commanders visualize a logical flow of operations, allocate resources, and assign tasks. Each level is defined by the outcome intended—not by the level of command or the size of the unit.

The Strategic Level

At the strategic level of war a nation or group of nations use national interests to determine their strategy to ensure an effective, responsive national power-projection capability. Strategy involves the art and science of employing armed forces with the other instruments of national power to secure strategic goals. The NCA and the CJCS translate strategy into military

policy and requirements, which are the starting points for developing campaign plans. Theater commanders participate in national and alliance or coalition discussions as the theater military experts. They design the campaign plan so that it relates to both national strategies and operational activities. The campaign plan derives from policy and requirements, sets theater-strategic goals, and is the basis for operational-level planning.

The Operational Level

At the operational level of war, joint and combined operational forces within a theater of operations perform subordinate campaigns and major operations and plan, conduct, and sustain to accomplish the strategic objectives of the unified commander or higher military authority.

The operational level is the vital link between national- and theater-strategic aims and the tactical employment of forces on the battlefield. The focus at this level is on conducting joint operations—the employment of military forces to attain theater-strategic objectives in a theater of war and operational objectives in the theaters of operations through design, organization, and execution of subordinate campaigns and major operations.

Combatant commanders and theater-of-operations commanders usually plan and execute campaigns. Combatant commanders have strategic intents, concepts, and objectives. Service or subordinate joint commanders have operational intents, concepts, and objectives in support of the combatant commanders. The echelon of Army commands varies with the nature of warfare, the strategic objectives, the size and structure of the theater of war, and the number of forces involved. The intended purpose, not the level of command, determines whether an Army unit functions at the operational level. Armies normally design the major ground operations of a subordinate campaign, while corps and divisions fight tactical battles and engagements. A corps commander might also command a joint force land component or a JTF. As a JTF commander, he might plan and execute a campaign that would achieve the theater-strategic objectives of the CINC's theater campaign.

Operational art is the skillful employment of military forces to attain strategic and/or operational objectives within a theater through the design, organization, integration, and conduct of theater strategies, campaigns, major operations, and battles. Operational art translates theater strategy and design into operational design which links and integrates the tactical battles and engagements that, when fought and won, achieve the strategic aim. Tactical battles and engagements are fought and won to achieve operational results. No specific level of command is solely concerned with operational art. In its simplest expression, operational art determines when, where, and for what purpose major forces will fight. It governs the deployment of those forces, their commitments to or withdrawal from battle, and the sequencing of successive battles and major operations to attain major objectives.

Operational art seeks to ensure that commanders use soldiers, materiel, and time effectively to achieve strategic aims through campaign design. Such a design provides a framework to help the theater and operational commanders order their thoughts. Operational art helps commanders understand the conditions for victory before seeking battle, thus avoiding unnecessary battles. Without operational art, war would be a set of disconnected engagements, with relative attrition the only measure of success or failure.

Operational art requires broad vision, the ability to anticipate, a careful understanding of the relationship of means to ends, an understanding of the inherent risks that are under them, and effective joint and combined cooperation. It challenges the commander to answer three questions:

- What military conditions will achieve the strategic objectives in the theater of war or theater of operations?
- What sequence of actions is most likely to produce these conditions?
- How should the commander apply military resources within established limitations to accomplish that sequence of actions?

These are important questions. They require the theater and operational commanders to consider the *ends* they must achieve, the *ways* to achieve those ends, and how to use the *means* available. The commander tempers his answers by the specified and implied restrictions and by actions he is specifically directed to do. These are sometimes called restraints and constraints. By answering these questions, he

articulates a vision for warfighting, a statement of his intent in his campaign plan, and a command structure within which he will execute that plan.

The Tactical Level

At the tactical level of war, battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces. These victories, put together, achieve operational results. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to one another and to the enemy to achieve combat objectives directed by the operational commander. *Tactics* is the art and science of employing available means to win battles and engagements. Tactics is battlefield problem-solving—usually rapid and dynamic in nature.

Battles. A battle consists of a series of related engagements; it lasts longer than an engagement, involves larger forces, and could affect the course of the campaign. Battles occur when division, corps, or army commanders fight for significant objectives. They may be short and fought in relatively small areas, as on the Golan Heights in 1973; or they last several weeks and cover large areas, as in the Battle of the Bulge during World War II.

Engagements. Engagements are small conflicts or skirmishes, usually between opposing maneuver forces; they are normally short in duration and fought at division level and below. They include, for example, covering forces and guard forces. Also, units in defense fight engagements when they encounter the enemy. These engagements may or may not bring on battle.

PLANNING CONSIDERATIONS

Joint operation planning is a continuous process that begins with the assignment of strategic guidance, limitations, tasks, and objectives or with the commander's recognition of a requirement until the mission is accomplished. Planning and fighting are often concurrent, with planning done as thoroughly as time allows. Successful planning requires an appreciation of the simultaneous nature of operations, an awareness of the total mission, anticipation of future events, and application of the battlefield framework described later in this chapter.

SIMULTANEOUS OPERATIONS

A *campaign* is a series of related military operations designed to achieve strategic objectives within a given time and space. A campaign plan describes how these operations are conducted. *Major operations* consist of coordinated actions in a single phase of a campaign and usually decide the course of a campaign.

Wartime campaigns are broad in scope and usually involve the employment of large forces. Peacetime campaigns can be broad in scope but usually involve smaller forces and, many times, other US Government agencies, international agencies, or United Nations forces.

More than one campaign can occur concurrently within the same theater. Operations go on simultaneously throughout the depth of enemy formations to win rapidly and decisively. A wide variety of combat and noncombat operations requires synchronization to achieve designated objectives.

A single, unifying strategic concept of operations synchronizes actions taken at each level of war against the enemy, whether the actions occur simultaneously or sequentially. The intent is to destroy or disrupt the enemy's key capabilities and functions and exploit the resulting strategic advantage before the enemy can react. The results should so demoralize the enemy by their combined and simultaneous effects that he perceives he cannot win.

Commanders at all levels require vision to fight simultaneously within theaters of operations, to respond to contingency requirements elsewhere in a theater of war, and to conduct normal peacetime activities throughout the combatant commander's AOR.

Historical Perspective

Late on 19 December 1989, a joint force of 7,000 soldiers, sailors, airmen, and marines deployed from US bases bound for Panama. During the early morning hours of 20 December, this force—supported by United States Southern command (USSOUTHCOM) forward-deployed forces in Panama—simultaneously hit targets at 26 separate locations.

The success of the attack against key Panamanian Defense Force (PDF) strongholds required a sequence of stealthy moves by an assortment of US SOF and elements from the 82d Airborne Division, the 5th Mechanized Division, the 7th Infantry Divsions, and US Marines Corps. These were supported by the Air force and Navy in a variety of ways, including airlift and sealift, SEAD, and AC-130 gunship strikes. MIssion orders, decentralized execution, and individual ingenuity contributed greatly to the ability of the joint force to rapidly paralyze PDF response capability.

Figure 6-1. depicts a few of the many actions that occurred within the same hour on 20 December.

- *Marines from the 6th Marine Expeditionary Brigade secured Howard Air Force Base and the Bridge of the Americas.*
- *The 1st Battalion, 75th Ranger Regiment, secured Tocumen Airport.*
- *The 4th Battalion, 17th Infantry (7th Infantry Divsion), and 3d Battalion, 504th Infantry (82d Airborne Division), secured Renacer Prison and Madden Dam.*
- *The 2d and 3d Battalions, 75th Ranger Regiment, secured the PDF base at Rio Hato.*
- *The 193d Separate Infantry Brigade and the 4th Battalion, 6th Infantry (5th Infantry Division), struck many targets in and around Panama City, including La Comandancia.*

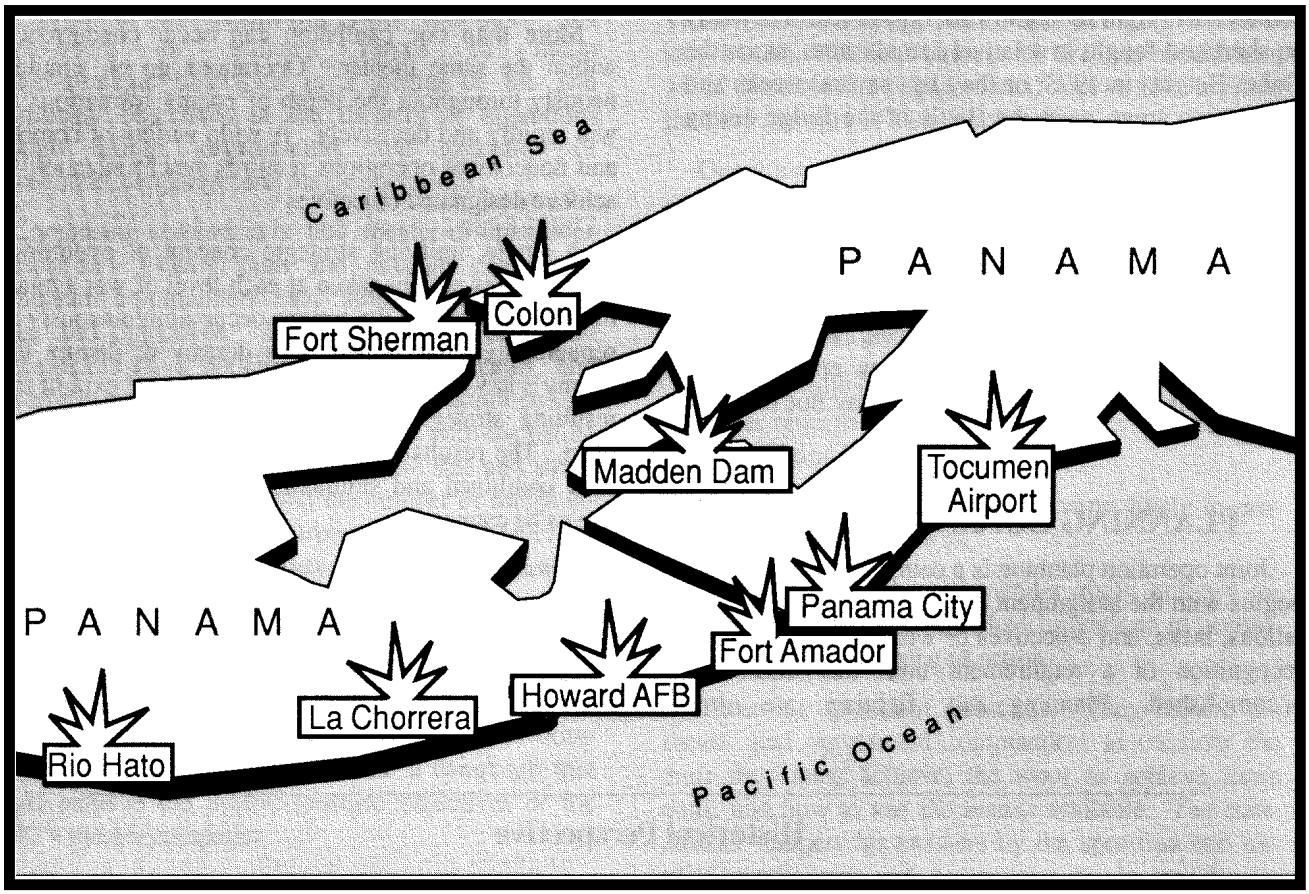


Figure 6-1. Operations in Panama, 20 December 1989

The combination of increased tempo and simultaneous operations dictates a need for tightly integrated operations. Tactical commanders fight engagements and battles, understanding their relevance to the higher operation plan. Operational commanders conduct major operations to achieve operational and theater-strategic objectives. Combatant commanders serve as theater strategists and campaign designers. At the same time, they remain acutely aware of the impact of operational and tactical events of the battlefield. Rapidly unfolding operations of all types blur the lines among the levels of war so that no commander can concern himself only with the results of events at his echelon.

A world of instant communications has shrunk the globe. The effect of information-age technology has been not only to increase the tempo of operations but also to provide images of operations that begin to condition strategic plans and define time limits of operations. This phenomenon must not be lost on tactical and operational Army commanders. Reality on the battlefield is reality in the household at almost the same time. The commander considers this and reaches beyond his immediate tasks to see the interrelationships, complexities, and opportunities offered by high-tempo, simultaneous operations. The commander's job has always been to bring order out of chaos; he must now do it quicker, while on the move, and with practiced insight.

TOTAL MISSION AWARENESS

From receipt of the mission to its accomplishment, Army commanders at all levels consider everything that affects their operation. Their thoughts, therefore, extend beyond the current moment and outside the AO. When deploying for combat operations, for example, a corps commander's thoughts may focus on the immediate tasks -- tailoring his force for deployment and flowing it smoothly to the theater of operations. By having a total mission awareness, he thinks simultaneously about activities on both sides of the deployment: finding a place and time to train active and RC roundout and roundup units; accommodating late-arriving units; placing initial and subsequent forces on the ground; adjusting task organizations; recovering from setbacks; keeping the range of options open, and so on.

Total mission awareness helps the division commander, for example, analyze his AO and mission with regard to his capabilities. Even as he approaches combat operations, however, his total mission awareness extends back into the COMMZ. Are his LOCs protected? Will late-arriving units be ready? Are units positioned to facilitate future operations? Are his key rear area facilities adequately protected? Are deploying civilian employees and contractor personnel equipped, trained, and ready? Then, after commanders have arrived in theater and have absorbed the *big picture*, their focus narrows, and they concentrate on the immediate combat mission and future operations.

TEAMWORK

An effective fighting force requires teamwork, which is based on individual trust and unit cohesion. In force-projection operations, the mix of deployed forces will be dictated by the need to maintain operational versatility and teamwork. In many cases, deploying units will find themselves assigned to an organization that has not previously trained or worked together. Additionally, many Army units will be operating in a joint and interagency environment for the first time. Forging the team is one of the early challenges facing commanders in a force-projection operation. Depending on time available and geographic separation, team-building techniques could include commanders meetings and leader reconnaissance to the AOR, early and continuous emphasis on face-to-face leadership, and liaison team exchanges. These are some of the Army's team-building techniques units can use, whether operating with other members of the Army's combined arms team or participating in joint, combined, or interagency operations.

FUNDAMENTALS

Army operational planning requires the complete definition of the mission, expression of the commander's intent, completion of the commander and staff estimates, and development of a concept of operations. These form the basis for a plan or order and set the conditions for successful battle. The initial plan establishes the commander's intent, the concept of operations, and the initial tasks for subordinate units. It allows the greatest possible operational and tactical freedom for subordinate leaders.It is flexible enough to permit leaders to seize opportunities consistent with the commander's intent, thus facilitating quick and accurate decision making during combat operations. The plan not only affects the current fight but also sets the stage for future operations.

Commanders issue orders to their subordinates face-to-face whenever the situation permits. In tactical units this often occurs on the ground chosen for the operation. Mission orders, which specify *what* the subordinate commands are to do without prescribing *how* they must do it, are often the best.

Mission

The mission is the commander's expression of what the unit must accomplish and for what purpose. Orders contain both specified and implied tasks. During mission analysis, commanders translate these into orders for their subordinates. They do so by analyzing the mission statement and concept of operations, understanding the commander's intent starting two levels above, assessing the current situation, and organizing all resources available to achieve the desired end. A precise, clear mission statement that subordinates understand before and during the battle is vital to mission success.

Commander's Intent

The commander's intent describes the desired end state. It is a concise expression of the purpose of the operation and must be understood two echelons below the issuing commander. It must clearly state the purpose of the mission. It is the single unifying focus for all subordinate elements. It is not a summary of the concept of the operation. Its purpose is to focus subordinates on the desired end state. Its utility is to focus subordinates on what has to be accomplished in order to achieve success, even when the plan and concept of operations no longer apply, and to discipline their efforts toward that end.

The intent statement is usually written but can be verbal when time is short. It should be concise and clear; long, narrative descriptions of how the commander sees the fight tend to inhibit the initiative of subordinates. A commander's order should contain the intent statement of the next higher commander.

Estimates

The commander's estimate helps commanders choose the best course of action. Estimates never stop. The process continues by staffs and by commanders, often independently and separately from one another, but coordinated when possible. The basic end result of the estimate is an accurate visualization of the current enemy and friendly situation, a visualization of the goal or mission, and a clear expression of alternatives.

The commander's estimate considers the enemy's likely intent and courses of action and wargames friendly alternatives to get from the current state to the end-of-mission state. Once commanders choose a course of action, they articulate their concept, describing how they visualize the fight. This description forms the basis for the rest of the plan. Commanders continually review the situation by visiting subordinates and getting their estimates, by observing operations, by meeting with higher and adjacent commanders, and by receiving updated information and intelligence. They revise their concept accordingly. The estimate process is continuous. Estimates for the current operation can often provide a basis for estimates for future missions.

Concept of Operations

The operational or tactical concept of operations describes how Army commanders visualize the major operation and battle unfolding. The concept is based on the commander's selected course of action to accomplish the mission, expressing *what, where*, and *how* the force will affect the enemy. Commanders answer these questions in sufficient detail for the staff and subordinate commanders to understand what they are to do and how they are to fight the battle. In the concept of operations, commanders describe how they see the actions of each of their units fitting together to accomplish the mission. They describe their view of probable enemy actions and how they will defeat the enemy. This description includes, as a minimum, the scheme of maneuver and concept of fires (see previous discussion on *Commander's Intent*).

In developing their concept, commanders should consider alternatives that lead to *decisive* operations and battles. These operations are key to determining the outcome of engagements, battles, and major operations. Many other operations lead to or support decisive operations. For example, two supporting ground battles, an interdiction operation, and a deception operation could all support a separate decisive ground battle during a single phase of a campaign.

Commanders at all levels should designate a point of main effort along with *supporting* efforts. This helps them and their staffs to allocate resources accordingly, providing focus to the operation while setting priorities and determining risks, promoting unity of effort, and facilitating an understanding of the commander's intent.

Will

Will is the disposition to act toward achievement of a desired end state. It is an expression of determination, the articulation of choice and desire. A platoon takes the hill because it wants to take the hill. The squad defends its position because it wants to hold the position.

War is a contest of wills. Combat power is the product of military forces and their will to fight. When will is lacking, so is combat power; when will is strong, it multiplies the effectiveness of military forces.

Ultimately, the focus of all combat operations must be the enemy's will. Break his will and he is defeated. When he no longer wants to fight, he cannot fight. Conversely, if his will remains strong, even though physically weakened and materially depleted, he remains a formidable opponent.

Leaders are the main source of will. They inspire their soldiers with the desire to win, to accomplish the mission, and to persevere in the face of all difficulties. When the will of the enemy commander is broken, his force quickly disintegrates. Analyzing and attacking the underpinnings of his will therefore is key to victory.

Concepts of Theater and Operational Design

Several key concepts of campaign design guide theater- and operational-level planners in their efforts. These include how to address the center of gravity, lines of operation, decisive points, and the culminating point.

Center of Gravity. The center of gravity is the hub of all power and movement upon which everything depends. It is that characteristic, capability, or location from which enemy and friendly forces derive their freedom of action, physical strength, or will to fight. Several traditional examples of a potential center of gravity include the mass of the enemy army, the enemy's battle command structure, public opinion, national will, and an alliance or coalition structure. The concept of a center of gravity is useful as an analytical tool to cause the joint commander and his staff to think about their own and the enemy's sources of strength as they design the campaign and determine its objectives.

The essence of operational art lies in being able to mass effects against the enemy's main source of power—his center of gravity, which he seeks to protect. At any given time, however, a center of gravity may not be immediately discernible. For example, the center of gravity might concern the mass of enemy units, but that mass might not yet be formed. Additionally, the center of gravity may be abstract, such as the enemy's national will or an alliance structure, or concrete, such as strategic reserves, C2, or industrial bases and LOCs.

The Iraqi Republican Guard is a good example. Although not located in Kuwait, it was the real source of power necessary for Iraq to hold that country. The destruction of the Republican Guard was seen as the center of gravity for achieving the strategic goal of removing the Iraqi forces from Kuwait. The eventual destruction of elements of the Republican Guard in the Kuwaiti theater of operations led to the withdrawal of Iraqi forces and limited their capability to return. The initial analysis of the enemy's center of gravity requires constant reappraisal during both planning and execution. It may develop or change during the course of the campaign.

Lines of Operation. Lines of operation represent a second concept for operational design. They define the directional orientation of the force in time and space in relation to the enemy. They connect the force with its base of operations and its objectives.

A force operates on *interior lines* when its operations diverge from a central point and when it is therefore closer to separate enemy forces than the latter are to one another. Interior lines benefit a weaker force by allowing it to shift the main effort laterally more rapidly than the enemy. A force operates on *exterior lines* when its operations converge on the enemy. Successful operations on exterior lines require a stronger force but offer the opportunity to encircle and annihilate a weaker opponent.

In modern war, lines of operation attain a three-dimensional aspect and pertain to more than just maneuver. Commanders use them to focus combat power toward a desired end. They apply combat power throughout the three dimensions of space and over time in a logical design that integrates firepower, PSYOP, deception, special operations, and maneuver forces to converge upon and defeat the enemy center of gravity.

Decisive Points. Decisive points provide commanders with a marked advantage over the enemy and greatly influence the outcome of an action. Decisive points are often geographical in nature, such as a hill, a town, or a base of operations. They could also include

elements that sustain command such as a command post, critical boundary, airspace, or communications node. Decisive points are not centers of gravity; they are the keys to getting at centers of gravity.

Normally, more decisive points will be in a theater than a commander can seize, retain, or destroy with his available resources. Therefore, planners must analyze all potential decisive points and determine which enable eventual attack of the enemy's center of gravity. Commanders designate the most important decisive points as objectives and allocate resources to seize or destroy them.

Decisive points help commanders gain or maintain the initiative. Con-trolling these points in the attack helps them gain freedom of operational maneuver, thus maintaining the momentum of the attack and sustaining the initiative. If the defender controls such a point, it interferes with the attacker's momentum and facilitates the defender's counterattack.

Decisive points include transportation nets or terrain features that are critical for the continued momentum of operations or the rapid shifting of the direction of maneuver and provide a pathway for advancing forces. They allow for passage of combat power in deeper and increasingly damaging thrusts against the enemy. One of the classic operations in this regard was Operation Market Garden in September 1944¡an effort to seize three successive bridgeheads and thrust deep into enemy lines. Each bridge was a decisive point in that its seizure by the Allies ensured the maintenance of momentum and initiative. The German 9th SS Panzer Division's retention of the bridge at Arnhem led to culmination of the Allied attack and collapse of the initiative.

By correctly identifying and using decisive points, commanders can place the enemy at a great disadvantage. Securing decisive points can give the operational commander the flexibility to select from more than one line of operation for further advance.

Culmination. Culmination has both offensive and defensive application. In the offense, the culminating point is the point in time and location when the attacker's combat power no longer exceeds that of the defender. Here the attacker greatly risks counterattack and defeat and continues the attack only at great peril. The art of the attack at all levels is to secure the objective before reaching culmination. A defender reaches culmination when he no longer has the capability to go on the counteroffensive or defend successfully. The art of the defense is to draw the attacker to his culmination, then strike when he has exhausted his resources and is ill-disposed to defend successfully.

Tactical overextension is less a matter of culmination than a temporary exhaustion or depletion of resources. Normally, the problem can be remedied by reinforcement, resupply, or unit substitution in a short period of time. Strategic and operational offensives may reach culmination for several reasons. The forward movement of supplies may be poorly organized, lack needed transport, or available stocks may be exhausted. The need to protect LOCs from partisans or regular forces operating on the flanks may sap the quantitative advantage of forward forces. The attacking force may suffer sufficient losses to tip the balance of forces. The soldiers of the attacking force may become physically exhausted and less morally committed to the attack as it progresses. The defending forces may become more determined as large portions of their territory are lost. Other countries that feel threatened could join the defender.

At the strategic level, examples of offensives that culminated before reaching their objectives include:

- The German attack on France in 1914.
- The German invasion of Russia in 1941.

Operational examples of culmination include:

- Rommel's drive into Egypt, which culminated at El Alamein in 1942.
- The Japanese drive in 1944 from Burma into India, which culminated at Imphal-Kohima.
- Patton's rapid advance across France, which bogged down for lack of supplies in Lorraine.
- The December 1944 German counteroffensive through the Ardennes, which resulted in the Battle of the Bulge.

Factors other than combat losses and lack of resources can influence culmination. For example, a commander could outrun his current intelligence in an attack that moves faster and farther than planned. The resulting increase in risk by continuing to advance may be acceptable if the commander knows he can overmatch any combination of forces he is likely to encounter. Given the lack of sufficient intelligence at that time, however, he may begin taking needless

losses or otherwise jeopardize the success of his operations. At that point, the better course of action might be to go more slowly to develop the situation.

Synchronization of logistics with combat operations can forestall culmination and help the commander control the tempo of his operations. For both tactical and operational levels, theater logistics planners forecast the drain on resources associated with fighting over extended distance and time. They respond by generating enough military resources to enable the commander to achieve his strategic objectives before reaching his culminating point. If they cannot do so, the commander should rethink the concept of operations.

SEQUENCING OPERATIONS

Army commanders determine the best sequence of major operations that achieve a tempo of operations to reach the desired objective. Commanders consider a variety of factors, including geography, strategic lift, command structure, logistics, enemy reinforcement, and public opinion. However, sequencing decisions for force-projection operations of ground forces is complicated by rapidly changing enemy situations. The sequence that commanders choose, therefore, should not foreclose future options but should be flexible enough to accommodate change.

Phases

The sequence of major operations (or the sequence of battles within a major operation) relates directly to the commander's decision on phasing. A *phase* represents a period during which a large number of forces are involved in similar activities (deployment, for example). A transition to another phase—such as a shift from deployment to defensive operations—indicates a shift in emphasis. For example, Phase I, the defense, could lead to Phase II, the counteroffensive, followed by a third phase that orients on consolidation and postconflict activities. World War II's Operation Overlord contained six distinct phases: buildup, rehearsals, embarkation, assault, buildup, and breakout.

During planning, commanders establish conditions for moving into each phase. They adjust their phases to take advantage of opportunities presented by the enemy or to react to an unexpected setback. Actions by the enemy also determine conditions for phases.

Changes in phases at any level can lead to a period of vulnerability for the force. At this point, missions and task organizations often change. Therefore, the careful planning of branches and sequels can reduce the risk associated with transition between phases.

Logistics is crucial to phasing. Operational planners consider establishing logistics bases, opening and maintaining LOCs, establishing intermediate logistics bases to support new phases, and defining priorities for services and support. Logistics, then, is key to sequencing the major operations of the campaign.

Branches and Sequels

No plan of operations can be projected with confidence much beyond the first encounter with the enemy's main force. The commander builds flexibility into his plan so that he may preserve his freedom of action under rapidly changing conditions. Branches and sequels directly relate to the concept of phasing. Their proper use can add flexibility to a campaign or major operation plan. During Operation Desert Storm, VII Corps planned a combination of seven branches and sequels called FRAGPLANs, an example of anticipation and flexibility in planning to maintain momentum.

Branches. Branches are contingency plans— options built into the basic plan—for changing the disposition, orientation, or direction of movement and also for accepting or declining battle. They give commanders flexibility by anticipating enemy reactions that could alter the basic plan.

Sequels. Sequels are subsequent operations based on the possible outcomes of the current operation—victory, defeat, or stalemate. A counteroffensive, for example, would be a logical sequel to a defense. Executing a sequel will normally mean beginning another phase of the campaign. This is a continuous process during an operation—the commander should never be without options.

DECEPTION

Deception operations are designed to mislead enemy decision makers by distorting, concealing, and falsifying friendly intentions, capabilities, and dispositions. The deception objective is the enemy commander and the decisions he is expected to make during the operation. The goal of the deception is to mislead the opposing military commander, prompting him to plan and conduct his activities in a manner that unwittingly serves the commanders' objectives.

While commanders at all levels can plan deception operations, those operations must support and complement the higher headquarters deception plan. In many cases, strategic or operational plans may include the employment of lower-level units, even though subordinate commanders may not be aware of the deception effort (see FM 90-2 for details on battlefield deception).

REHEARSALS

A rehearsal is the process of practicing a plan before actual execution. Rehearsing key combat actions allows participants to become familiar with the operation and to visualize the plan. Rehearsals assist units in orienting themselves to their environment and to other units during execution. Rehearsals also provide a forum for subordinate leaders to analyze and understand the plan, but caution must be exercised in adjusting the plan or order to prevent errors in synchronization. While rehearsals with combat units usually occur at the tactical level, headquarters at the operational level can rehearse key aspects of a plan using command post exercises.

Sometimes conditions allow for rehearsals of large, tactical formations such as the VII Corps move west during Operation Desert Storm from tactical assembly areas to attack positions using the same formation alignments they would later use during the attack. XVIII Airborne Corps conducted rehearsals of Operation Just Cause just prior to that operation, using a variety of methods to shield them from the enemy. However, even if time does not permit a complete rehearsal with a full complement of troops and equipment, some form of rehearsal must take place with all key leaders. It can be as simple as a leader discussion over a sand table or a C2 tactical exercise without troops (TEWT) over similar terrain—whatever reinforces the commander's intent.

WEAPONS OF MASS DESTRUCTION

The use of weapons of mass destruction can have an enormous impact on the conduct of all operations. Not only do the sheer killing and destructive power of these weapons create the battlefield effect, but the strategic, operational, psychological, and political impacts of their use affect campaign designs. Further, the proliferation of weapons of mass destruction dramatically alters the nature of regional conflict. As these weapons proliferate, the likelihood of their use against friendly forces or in response to an enemy's first use increases. The effects of these weapons on a campaign or major operation—either through use or the threat of use—can cause large-scale shifts in tactical objectives, phases, and courses of action. Thus, planning for the possibility of their use against friendly forces is critical to campaign design.

From the combatant commander's perspective, a swift end to a conflict will partially negate the escalatory potential of these weapons. A combination of conventional offensive and defensive measures can help deter or reduce the likelihood of an enemy's use of these weapons. Offensive preventive measures may include raids, surgical air strikes, and operations designed to locate and neutralize the threat of such weapons. Commanders implement defensive NBC principles of avoidance, protection, and decontamination. They also plan for effective air and ballistic missile defense with different systems. US military policy attempts to deter enemy use of weapons of mass destruction through a defense posture that allows US forces to survive, fight, and win under conditions produced by these weapons.

Commanders must assess an enemy's willingness to employ these weapons and the conditions that would prompt him to do so. However, commanders should never assume rationality in the mind of the enemy. A virtually defeated enemy may resort to unrestricted warfare by any means at hand.

The Mass Destruction Environment

When weapons of mass destruction are used, extensive destruction and mass casualties can result. Only cohesive, disciplined, physically fit, and well-trained units can function in this environment. But long-term operations in this environment will degrade even the best individual and unit performance as a result of wearing protective equipment. Commanders must train and equip soldiers and civilians alike to endure these conditions. By being better prepared than the enemy for continuous operations under conditions produced by weapons of mass destruction, US forces can maintain an advantage over the enemy that deters him from using these weapons.

Force protection is an imperative in this environment. Units can survive the use of weapons of mass destruction by anticipating their employment. Commanders can protect their forces in a variety of ways. These include training, OPSEC, dispersion of forces, and proper use of terrain for shielding against effects.

In an NBC environment, battle command becomes more difficult. Command posts and headquarters at all levels are likely targets. Control will be difficult even within the smallest unit. Personnel in protective clothing will be slow to respond to rapid changes in mission. The employment of these weapons will greatly alter the tempo of combat. Consequently, commanders must never assume that they are immune to attack but consider ways of decreasing their risk.

Contamination avoidance is essential for successful operations when faced with an NBC threat. Avoiding contamination allows units to maintain tactical momentum and preserves combat power by keeping soldiers out of increased NBC protective postures. It also removes or lessens the need for decontamination. FM 3-3 provides detailed information on NBC contamination avoidance.

Combined operations become more risky with the threat of NBC use. Countries that cannot protect themselves against these weapons may become the primary target of an enemy, whose aim is to disintegrate the coalition. The likelihood that an enemy will use mass destruction weapons against other coalition members will increase as US forces demonstrate the ability to defend effectively against their effects. Commanders should consider that possibility in all strategic, operational, and tactical planning.

Nuclear Weapons

As a force that now has no organic nuclear capability, the Army must rely on Air Force and Navy nuclear capabilities to deter regional threats from using weapons of mass destruction, and should it be necessary, to respond to regional use of these weapons. The integration of nuclear weapons and long-range ballistic missile systems expands the scope of regional conflict. Ballistic missiles significantly reduce reaction times and create complex planning and decision criteria. The ability of some nations to employ nuclear weapons at extended ranges, using ballistic or cruise missiles and high-speed aircraft, will significantly enhance their effectiveness as instruments of terror. With this ability comes the possibility of conflict escalation beyond the boundaries of the region.

Using intelligence systems, planners advise the commander of the enemy's capability to employ nuclear weapons and under what conditions he is most likely to do so. A significant intelligence task is locating these weapons and assessing the probability of their employment. Accordingly, the integration of national, joint, and combined intelligence means is vital to this effort.

The immediate effects of a nuclear detonation are blast, thermal radiation, initial nuclear radiation, and electromagnetic pulse (EMP). These effects can cause significant personnel and materiel losses. Secondary effects include urban devastation, fires, and radiological contamination. The EMP from a nuclear detonation can affect unshielded electronic equipment and degrade command, control, communications, and intelligence (C3I) systems. Residual radiation also can have long-term effects on personnel, equipment, facilities, terrain, and water sources. Therefore, ensuring that friendly force dispositions do not provide lucrative targets for nuclear weapons is important.

Biological Weapons

While the US has renounced the use of biological weapons, many nations have not. The availability of biological weapons to possible enemies requires that commanders prepare for operations in a biological environment. Defensive measures are necessary to mitigate the effects of a biological attack. Both military and civilian populations require informational, psychological, and medical preparation.

Chemical Weapons

All current and future operations have the potential to occur in a chemical environment. Although US policy does not condone or authorize first use of chemical weapons, preparedness to operate in this environment negates many possible advantages for an enemy to employ these weapons—in itself a deterrent to their use.

Chemical weapons produce immediate and delayed effects that can hamper operations through the contamination of equipment, supplies, and critical terrain features. Commanders can reduce the effects of chemical employment by applying the fundamentals of contamination avoidance, protection, and decontamination. Chemical reconnaissance and decontamination are two planning imperatives for all future missions; training is the key. Detailed information on providing NBC protection to the force, as well as risk analysis and assessment, is found in FM 3-4.

THE BATTLEFIELD FRAMEWORK

A *battlefield framework* helps commanders relate their forces to one another and to the enemy in time,

space, resources, and purpose. This battlefield framework establishes an area of geographical and operational responsibility for the commander and provides a way to visualize how he will employ his forces against the enemy. To understand this framework is to understand the relationship between the AO, battle space, and operations in depth. Proper relationships allow for simultaneous operations and massing of effects against the enemy.

During the Cold War, US Army doctrine stressed a battlefield framework that fit the conduct of operations against the Warsaw Pact, even while allowing variations of that framework to apply in other theaters. Army commanders and staffs in force-projection operations must go beyond that single alternative in considering the correct battlefield framework for the mission. US joint doctrine establishes a preferred framework where joint forces can apply combat power simultaneously throughout the land, sea, air, and space dimensions of the theater to stun and then defeat an enemy rapidly. Thus, US Army doctrine also prefers such a battlefield framework.

Thinking about choices to lay out that framework is the business of both tactical- and operational-level army commanders and staffs. Options available range from a linear framework with clearly defined geometry and lines with contiguous units and deep, close, and rear boundaries, to a less precisely structured framework where units might not be adjacent to one another and have no linear relationship. The following paragraphs discuss the selection of the battlefield framework that most readily suits the conditions of METT-T, the various planning tools, and the doctrinal considerations in the use of these methods.

The 1st Cavalry Division's operations in the Ia Drang Valley in 1965 and Operation Just Cause in 1989 differed considerably in framework from the defense of the Fulda and Meiningen Gaps by the V and VII Corps in Central Army Group (CENTAG) during the Cold War. Operation Desert Storm in 1991 saw yet another battlefield framework.

AREA OF OPERATIONS

A theater of war will normally contain more than one theater of operations, which can extend from friendly ports and logistics areas to distant sources of enemy support. Within a theater of operations, the JFC may define the lateral, rear, and forward boundaries of a geographical *area of operations*, including the air space above. Subordinate commanders may also define smaller AOs as the conditions of METT-T dictate. Within the AO, the JTF commander has the authority to control and synchronize the timing, priority, and effects of joint force actions consistent with his higher commander's intent and concept.

The AO must be appropriate in size and design so that the commander can accomplish his mission and protect his force. It should allow him to employ his organic, assigned, and supporting systems to the full extent of their capabilities.

If a land component commander is designated, the AO may be assigned to him. This determines what activities occur within his AO and how they contribute to his mission accomplishment. He allocates parts of this area to subordinate commanders, usually using zones or sectors. Commanders at all levels have the full range of measures described in FM 101-5 and FM 101-5-1 to help them control operations within their AO. Generally, however, they should use the minimum measures necessary for effective control of combat and sustaining activities.

BATTLE SPACE

Within a given battle space, commanders must understand the effects of geography and terrain, appropriately apply use of organic capabilities, and integrate joint and combined assets that can be brought to bear against the enemy.

Commanders seek to dominate the enemy in a given battle space. Battle space is a physical volume that expands or contracts in relation to the ability to acquire and engage the enemy. It includes the breadth, depth, and height in which the commander positions and moves assets over time. Battle space is not assigned by a higher commander and extends beyond the commander's AO. It is based on the notion that commanders expand their thinking to develop a vision for dominating the enemy and protecting the force before any mental constraints are emplaced, such as overlays depicting phase lines, boundaries, and arrows. This gives them complete freedom of thought to build a broad vision according to existing factors of METT-T.

Battle space includes the combat power of all friendly forces that can be brought to bear on the enemy, including joint and combined forces. It contains the physical, three-dimensional view of the battlefield, which can later be depicted with operational graphics. Battle space also includes the operational

dimensions of combat, including time, tempo, depth, and synchronization.

At the lower tactical levels, battle space is determined by the range of direct fire systems and the terrain on which they are applied. The higher the echelon, the greater the complexity and number of variations of battle space. A corps commander envisions the combined battle space of his divisions, long-range weapons, airborne and ground acquisition systems, and other assets given to him or used on his behalf (for example, SOF, interdiction assets, and adjacent unit fires).

Unity of effort is essential to operations within a given battle space. Ownership of assets is less important than application of their effects toward an intended purpose. In that way, battle space can overlap, shared by two adjacent commanders who perceive ways to employ their respective assets to mutual advantage.

Battle space must be used to every possible advantage. It is better to see, target, and hit the enemy at a distance from which he cannot hit back.
Conversely, if the enemy has distinct advantages at long range, the counter may be to move in closer to deter him from using firepower effects that may endanger his own forces.

Understanding battle space allows commanders to keep their options open, protect and sustain their forces, synchronize combat power, and keep the enemy off balance. As the commander considers his mission, he can visualize how he wants his battle space to look at different times as he moves against the enemy. This helps him determine how he might task-organize and position his units during different phases.

Effective commanders have always known how to use battle space. It was said of LTC Creighton Abrams in World War II that he knew the location of every tank and every piece of equipment and thereby was able to command, move his outfit, and always defeat the enemy in front of him. The tempo of operations today has accelerated to the point that all commanders must learn to dominate their battle space. That space has expanded dramatically as have events and combat systems that can impact on it. The challenges to control battle space have increased as have the penalties for failing to know what is where within that space and how those resources can be respectively protected, denied, damaged, or destroyed.

Commanders use the concept of battle space to help determine how the terrain and all available combat power can be used to dominate the enemy and protect the force. Eventually, this vision becomes the battlefield framework from which their intent and concept of operation are derived. Understanding battle space allows commanders to synchronize combat power against the enemy and keep the enemy commander from extending his own battle space to its greatest range. As commanders consider their mission, they visualize how they can make best use of their battle space. This helps them determine how they might task-organize and position their units. By understanding how to visualize operations in depth, commanders can synchronize operations to disrupt the enemy in depth, to throw him off balance, to attack his functions, and to set the conditions for decisive victory.

BATTLEFIELD ORGANIZATION

Commanders visualize their battle space to set the relationship of friendly forces to one another and to the enemy in time, space, resources, and purpose. Once commanders decide the purpose and relationship of battlefield activities, they determine how to arrange them within the breadth, depth, and space of the battlefield to meet their considerations of METT-T. This, in turn, helps them relate their activities to those of the enemy over time.

Three closely related sets of activities characterize operations within an AO—deep, close, and rear operations. Army commanders fight deep, close, and rear actions simultaneously in a manner that appears to the enemy as one continuous operation against him. They seek to attack the enemy simultaneously throughout the depth of the battlefield and mass both effects and forces when and where necessary to accomplish the mission.

Consistent with the JFC's plan, assets of other members of the joint team are used to accomplish these attacks as well as operate outside tactical depths to achieve simultaneous attacks throughout the theater. Fighting within this framework thus requires constant synchronization. The lines between these actions may be transparent and will often shift. Sometimes time and space are separated between these elements. Commanders arrange deep, close, and rear operations consistent with orders they have received and in a way that accomplishes the mission at least cost.

Deep operations, combined with simultaneous close operations, might be decisive in one operation, while in an other, deep operations set the conditions for future close operations to be decisive. Reaching the decisive operations point quickly is the aim. The factors of METT-T determine the relationship between assets committed to close, deep, and rear operations. Commanders must see the entire AO and react promptly to developments anywhere within it.

Understanding time-space relationships and systems capabilities is vital to commanders' reaction times and contributes directly to maintaining the momentum of operations and the initiative. It is important to know not only the location of the enemy but also how fast friendly commanders can react to his initiatives and how fast the enemy can react to our initiatives. Battle is a contest of these dynamic relationships.

Synchronization of deep, close, and rear operations is a complex undertaking. It requires a clear understanding of commander's intent within the organization, stimulating both command and staff initiative. Effective operations in depth require dynamic, anticipatory responses in order to synchronize a variety of assets, including space-based systems. The ultimate success in synchronizing deep, close combat, and rear operations determines the outcome of battles, major operations, and campaigns.

Deep Operations

Deep operations are those directed against enemy forces and functions beyond the close battle. They are executed at all levels with fires, maneuver, and leadership. Deep operations affect the enemy through either attack or threat of attack. They expand the battlefield in space and time to the full extent of friendly capabilities. Effective deep operations facilitate overall mission success and enhance protection of the force.

The deep battle is designed to nullify the enemy's firepower, disrupt his C2, destroy his supplies, and break his morale. A well-orchestrated deep battle may help cause the enemy to be defeated outright or may prevent him from achieving his intended objectives. In conducting simultaneous attacks in depth, Army forces employ long-range, intelligence-acquisition and targeting assets, including electronic warfare and joint assets, to track enemy forces, to complicate their operations, and to determine the effects of our strikes in depth.

The enemy is best defeated by fighting him close and deep simultaneously. In doing so, Army forces use deep operations to set the conditions for decisive future operations. Attack of enemy formations at depth delays, diverts, or reduces enemy combat capabilities and hastens enemy defeat. These operations enable friendly forces to choose the time, place, and method to fight the close battle. The principal targets of deep operations are the freedom of action of the opposing commander, the coherence and tempo of his actions, and the physical size of his force or selected parts of it. Successful deep operations attack the enemy's functions, such as his command, logistics, and air defense, while also destroying his combat forces.

While firepower plays an essential role in the conduct of deep operations, the integrated application of firepower and maneuver makes the Army's deep attack capability effective. Airborne and air assault forces, attack aviation units, and high-speed armor forces provide the land component and joint force commanders the capability to thrust deep into the battlefield to seize facilities and destroy key enemy functions that would be too expensive or risky to attack by other means. Maneuver at depth will often result in close combat. It may result in massing ground formations against a deep objective from previously dispersed friendly positions. It can also provide advantageous positions for indirect fire systems and bases for aircraft, or it can secure an advantage by only the threat of direct and indirect firepower against the enemy from those positions. Successful deep maneuver requires the synchronization of supporting assets, including systems organic to Army echelons and those of other services or allied forces.

Close Operations

Forces in immediate contact with the enemy, in the offense or defense, are fighting close operations. Close operations are usually the corps and division current battles. At the tactical level, they include the engagements fought by brigades and battalions. Commanders should dictate when and where to fight decisive close battles. Only ground forces can dominate the terrain through close operations. No other means are capable of doing this. Close battle occurs where, when, and against whom commanders choose to commit assault formations. Normally it takes close operations on land to gain decisive and lasting battlefield effects. Close operations by ground forces give commanders staying power.

The concept of close operations is sufficiently elastic to adjust to the conditions of a wide range of com-

bat situations. Since the close fight usually places friendly forces at greatest risk, it is essential to choose correctly the time and place for key close operations. Moreover, commanders must concentrate forces only when necessary for decisive effects, preferring to concentrate effects instead, if that is possible. Nonetheless, in some circumstances it will be necessary to concentrate forces. Forces can be dispersed, concentrated to achieve decisive results, then dispersed again. Deciding between concentration of forces or massing of effects is a function of METT-T.

Rear Operations

Rear operations assist in providing freedom of action and continuity of operations, logistics, and battle command. Their primary purposes are to sustain the current close and deep fights and to posture the force for future operations. At the operational level, rear operations support current operations and posture the force for the next phase of the major operation or campaign. At the tactical level, they enhance the commander's ability to influence the tempo of combat, helping him take advantage of any opportunity without delay. At either level, rear areas may not be contiguous with forward areas, complicating both protection for rear area forces and sustainment of forces fighting close operations.

Rear operations can be the targets of the enemy's deep attack. To preclude diverting assets needed for close operations, commanders train and equip units involved in rear operations to protect themselves against all but the most serious threats.

Contingency plans can also commit combat forces to respond to rear area threats. Protective actions in the rear can be active and passive. Soldiers and leaders at all levels are alert to threats to rear areas. They must be psychologically prepared to deal with them. Commanders continually reevaluate the possibility of serious threats to rear operations and devise measures to meet them with minimum penalty to ongoing close operations.

OFFENSE AND DEFENSE AT THE TACTICAL AND OPERATIONAL LEVELS

Commanders set favorable terms for battle by synchronizing ground, air, sea, space, and special operations capabilities to strike the enemy simultaneously throughout his tactical and operational depths. The theater commander attacks the enemy at strategic depths to set conditions for deeper operational maneuver. Commanders and units seek to be unpredictable to the enemy. They must be crafty and have a certain amount of guile and cunning in selecting how to lay out the battlefield and where, when, and against whom to fight. They must also remember battle is two-sided and the enemy influences the outcome.

Successful reconnaissance normally precedes successful operations at all levels. Large-scale ground maneuvers always require protection from enemy ground and air forces and sometimes from naval forces. Joint force and component commanders continuously synchronize interdiction, electronic warfare, air defense, air and ground reconnaissance and security, logistics, and special operations to support the overall campaign and its integral ground operations, especially at decisive junctures. Planning is not fighting, and key to success are the continuous adjustments during the conduct of operations. Commanders achieve the initiative by making adjustments and having options when the enemy has none.

Ground operations require the coordinated movement and the dynamic, agile concentration of units up to corps and numbered armies to gain positional advantage over the enemy. Intelligence, movement control, command on the move, air defense, deception, and logistics must all function harmoniously to support operational movements. Commanders protect key forces and facilities—some of them deep in the rear area—during this movement.

Major tactical events can lead to fast-breaking developments. Coordination of actions that support the movement of large forces is extremely important following major operations and battles. Commanders of large units will attempt to exploit tactical gains or defend and reorganize units. Air defense, deception, ground and air transportation, reconnaissance and security, logistics, and movement control will be the chief concerns as these movements occur.

Original plans may require modification as the enemy situation changes or becomes clear. Tactical formations, therefore, must be able to modify their direction of movement or orientation of defenses during operations. The mental agility of the commander, organizational agility of his staff, and physical agility of his units are vital to success. Staffs continually work to generate workable options for the

commander as fighting continues and friendly forces seek to gain and maintain the initiative.

Use of reserves and realignment of forces is continuous. The commander may have to realign forces in response to the operational situation or otherwise attempt to adjust the terms of the battle itself to meet his objectives or facilitate future operations. A significant concern of the large-unit commander during battle is to defeat the enemy's operational reserves and commit his own reserves, if necessary, at the decisive time and place. Friendly operational reserves often exploit the results of battle by penetrating deep beyond enemy defenses. In the defense, such reserves counterattack to defeat the enemy attack or start the friendly counteroffensive. The operational reserve can limit the enemy's success or cover the force's withdrawal. The theater commander attacks the enemy's strategic reserves. One-time commitment of reserves to achieve decisive results is desirable, but often not attainable. Thus commanders and staffs continually reconstitute a reserve in order to have decisive options available.

During the current battle, commanders compare the progress of ongoing operations against the anticipated requirements of future operations. They continually assess the potential culmination of their force and seek to achieve decisive results before reaching culmination.

OFFENSIVE OPERATIONS

The offensive is the decisive form of war-¡the commanders' ultimate means of imposing their will upon the enemy. While strategic, operational, or tactical considerations may require defending, the defeat of an enemy force at any level may require shifting to the offensive. Even in the defense itself, seizure and retention of the initiative requires offensive activities. The more fluid the battle, the truer this will be.

Offensive campaigns and major operations are designed to achieve operational and strategic objectives quickly and decisively at least cost. Operations Just Cause and Desert Storm are good examples. Army forces must also be adept and have the will to fight in more protracted conflicts if necessary. Several dynamic characteristics apply to offensive operations: initiative on the part of subordinate commanders, rapid shifts in the main effort to take advantage of opportunities, momentum and tempo, and the deepest, most rapid and simultaneous destruction of enemy defenses possible.

Historical Perspective

The Desert Storm phase of the 1990-1991 Persian Gulf War reflects the dynamic joint and combined nature of the operational offensive and simultaneous operations in depth.

Desert Storm began on 17 January 1991, when allied air and naval forces began the destruction of key Iraqi strategic, operational, and tactical targets. By the end of the second day, the coalition air component had achieved air superiority; by 21 January the Iraqi air force was incapable of operations. Air operations continued to strike at key systems in the heart of Iraq, as well as at the Republican Guard and frontline Iraqi forces. USMC forces afloat tied down Iraqi ground forces along the coast with a threatened amphibious landing. SOF operated throughout the theater.

The coalition set the final conditions for the ground attack. It moved the VII Corps by ground tactical movement and the XVIII Airborne Corps by road convoy from defensive positions in the east to attack positions up to 500 miles away, west of Kuwait. As air interdiction and operational deception operations continued, allied ground forces were set to execute the decisive action against the enemy.

The major ground operation began in the early morning hours of 24 February. The objective was to drive Iraqi forces from Kuwait, requiring defeat of the Republican Guard divisions in southern Iraq. The plan for achieving this envisioned a deliberate attack along the Kuwaiti-Saudi Arabia border by the 1st Marine Expeditionary Force and Arab coalition forces. Included in the plan were deception operations to fix Iraqi forces while the VII Corps and XVIII Airborne Corps swept around to the west of the Iraqi defenses to envelop them, to strike deep into Iraq to sever Iraqi LOCs, and to isolate and defeat the Republican Guard.

The coalition attack began with supporting attacks on both flanks and a feint in the center of sector (Figure 6-2). The XVIII Airborne corps attacked in the west with two divisions. The French Daguet Division (6th French Light Armored Division), with OPCON of a brigade of the 82d Airborne Division, attacked to secure as-Salman Airfield and protect the coalition's west flank. The 82d Airborne Division (-) followed and supported the 6th French Light Armored Division. The 101st Airborne Division (Air Assault) conducted the largest air assault operation in history to secure a forward operating base deep in Iraq.

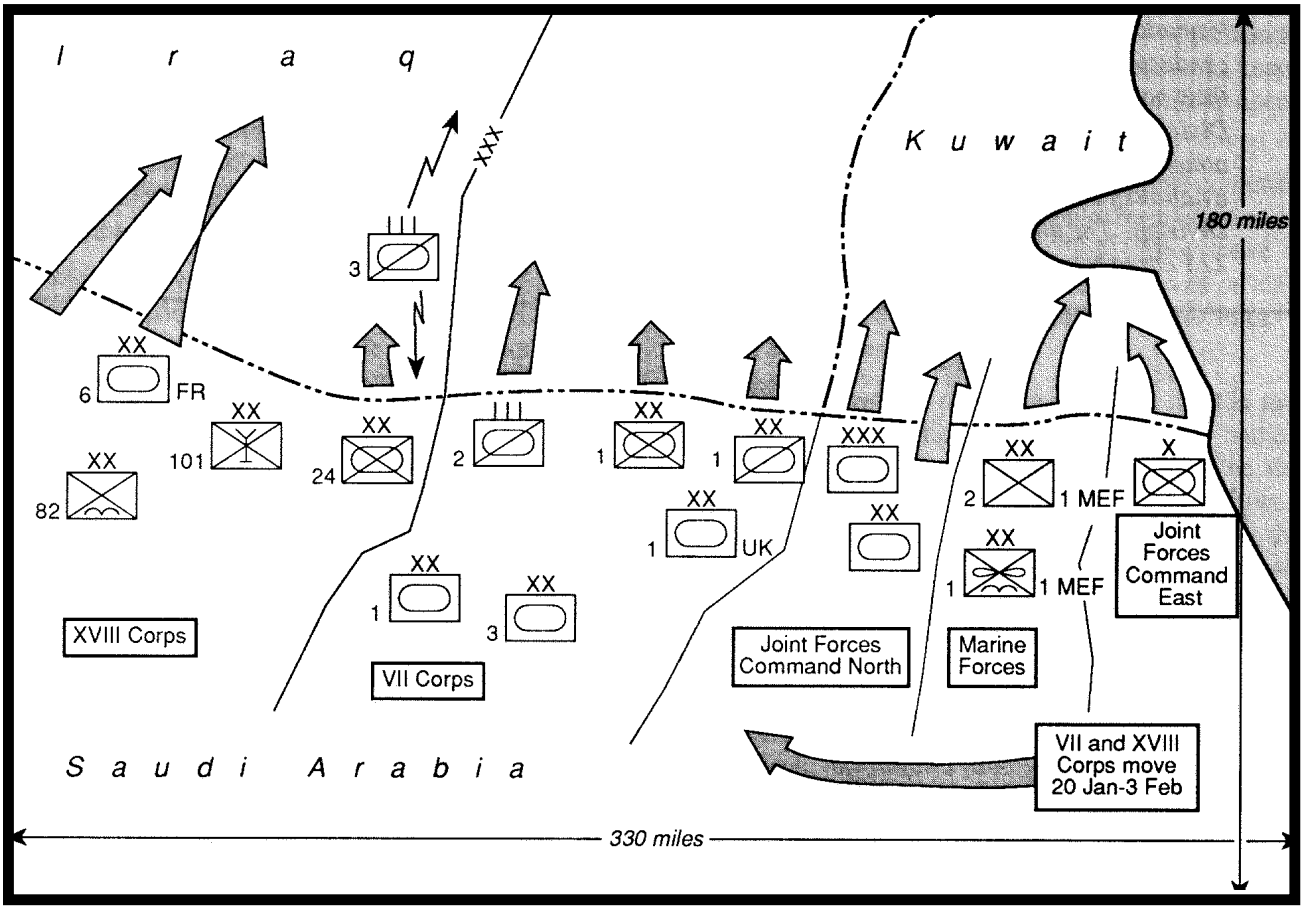


Figure 6-2. Operation Desert Storm, 24 February 1991

On the coalition's eastern flank, the 1st and 2d Marine Divisions, with an attached armor brigade of the 2d Armored Division and forces of the Saudi Arabian National Guard, attacked north into Kuwait. In the center, the 1st Cavalry Division conducted a feint as part of the plan to deceive the Iraqis as to the location of the coalition's main effort.

Based on the initial success, United States Central Command (USCENTCOM) began the coalition's main effort 14 hours early. The XVIII Airborne Corps continued to attack west of the Iraqi obstacle belt with the 24th Infantry Division and the 3d Armored Cavalry Regiment (ACR) to seize objectives inside Iraq. VII Corps, conducting the main effort for USCENTCOM, attacked in the center with the 1st Infantry Division penetrating the main Iraqi defensive belt. The 1st (UK) Armored Division attacked through the breach to defeat Iraqi tactical reserves and secure the corps eastern flank. Simultaneously, to the west of this, the 2d ACR led the attack of the 1st and 3d Armored Divisions around the flank of the obstacle belt and into Iraq. In the east, Arab coalition forces began their attack into Kuwait.

By the evening of 26 February, the VII Corps had turned 90 degrees to the east, fixed the Republican Guard, and opened a corridor for the XVIII Airborne corps to continue their attack to the east after having secured the coalition's west flank. The 24th Infantry Division had reach the Euphrates River, blocking Iraqi western routes of withdrawal, and had turned east with the 3d ACR to engage the Republican Guard. Throughout the theater of operations, coalition forces held the initiative.

Coalition forces attacked on the night of 26 February, with VII Corps making the main attack against three Republican Guard Armored Divisions (Figure 6-3) and parts of other Iraqi formations, to include the Jihad Corps. In the south of the corps sector, the 1st Infantry Division conducted a night passage of lines through the engaged 2d ACR and immediately made contact. To their north, the 1st and 3d Armored Divisions pressed the attack east while the 1st Cavalry Division, released for USCENTCOM reserve, moved almost 200 kilometers in 24 hours to an attack position. XVIII Airborne corps pressed the attack east to the north of VII Corps, with attack aviation of the 101st Airborne Division and ground and air attacks of the 3d ACR and 24th Infantry Division. The allies pressed the attack relentlessly through the night and during the day of 27 February toward the Iraqi city of Basrah and the coast of Kuwait.

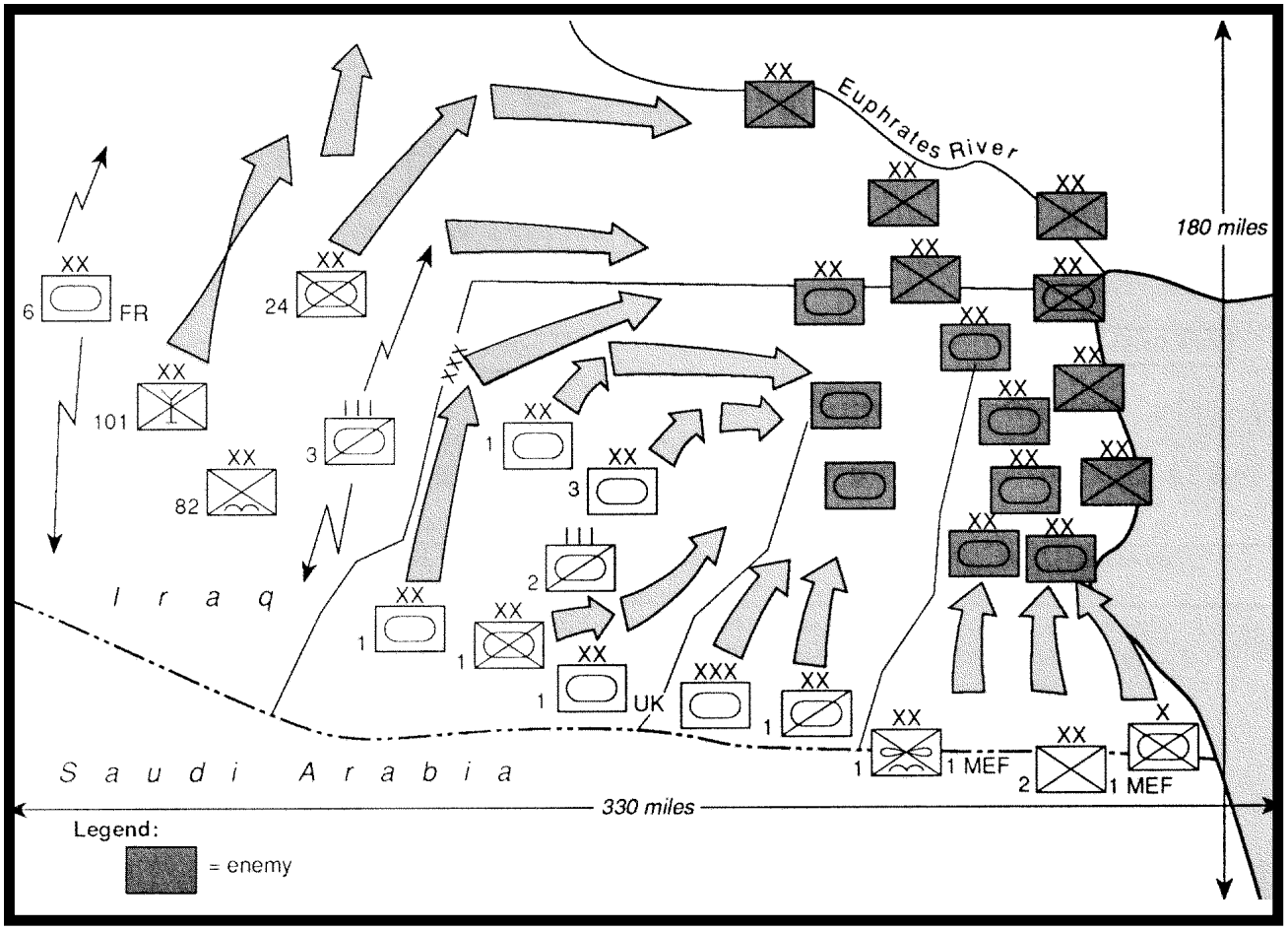


Figure 6-3. Operation Desert Storm 24 February 1991

By the morning of 28 February, the Republican Guard divisions were effectively routed and incapable of further coordinated resistance. At 0800 hours on the 28th, after the coalition achieved the military objectives of the operation, President Bush called for coalition forces to cease offensive operations.

The ideal attack might resemble a torrent of water rushing forward and expanding its channels around major resistance. It should move fast, follow reconnaissance units or successful probes through gaps in enemy defenses, and shift its strength quickly to widen penetrations and reinforce its successes, thereby carrying the battle deep into the enemy's rear.

JFCs orient offensive campaigns and major operations on decisive objectives. Their plans identify the center of gravity and decisive points and establish objectives that lead to the enemy's defeat. Although a campaign should attempt to defeat the enemy in a single major operation, an elusive enemy may cause commanders to structure the campaign to defeat the enemy in a series of major operations.

Within a given theater, a number of ground, air, and naval operations occur simultaneously in support of the campaign plan. Even during a major operation, one large joint force might be attacking, another defending, and still another protecting LOCs, while others arrive in theater.

Additionally, commanders may find themselves fighting offensive campaigns against either concentrated or dispersed enemy forces. Facing a concentrated enemy, operational commanders maneuver to force the enemy to abandon his position or fight at a disadvantage. In practice, this means directing operations against an enemy's flanks or rear or penetrating his defenses through weak areas. Facing a dispersed enemy, attacking commanders can isolate and defeat separated enemy forces in turn before they can join to organize a stronger defense.

However, in any offensive operation, ground commanders try to collapse enemy defenses as rapidly as possible with the smallest expenditure of resources. They do this by massing fires, concentrating units only when necessary. They also do this by retaining the initiative, striking enemy weaknesses, attacking the enemy in depth, and creating conditions that prevent the enemy from organizing a coherent defense. Occasionally, attacking commanders maneuver to avoid battles that would slow or weaken the offensive.

The initiative is critical to successful offensive operations. Whatever its purpose, campaign plans must be flexible enough to accommodate change so commanders can shift their main effort in response to either setback or opportunity without losing the initiative. Accordingly, commanders anticipate likely enemy actions and prepare contingencies for them and train their units to do likewise. Successful commanders do not run out of options and are always looking for ways to hurt the enemy. Anticipation and continuous formulation of attack options are key.

Security of the force is crucial. Successful reconnaissance is vital to success. The high-speed mobility of modern forces can create exposed LOCs and gaps between large, friendly formations. Commanders should anticipate this and take precautions to keep it from happening. Moreover, covering forces operate well forward, providing early warning.

In each phase of a campaign, operational commanders deploy their units using whatever form of maneuver best fits the conditions of METT-T. They move the force as a whole, orienting on enemy forces or major geographical terrain features, keeping some forces in depth as reserves.

The employment of the reserve may be the most crucial decision commanders make. As the battle is joined, operational-level commanders adjust the final maneuver of their forces and look for opportunities to defeat the enemy's defense in depth. In particular, they seek ways to employ their operational reserves decisively. In any battle, commanders position operational reserves where they can best exploit tactical success. As tactical success is achieved, the choices for employing reserves become more certain, whether to destroy the enemy in the battle area, to secure deep objectives, or whatever else commanders desire. So it is important that commanders plan for the commitment of the reserve and, once committed, anticipate its reconstitution.

Finally, in an offensive campaign, commanders try to preserve the fighting integrity of the force. However, if their force becomes dispersed or overextended, they may have to resort to the defense, planning for such a contingency as either a branch or sequel to their offensive operations.

DEFENSIVE OPERATIONS

The defense is the less decisive form of war. The defense may nonetheless be stronger than the offense, thus METT-T may necessitate defense in a campaign for a force-projection army prior to conducting offensive operations. The advantages of cover and concealment, advance siting of weapons, shorter LOCs, and operations over familiar terrain among a friendly population generally favor the defender. The

advantages enjoyed by the attacker are the initial choices of when and where to strike and when and where to mass; these give him the initiative. The major challenge of the defense is to overcome this initial offensive advantage and look for and create early options to transition to the offense.

The defender uses prepared positions and knowledge of the ground to slow the attacker's momentum and strike him repeatedly and unexpectedly. The defender disrupts the attacker's synchronization, degrades his strength and ability to concentrate, and defeats his force with effective use of combined arms. The defender simultaneously attacks the enemy throughout the full depth of his formations. He need not kill every enemy tank, squad, or fieldpiece; he need only destroy the ability of the enemy force to sustain and coordinate his forward movement.

A successful defense consists of reactive and offensive elements existing together to deprive the enemy of the initiative. An effective defense is rarely passive. The defender resists and contains the enemy where he must but seeks every opportunity to conduct offensive operations such as local counterattacks. Such opportunities may be limited early in the defensive; as the situation develops they become more numerous. This is especially true when the defender takes steps to uncover enemy vulnerabilities or confuse or disorganize enemy forces. When the attacker exposes himself, the defender's reserves or uncommitted forces counterattack. The defense that successfully destroys the coherence of enemy operations can more easily defeat him after the defender transitions to the offense.

Historical Perspective

The Yom Kuppur War, 6-24 October 1973, exemplifies the relationship between offensive and defensive actions as the operational level of war. On 6 October 1973, at 1504 hours, the Egyptians launched massive air and artillery stikes against Israeli positions in the Bar Lev Line (Figure 6- 4). At precisely the same time, Syrian forces opened a second operational axis against Israeli positions on the Golan Heights. The Israeli High Command soon determined that the critical theater of operations would develop along the Suez front and devised plans to begin decisive offensive operations there against the Egyptians. But to ensure the ultimate success of these operations, Israeli troops had to maintain a strong defense in the Golan region, securing the strategic rear of the Israeli forces operating in the Sinai.

By the end of 6 October, Syrian commandos in a heliborne assault seized the key observation post on Mount Hermon that overlooked the Golan Plateau and the Damasucs Plain. The next day, the Israeli 7th Armored Birgade defeated the Syrian 7th Infantry Division north of Juneitra. The 3d Tank Division, operating in the second echelon of the Syrian attack, then sought a breakthrough on its own further to the south. This thrust was defeated in a fierce tank battle west of Amadiye.

On 6-7 October, Syrian forces achieved greater success across the more favorable terrain to the south near the town of Rafid. Here, the 5th Mechanized Division broke the defenses of the Israeli 188th Armored Brigade. Although virtually destroyed (90 percent of the unit's officers were killed or wounded), the unit's two-day struggle bought time of the Israeli defense, led by Major General Rafael Eitan. By the end of 7 October, the initial Syrian attack, reinforced by the 1st Tank Division, had reach offensive culmination near the western escarpment of the Golan.

During 8-9 October, General Eitan redeployed the 7th Armored Brigade from the north for a counterattack against the newly won Syrian positions. Catching the Syrians in the midst of

resupplying their units, the Israelis were able to recover much of their lost territory. Eitan's counterattack, however, was merely the prelude to an operationl counteroffensive that began on 10 October.

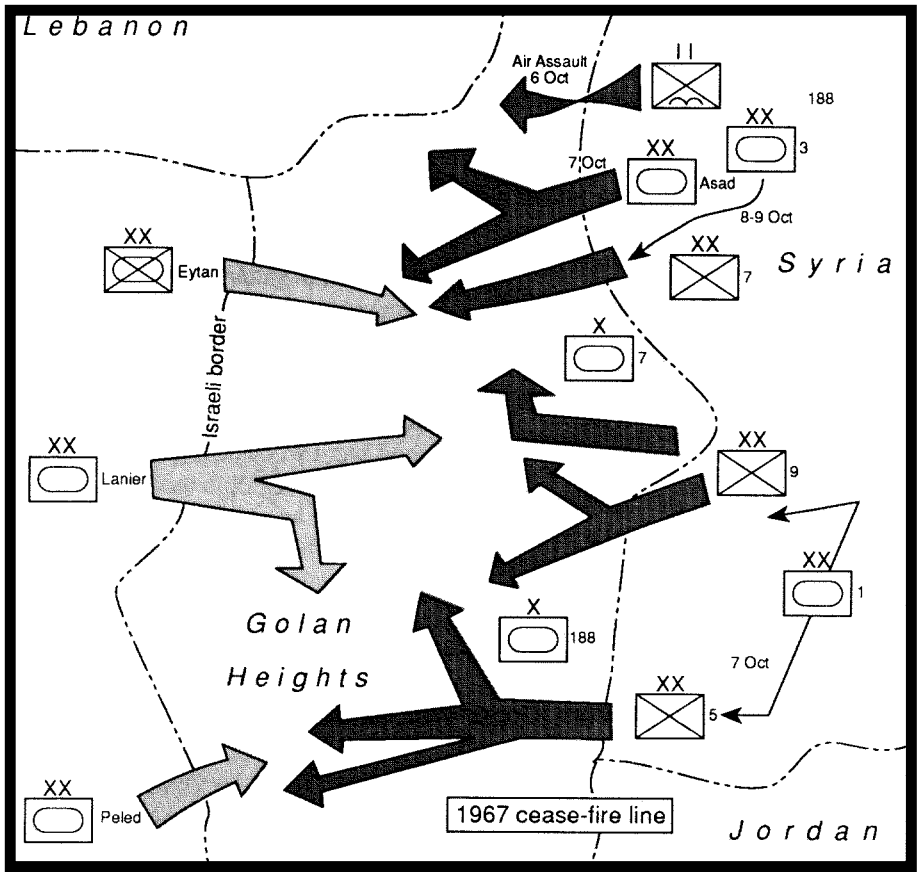


Figure 6-4. Yom Kippur War, 6 October 1973

Thanks in large measure to the last stand of the 188th Armored Brigade, the Isarelis were able to rush three divisions to Eitan on the Golan front. These three division launched a coutneroffensive down the Kuneitra-Damascus highway. By 12 October, the counteroffensive was so succesful that the Israelis began to shift untis to the decisive Sinai front. All positions on the Golan were restored by 22 October 1973, Mount Hermon being retaken on that day (Figure 6-5).

Thanks to the stout defense by General Eitan and his troops on the Golan front, the great encircling battle of Suez-Adabiya was able to take place in the Sinai. The encirclement of the Egyptian Third Army essentially sealed the victory for the Israeli armed forces in the Yom Kuppur War.

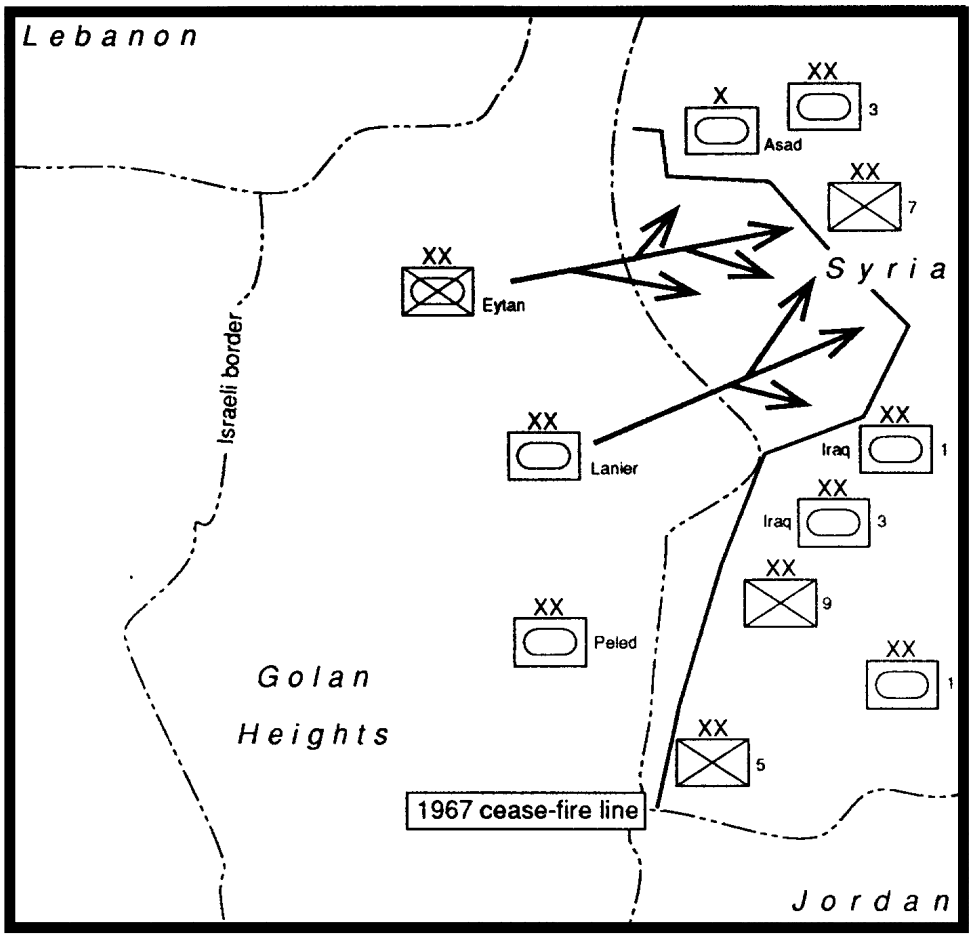


Figure 6-5. Yom Kippur War, 22 October 1973

Commanders fight defensive operations to defeat a large, attacking force, retain territory, build strength, or gain time. They also defend in certain areas as an economy-of-force measure. They use the defense to help set the terms for future decisive operations.

In preparing for defensive operations, the commander considers the logistical base and the strengths, limits, and vulnerabilities it imposes on him. The commander coordinates his plans for ground operations with theater air, sea, space, and special operations to ensure that the five are synchronized and that he fully exploits the capabilities of each. The campaign plan should set clear objectives for all major forces in the theater.

Defensive operations control the enemy's attack while preserving the defending force. Because the attacker normally attempts to push forces into the depths of the defended theater, the defending commander holds reserves in depth. He may employ them to engage the enemy's operational reserve, extricate committed units after battle, exploit tactical success by imposing greater losses on the enemy, or seize the operational initiative after a decisive victory. In particular, the defender isolates or defeats the attacker's operational reserve.

Whatever the design, commanders conducting defensive operations mix offensive and defensive tactical actions and contest the initiative at every opportunity. They consider their offensive actions carefully but accept calculated risks. As a rule, any

concept of operation the commander adopts reflects the greatest possible use of mobility, surprise, knowledge of the terrain, and offensive tactics. The ultimate objective is to turn to the offensive and defeat the enemy decisively.

CONFLICT TERMINATION

Military operations seek to end war on favorable terms. Knowing when to end a war and how to preserve the objectives achieved are vital components of campaign design and relate to theater-strategic planning discussed earlier in this chapter. Before the first shot is fired, the theater commander must have a clear sense of what he needs to see in order to know that his operations (and hence, the conflict) can end; he also needs to know whether (and how) ending the conflict at the point he has chosen will contribute to the overall policy goals.

The combatant commander considers how military operations combine to bring the conflict to a favorable end. He must understand strategic objectives and how victory in war contributes to those objectives. National decision makers will rely on the advice of senior military leaders as they consider how and when to end a conflict. The commander provides decision makers with critical information on enemy intent, objectives, strategy, and chances of success. Commanders consider the nature and type of conflict, the objectives of military force, the plans and operations that will most affect the enemy's judgment of cost and risk, and the impact of military operations on alliance and coalition warfare. The commander's view of the situation on the ground and, particularly, the enemy's residual fighting capacity and ability for continued resistance contribute importantly to the political determination that military operations should cease.

If the conditions have been properly set and met for ending the war, the enemy should be both unable and unwilling to resist. Success here should give political leverage to achieve the strategic objectives. Since war is fought for political aims, it is only successful when such aims are ultimately achieved. Success on the battlefield does not always lead to success in war. Making sure that it does requires the close collaboration of political and military leaders.

A period of postconflict activities exists in the period from the immediate end of the conflict to the accomplishment of the national strategic goals and objectives. A variety of operations other than war occur during this period. Chapter 3 discusses this phase of a force-projection operation, while Chapter 13 discusses principles and considerations for operations other than war.

CHAPTER 7

FUNDAMENTALS OF THE OFFENSE

The offense is the decisive form of war. While strategic, operational, or tactical considerations may require defending for a period of time, defeat of the enemy sooner or later requires shifting to the offense. Seizure and retention of the initiative comes with offensive action.

The fundamentals of the offense apply equally to entry operations as they do to more traditional offensive operations. In both cases, the intent is to gain freedom of action to allow swift transition from one action to another and to put the enemy at risk throughout the depth and space of the battlefield. The attacker presses successful operations relentlessly to prevent the enemy from recovering from the initial shock of the attack, regaining his equilibrium, forming a cohesive defense, or attacking in turn. The fight is taken to the enemy in such a way as to achieve decisive victory at least cost.

PURPOSES OF THE OFFENSE

The main purpose of the offense is to defeat, destroy, or neutralize the enemy force. Additionally, offensive operations are undertaken to secure decisive terrain, to deprive the enemy of resources, to gain information, to deceive and divert the enemy, to hold the enemy in position, to disrupt his attack, and to set up the conditions for future successful operations.

Because tactical offensive operations often expose the attacker, they normally require local superior combat power at the point of attack. That and the need to have sufficient force available to exploit success imply accepting risk elsewhere. Commanders build up sufficient combat power in their main effort to overwhelm the enemy at the critical time and place.

At the point of their attack, commanders avoid the enemy's main strength, turning him out of his defensive positions, isolating his forces from sources of support, and forcing him to fight in an unintended direction over ground he has not prepared. By attacking this way, the disadvantages of fighting exposed and surprised shift to the defender. One experienced soldier once put it this way, "Hit the other fellow as quick as you can, as hard as you can, where it hurts the most, when he isn't looking."

At times more direct attacks are possible. However, such attacks are nearly always costly in lives and materiel. Commanders should undertake them only when no other approach will accomplish the mission.

Inflicting physical damage is frequently necessary for offensive success. The tactical offense can achieve large gains by destroying the coherence of the defense, fragmenting and isolating enemy units in the zone of attack, and driving deep to secure decisive objectives. Historically, the most successful offensives have produced more enemy prisoners than casualties, reflecting the significant impact of offensive shock on the enemy's will to resist.

CONTENTS

Offensive tactical operations are continuous, not isolated, battles. They may continue for weeks, presenting the enemy with continuous pressure and few options. Commanders therefore plan for conducting the tactical offense over extended times, resting troops as necessary, and alternating and combining different forms of maneuver and operations throughout the duration of the fighting. For example, the initial assault to gain forcible entry may be followed by a defense of the lodgment area by ground forces to protect the buildup, while air and sea forces conduct simultaneous offensive operations. Limited maneuver may follow to expand the lodgment and to set the stage for a sustained ground offensive.

The offense is an integral part of any defense. A defending force may attack to disrupt an expected enemy offensive, upsetting its preparation while buying time and information. As in the case of the reconnaissance in force, a *spoiling attack* may develop into a major offensive operation if the attack reveals an exploitable weakness. *Raids* are a special form of spoiling attack designed to destroy installations or facilities critical to the enemy's operations. Commanders may also conduct raids prior to or in conjunction with other offensive operations to confuse the enemy or to divert his attention.

CHARACTERISTICS OF THE OFFENSE

The main feature of an offensive battle is the outflanking or bypassing of the defender—that is, taking the initiative. The aim of the commander in an offensive battle is to expedite the decision. Surprise, concentration, tempo, and audacity characterize offensive operations and are components of initiative. Initiative, combined with maneuver, makes decisive offensive operations possible.

The basic tenets allow the commander to focus on these characteristics. In a violently executed attack, agility is particularly important. It requires that commanders anticipate developments and prepare branches and sequels so that they are ready to exploit opportunities by shifting forces and activities quickly. Agility requires units to be able to rapidly change formation alignments and shift from one form of maneuver to another without pause. To preserve synchronization on a fluid battlefield, commanders conduct detailed initial planning. Subordinates understand the intent of the next two higher commanders so well that they can properly exploit battlefield opportunities even when communications fail. At every level, commanders develop options so that whatever happens, they can maintain the momentum of the attack.

Commanders in the offense synchronize the effects from all of their assets, control operations to the depth of their combat systems' effective ranges, and change direction frequently. They sustain themselves and maintain the ability to change direction quickly without losing the concentration of their forces and synchronization of effects. Commanders use routes that permit the most opportunities for maneuver around strongpoints. Offensive battle plans include contingencies such as reverting to the defense when necessary, exploiting opportunities whenever possible, changing the direction or location of the main effort, or continuing operations in altered light or weather conditions. As the conditions of battle change, commanders perceive opportunities and dangers and adjust accordingly. Agile units plan for dispersal, use multiple routes, earmark reserves that are prepared for all conceivable contingencies, and adjust as necessary to enemy use of weapons of mass destruction.

SURPRISE

Commanders achieve surprise by striking the enemy at a time or place or in a manner for which it is not physically or mentally ready. Knowing the enemy commander's intent and denying his ability to conduct thorough and timely intelligence is crucial. Being unpredictable and using deception, cunning, and guile also help to gain surprise. Surprise is achieved by the direction, timing, boldness, and force of the attack. Surprise delays enemy reactions, overloads and confuses enemy C2, induces psychological shock in enemy soldiers and leaders, and reduces the coherence of the enemy defense. By diminishing enemy combat power, surprise enables an attacker to succeed with fewer forces than he might otherwise require.

Achieving outright surprise once hostilities have begun is difficult. The proliferation of modern surveillance and warning systems and the presence of global commercial news networks make complete surprise less likely. Nonetheless, surprise can still be achieved by operating in a manner the enemy does not expect. The enemy may anticipate an attack, but he can still be deceived as to its nature, its timing, and its force. Bad weather, seemingly impassable terrain, feints, demonstrations, and false communications can all be used to

lull the enemy into false expectations. Sudden and violent attacks have a paralyzing effect on the enemy. So do attacks from unanticipated directions. Airborne, air assault, and special operating forces deep in the enemy's rear tend to have a disconcerting psychological effect on the enemy's equilibrium.

Surprise can come from operations used to throw the enemy off balance and eventually off guard. Repeated rehearsals by the Egyptian Army in 1973 caused recurring alerts by Israeli forces on the Bar Lev Line. The Israelis finally tired of the drills and believed that the Egyptians did not intend to cross. At that point the Egyptians attacked, successfully achieving surprise.

Surprise can also come from an unexpected change in tempo. Tempo may be slow at first, setting the conditions for a later acceleration that catches the enemy off guard. After several weeks of air attacks in Operation Desert Storm with only limited offensive action on the ground, the sudden breakthrough of allied forces caught the Iraqis off guard. VII Corps' night turning movement into the flank of the Iraqi Republican Guard units and the rapid exploitation, which put the 1st Infantry Division in blocking positions on the North-South Coastal Highway and the 24th Infantry Division astride Highway 8 blocking the enemy's retreat or reinforcement, completely surprised the Iraqi forces caught on the road.

CONCENTRATION

While surprise may contribute to offensive success, concentration is the ability to mass effects without massing large formations and is therefore essential for achieving and exploiting success. Concentration of any size force is also a vulnerability. Modern technology makes the process of concentration more difficult and dangerous. While advances in ground and airmobility enable the attacker to concentrate more rapidly, they also enable the defender to react more quickly. Moreover, the lethality of modern weaponry significantly increases the threat to concentrated formations.

To overcome these difficulties, attacking commanders manipulate their own and the enemy's concentration of forces by some combination of dispersion, concentration, deception, and attack. Dispersion stretches the enemy's defenses and denies lucrative targets to deep fires. By concen- trating forces rapidly along converging axes, the attacker overwhelms enemy forces at the point of attack by massing the effects of combat power. The attacker makes every effort to deceive the enemy as to his true intentions.

After a successful attack, attacking commanders keep their force concentrated to gain full advantage of its momentum. Should other forces threaten them, they may disperse again. They adopt the posture that best suits the situation, protects the force, and sustains the momentum of the attack.

Commanders designate a point of main effort and focus resources to support it. They are ready to shift it rapidly without losing synchronization of effects as the attack unfolds. Allocating enough CS and CSS to units making the main attack permits them to adjust to changing circumstances without time-consuming and confusing reorganizations. At the same time, commanders retain centralized control of sufficient assets to shift the main effort to a supporting attack if it appears more advantageous.

At every level, especially at division and higher, commanders conceal the concentration of their forces until it is too late for the enemy to react effectively. Units avoid or mask the patterns of their movement and preparatory activity that might reveal the direction or timing of attack. Commanders monitor their logistical buildups, patrolling activities, communications, and indirect fires to keep the enemy from seeing a visible change in the attacking force's operating pattern. Speed, security, and deception are essential to successful concentration of forces.

Concentration requires careful, prior coordination with other services and coalition forces. At every stage of the attack commanders integrate joint intelligence assets vertically and horizontally with joint fires. In addition to the protection from detection and attack that air superiority provides, tactical commanders employ ground, air, and sea resources to delay, disrupt, or destroy the enemy's reconnaissance. They also employ air, air defense, fires, and maneuver forces to gain tactical protection of combat and support forces as they concentrate. Once concentrated, forces can generate tactical fires from ground systems, CAS, and sea-based systems to weight the main effort and to sustain the momentum of the attack.

TEMPO

Tempo is the rate of speed of military action; controlling or altering that rate is essential for maintaining the initiative. As opposing forces battle one another, military operations alternate between actions and

pauses. Sometimes units go slow at one point in order to go fast later. Commanders seek a tempo that maintains relentless pressure on the enemy to prevent him from recovering from the shock and effects of the attack. A quick tempo demands an ability to make tactical decisions quickly, to execute operations that deny the enemy a pause, and to exploit opportunities according to the commander's intent. An attack tempo that puts sufficient pressure on the defender is essential to success; it promotes surprise, keeps the enemy off balance, contributes to the security of the attacking force, and denies the defender freedom of action. Properly exploited, tempo can confuse and immobilize the defender until the attack becomes unstoppable.

Tempo can be either fast or slow. While speed is often preferred, commanders adjust tempo to ensure synchronization. At times, tempo may be slowed to ensure conditions are set before accelerating again to gain the advantages that come with speed. The attacker may adjust his tempo prior to the final decisive action to ensure the location of key enemy targets, to arrange forces for a simultaneous attack in depth, or to complete resupply and repositioning to sustain the immediate transition to exploitation and pursuit. Once combat begins, attacking forces move fast to follow reconnaissance units or successful probes through gaps in enemy defenses before the enemy recovers. Attackers shift their strength quickly to widen penetrations, roll up exposed flanks, and reinforce successes. The attacker tries to carry the battle deep into the enemy rear to break down the enemy's defenses before it can react. The attacker does not permit the enemy to recover from the shock of the initial assault, never gives him the time to identify the main effort, and, above all, never affords him the opportunity to concentrate his forces or mass his effects against the main effort.

Tempo provides the necessary momentum for attacks to achieve their objectives. Tempo is a combination of speed and mass that creates pressure on the enemy. Speed, moreover, is not a substitute for the mass produced by sound tactics. Commanders who overextend their ability to mass effects or otherwise act hastily may give the advantage to the enemy. To gain the greatest advantage, commanders combine their control of tempo with sound tactics to create pressure; this confuses and shocks the enemy and robs him of his combat power.

Commanders build tempo into operations through careful planning. They identify the best avenues for attack, plan the battle in depth, provide for quick transition to other phases of offense, and concentrate and combine forces effectively.

AUDACITY

Audacity is a key component of any successful offensive action. A simple plan, boldly executed, requires audacious leaders to negate the dis-advantages of numerical inferiority. A good example from Operation Desert Storm is the audacity demonstrated late on 27 February 1991. The two ground troops of the 1-4th Cavalry reached Highway 8, which connected Kuwait City and Basrah. The squadron commander, operating on the extreme northern flank of the division, attempted to contact the 1st Infantry Division tactical operations center to report his situation. He realized the inherent risk to his force in continuing the attack while separated from the rest of the division by 25 kilometers and without support by artillery or reinforcements due to the loss of radio communications. Knowing the intent of the corps and division commanders, he blocked the Iraqi escape route. Subsequently, 1-4th Cavalry captured more than 1,000 prisoners.

Commanders should understand when and where they are taking risks but must not become tentative in the execution of their plan. A difficult situation handled boldly often leads to dramatic success. The offensive is inherently a bold action and must be pursued with audacity.

FORMS OF THE TACTICAL OFFENSE

The four general forms of the tactical offense are movement to *contact, attack, exploitation*, and *pursuit*. While it is convenient to talk of them as different forms, in reality they flow readily from one to another. Operations are increasingly fluid. Different forms of attack—occurring throughout the depth of the battlefield simultaneously and in closely aligned phases that shift back and forth—take new forms and offer increasing options for development. An attack may lead to exploitation, which can lead to pursuit. But there are also occasions when pursuit can be followed by deliberate attack, or deliberate attack can lead directly to pursuit. The ebb and flow of battle opens up many avenues for attack; victory goes to the bold.

In force-projection operations, the transition from offense to defense is another critical ebb and flow. Entry forces have to survive their initial battles to build forces. Initial-entry forces have to secure a lodgment

area to permit the buildup of forces. Their selection of offensive and defensive missions changes with the situation and flow of forces. Forced entry is clearly offensive, but it often leads directly to the defense of the newly gained lodgment area. On the other hand, the tempo of force-projection operations may move from the initial offensive objective to a defensive pause and then to a subsequent limited objective to seize key terrain essential to the defense. As the buildup of forces takes place, tactical units conduct a combination of defensive and offensive operations to set the stage for the sustained offensive operations. Such choices are influenced principally by the factors of METT-T. The forms of offensive operations serve different purposes and offer specific outcomes at different points in the offense.

MOVEMENT TO CONTACT

Movement to contact is the offensive operation conducted to develop the situation and to establish or regain contact. It may also include preliminary diversionary actions and preparatory fires. The extent and nature of the movement to contact depends on whether opposing forces were previously in contact. If forces are not in contact, then the central feature of the movement-to-contact operations is gaining or reestablishing contact with the enemy. Establishing contact occurs at some level in virtually all offensive operations where forces are not in immediate proximity to one another. Knowing the enemy's location and activities is an underpinning of a unit's ability to conduct mobile, force-oriented battles. Technologies such as space-based or joint-extended range surveillance and reconnaissance systems help locate the enemy, but physical contact by friendly troops remains a vital means of finding and fixing enemy forces. It is best when friendly forces discover the enemy with at least enough time to make hasty attack plans. Being surprised by inadvertently running into the enemy is always a possibility -- but not the preferred tactical option.

Approach March

An *approach march* is a variant of the movement to contact. Commanders conduct an approach march when they are relatively certain of the enemy's location and are a considerable distance from the enemy. Commanders adjust their tempo appropriately as they anticipate closing with enemy forces. They decide where their forces can deploy into attack formations that facilitate the initial contact and still provide freedom of action for the bulk of their forces.

Two limited-purpose applications of the movement to contact are the *search and attack*, and *reconnaissance in force.*

Search and Attack

Search and attack operations are conducted by smaller, light maneuver units and air cavalry or air assault units in large areas. The purpose of this operation is to destroy enemy forces, protect the force, deny area to the enemy, or collect information. Commanders use search and attack when the enemy disperses in an area of close terrain that is unsuited for heavy forces, when they cannot find enemy weaknesses, or when they want to deny the enemy movement in an area. They also employ search and attack in rear areas against infiltrators or SOF. Finally, search and attack is also useful as an area security mission to clear assigned zones.

Reconnaissance in Force

The *reconnaissance in force* is a limited-objective operation by a considerable force to obtain information and locate and test enemy dispositions, strengths, and reactions. If the enemy situation must be developed along a broad front, the reconnaissance in force may consist of strong probing actions to determine the enemy situation at selected points.
The enemy's reactions may reveal weaknesses in his defensive system.

Commanders may conduct reconnaissance in force during mobile operations as a means of keeping pressure on the defender by seizing key terrain and uncovering enemy weaknesses. Even when commanders execute a reconnaissance in force primarily to gather information, they must be alert to seize any opportunity to exploit tactical success.

Meeting Engagement

The desired result of the movement to contact is to find the enemy. When this happens, commanders fight a *meeting engagement*. To maintain their freedom of action once they make contact (essential to maintaining the initiative), commanders usually lead with a self-contained force that locates and fixes the enemy.

The commanders hold the bulk of their force back so that when their lead forces make contact they can maneuver the majority of their force without becoming decisively engaged. They fight through light resistance with lead units whenever possible to maintain the

momentum of the operation. Focusing combat power rapidly requires agility in organizations and leaders. Commanders also must balance the need to focus combat power rapidly with the need to keep other options open and to maintain pressure to which the enemy must react. Sometimes a meeting engagement occurs by chance wherever the opposing forces meet. This is not a preferred operation or one that intelligence assets should allow to happen. Rather, com-manders seek to surprise the enemy whenever possible.

Sometimes in a race to an objective or occupation of key terrain, forces make contact while on the move. Moreover, meeting engagements can occur even when each opponent is aware of the other, but both decide to attack without delay.

Once commanders establish contact, they implement the option that provides them the most advantage. Hasty attacks usually follow movement-to-contact operations, but other options are possible. Among these are fixing the enemy force while the bulk of attacking forces bypass it or transitioning to a deliberate attack. When Army forces run into a larger enemy, or if the terrain is such that it offers an advantage, commanders may elect to conduct a hasty defense and force the enemy to fight in the open. Commanders exploit every opportunity. Whatever the choice¡attack or defend¡at the point of collision of combat forces, commanders must be able to generate and sustain overwhelming combat power.

ATTACK

The purpose of the *attack* is to defeat, destroy, or neutralize the enemy. The same fundamentals apply to each type of attack. The differences between types of attacks lie in the amount of planning, coordination, and preparation before execution—in other words, how thoroughly commanders can apply the fundamentals. Force-oriented objectives allow greater freedom of action than terrain-oriented objectives and are therefore the preferred option. The attack usually follows a movement to contact (see Figures 7-1 and 7-2) but is also appropriate after defensive operations, exploitations, and pursuits. Deciding when to begin and end an attack is a tactical or operational judgment based upon its contribution to the commander's objectives.

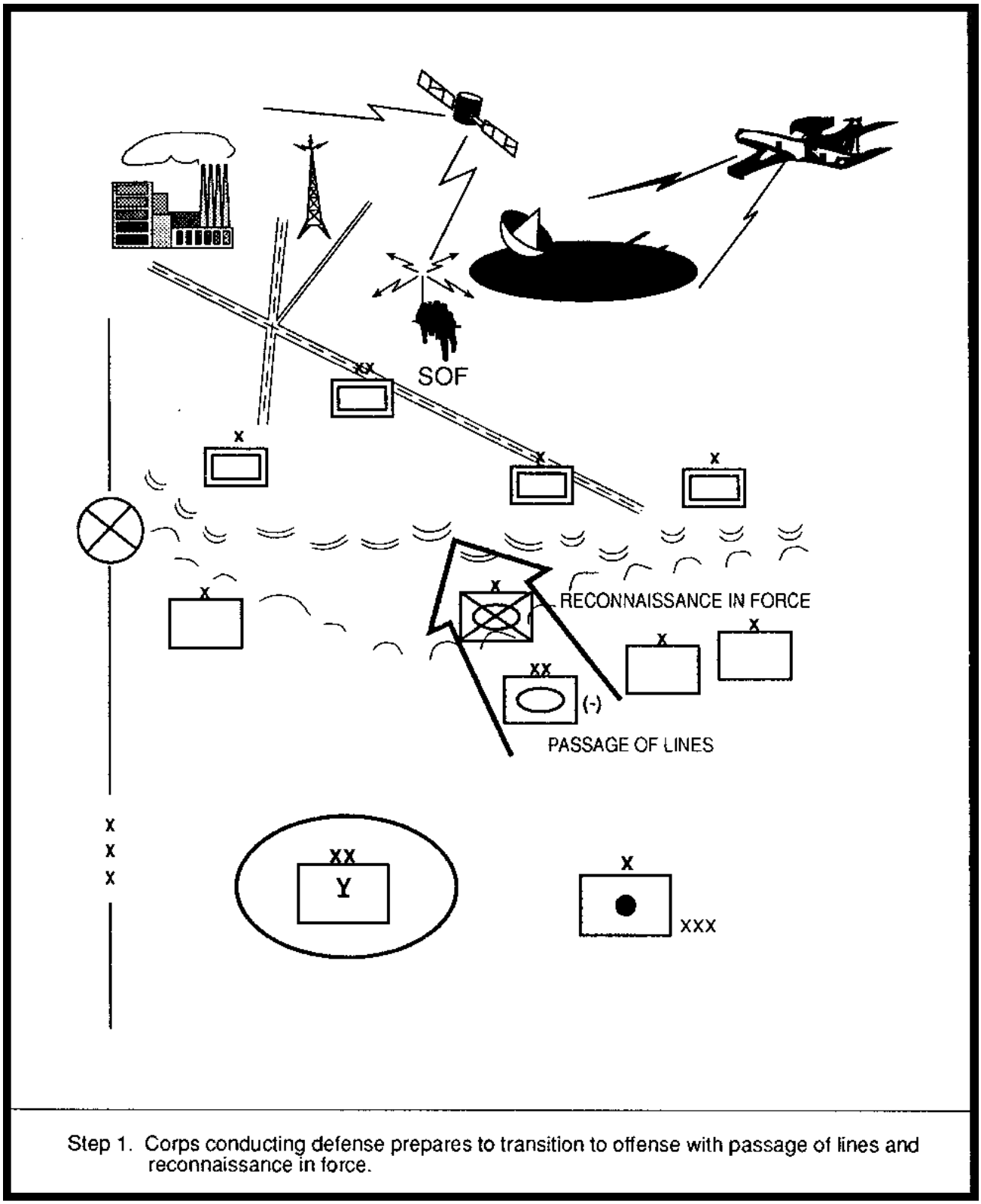
Whether hasty or deliberate, successful attack depends on the skillful massing of effects against the enemy force. The objective is to shatter the enemy's will, disrupt his synchronization, and destroy his units' cohesion and the willingness of his soldiers to fight. Successful attacks leave defending units incapable of further resistance.

Once commanders decide to attack, any unnecessary delays or preparatory movements before execution of the plan may allow the defender additional time to react, which makes this defeat more difficult. Commanders, staffs, and units are prepared to react quickly. Adjustments during the execution of the attack are to be expected. Skillful commanders provide the means and methods to work these adjustments rapidly in order to sustain the momentum of the attack. Their course of action is influenced by the purpose of the attack. Commander's intent drives the selection of available attack options—hasty attack, deliberate attack, spoiling attack, counterattack, raid, feint, demonstration, or any combination thereof.

Hasty Attack

The *hasty attack* is the most likely result of the meeting engagement. Commanders launch the hasty attack with the forces at hand and with minimum preparation to destroy the enemy before he is able either to concentrate or to establish a defense. The attacker may also employ such an attack to seize a fleeting opportunity or to regain the initiative quickly after a successful defense. In the defense, hasty counterattacks may recapture lost positions before the enemy has time to consolidate his success. Commanders can often recover lost ground and a shattered defense by counterattacking rapidly before the enemy is able to consolidate his gains. At higher echelons, commanders anticipate and employ hasty attacks in their contingency plans. Large formations attack from the march, using hasty attacks by subordinate units or covering forces.

Regardless of its purpose or echelon, a hasty attack enhances agility at the risk of losing synchronization. To minimize this risk, units conducting hasty attacks should use standard formations and well-understood and -rehearsed plans supported by sound intelligence-preparation-of-the battlefield. Supporting arms and services react quickly using prearranged procedures. The more closely combat and supporting units work together before the attack, the easier and more successful such coordination will be. Hasty attacks place a premium on habitual relationships among supported and supporting units at every level. A proper IPB also enables commanders to anticipate hasty attack contingencies, allowing some planning to make these attacks less improvised.



Step 1. Corps conducting defense prepares to transition to offense with passage of lines and reconnaissance in force.

Figure 7-1. Offensive Operation, Step 1

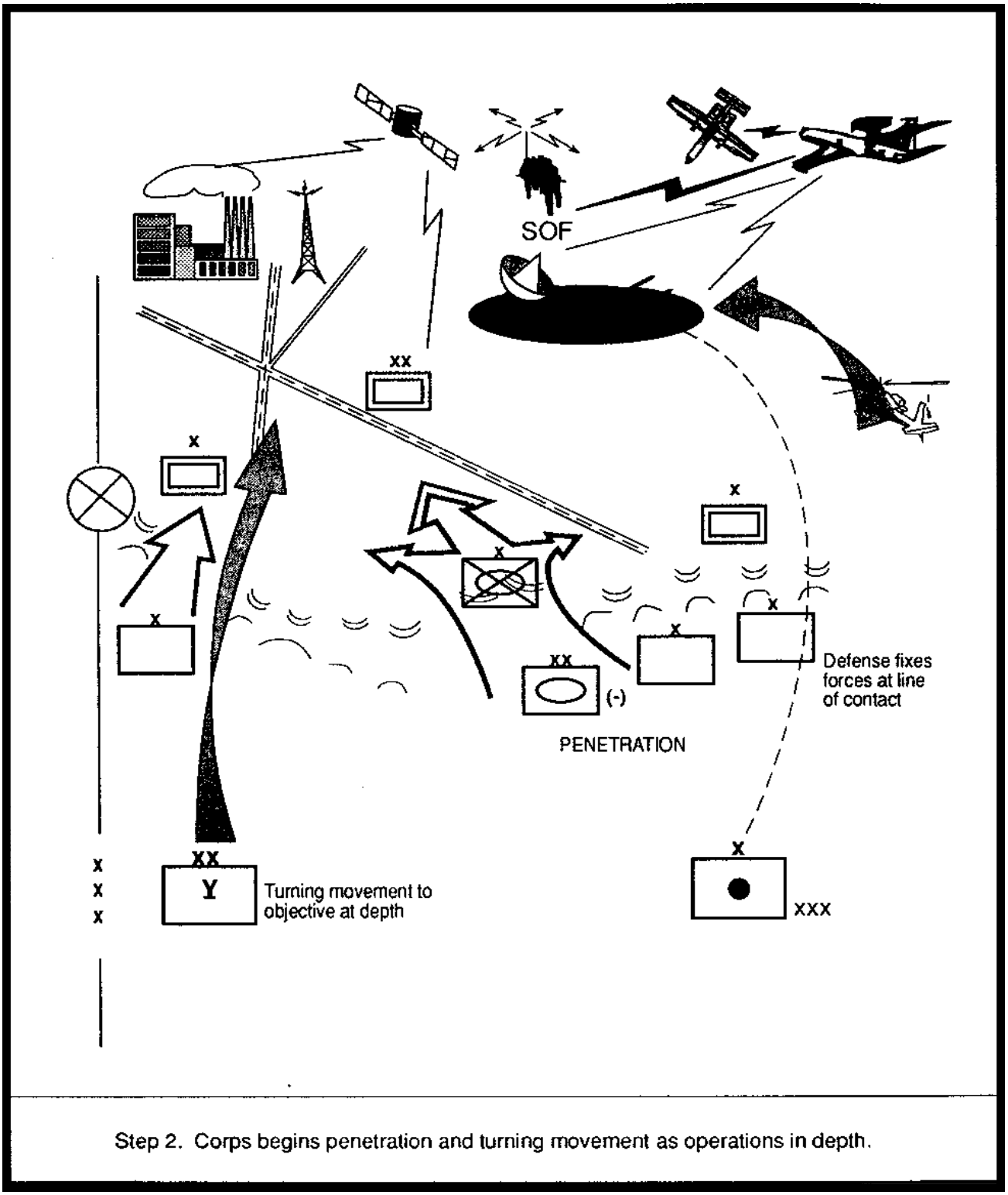


Figure 7-2. Offensive Operation, Step 2

Deliberate Attack

In contrast to hasty attacks, *deliberate attacks* are fully synchronized operations that employ the effects of every available asset against the enemy defense. They are often conducted from a defensive posture. Because such synchronization requires careful planning and extensive coordination, deliberate attacks take time to prepare. During this time, the enemy can improve his defenses, disengage, or launch a spoiling attack of his own. Commanders should use the deliberate attack when the enemy situation is known and when the combined arms team can be employed with sufficient combat power to defeat the enemy. They consider all of the factors of METT-T and the principles of war to thwart the enemy's defensive preparations, especially making effective use of bold maneuver and annihilating fires.

Spoiling Attack

Commanders mount *spoiling attacks* from a defensive posture to disrupt an expected enemy attack. A spoiling attack attempts to strike the enemy while he is most vulnerable—during his preparations for attack in assembly areas and attack positions—or while he is on the move prior to crossing his line of departure. In most respects, commanders conduct spoiling attacks like any other attack. They may be either hasty (when time is short) or deliberate (when the command has obtained adequate forewarning). When the situation permits, however, commanders exploit a spoiling attack like any other attack.

Counterattack

Commanders conduct counterattacks either with a reserve or with lightly committed forward elements. They counterattack after the enemy launches his attack, reveals his main effort, or creates an assailable flank. Although commanders conduct counterattacks much like other attacks, synchronizing them within the overall defensive effort requires careful timing.

Counterattacks afford the defender the opportunity to create favorable conditions for the commitment of combat power. Counterattacks can be rehearsed, their timing can be controlled, and the ground to be traversed can be prepared. Counterattacks are most useful when they are anticipated, planned, and executed in coordination with other defending, delaying, or attacking forces and in conjunction with a higher commander's plan.

As in spoiling attacks, commanders prepare to seize the opportunity to exploit success by the entire force. However, counterattacks may be limited to movement to better terrain in order to bring fires on the enemy. Counterattacks can achieve greater effects than other attacks, given the same forces on both sides, because the defender can create more favorable conditions. If it is possible to fix the enemy, then timing can be controlled and the counterattack rehearsed.

Raid

A *raid* is a limited-objective attack into enemy territory for a specific purpose other than gaining and holding ground. Commanders conduct raids to destroy key enemy installations and facilities, to capture or free prisoners, or to disrupt enemy C2 or support functions. The raiding force withdraws from the objective area after completing its mission and, unless it is a stay-behind unit, recovers to friendly lines.

Feint and Demonstration

Diversionary operations include feints and demonstrations. A *feint* is designed to divert the enemy's attention from the main effort. Brigades and smaller units conduct feints. Feints are usually shallow, limited-objective attacks conducted before or during the main attack. During Operation Desert Storm, units of the 1st Cavalry Division, as part of the VII Corps, conducted feints in the Rugi pocket prior to 24 February 1991, to fix Iraqi frontline units and to deceive Iraqi commanders that the coalition main attack was going to be in the Wadi al-Batin.

A *demonstration* is a show of force in an area where a decision is not sought. A demonstration threatens attack but does not make contact. Feints and demonstrations deceive the enemy as to the true intentions of the attacker. They pin the enemy in place, divert his attention, and allow decisive action elsewhere. If they unveil weaknesses in the enemy, they are followed up with a hasty or deliberate attack.

EXPLOITATION

In *exploitation*, the attacker extends the destruction of the defending force by maintaining offensive pressure. Attacks that result in annihilating a defending enemy are rare. More often, the enemy will attempt to disengage, withdraw, and reconstitute an effective defense as rapidly as possible. In large-scale operations, the enemy may attempt to draw forces from less active areas or bring forward previously uncommitted reserves.

Opportunities for local exploitation may occur even as the attack continues elsewhere in the same battle space.

Units remain alert to enemy signs that would signal the opportunity to transition to exploitation. Events such as increased EPWs, enemy units disintegrating after initial contact, lack of organized defense, and capture of or absence of enemy leaders all signal to the attacking units their opportunity to transition to exploitation. Commanders should be ready to follow every attack (when not restricted by higher authority or lack of resources) without delay. Such bold exploitation keeps the enemy under pressure, compounds his disorganization, and erodes his will to resist. The ultimate objective of the exploitation is the disintegration of the enemy to the point where he has no alternative but surrender or flight. This requires applying different tempos among subordinate commands to take advantage of exploitation in one sector while pressing the attack in others.

While exploitation following an attack is fundamental, it is especially important in a deliberate attack. Failure to exploit aggressively the success of the main effort may provide the enemy sufficient time to regain the initiative. Commanders consider exploitation and move rapidly to execute it when they see the opportunity.

Commanders of committed forces act fast to capitalize on local successes. When possible, the forces already leading the attack continue directly into the exploitation. If that is not feasible, commanders pass fresh forces into the lead. Exploitation requires the physical and mental aggressiveness to combat the friction of night, bad weather, dangers of fratricide, and extended operations. After weighing and accommodating the risks, commanders ruthlessly exploit vulnerable forces.

Commanders normally designate exploiting forces by fragmentary orders issued during an attack. Typical missions for these forces include seizing objectives deep in the enemy rear, cutting LOCs, isolating and destroying enemy units, and disrupting enemy C2. Commanders of the exploiting force are given the greatest possible freedom of action to accomplish their mission. They act with great aggressiveness, initiative, and boldness. Their objectives are a critical communications center, key terrain that would significantly contribute to destruction of organized enemy resistance, or simply a point of orientation.

As the enemy becomes demoralized and his formations begin to disintegrate, exploitation may develop into pursuit. Commanders of all units in exploitation must anticipate the transition to pursuit and must consider any new courses of action that become available as enemy cohesion and resistance break down. See Figure 7-3.

PURSUIT

A *pursuit* is an offensive operation against a retreating enemy force. It follows a successful attack or exploitation and is ordered when the enemy cannot conduct an organized defense and attempts to disengage. The object of the pursuit is destruction of the opposing force. If it becomes apparent that enemy resistance has broken down entirely and the enemy is fleeing the battlefield, any type of offensive operation can give way to pursuit. Command-ers conduct air and ground operations to intercept, to capture, or to destroy the enemy. Air forces can also interdict fleeing forces. Like exploitation, pursuit encompasses broad decentralization of control and rapid movement. Unlike exploitation, however, commanders can rarely anticipate pursuit, so they do not normally hold forces in reserve solely to accomplish this mission. Therefore, commanders must be agile enough to react when the situation presents itself.

Exploitations and pursuits test the audacity and endurance of soldiers and leaders alike. Both of these operations risk disorganizing the attacker nearly as much as the defender. As LOCs become extended, soldiers tire and equipment wears down. Extraordinary physical and mental effort is necessary to sustain momentum, transition to other operations, and translate tactical success into operational or strategic victory. Pursuit, like other operations, can give way to other forms of the offense. As the Allies pursued German forces to the Rhine in November 1944, the First US Army turned unexpectedly from pursuit operations to the deliberate attack of an organized defense at the Huertgen Forest. Some tactical difficulty and high friendly losses occurred due to problems recognizing the need to transition from exploitation back to deliberate attack.

Although history reveals examples in which the offense occurred in the sequence of *movement to contact, attack, exploitation, pursuit* (see Figures 7-1, 7-2, and 7-3), many offensive operations deviate from this pattern in one way or another. Attacks—especially counterattacks—can take place with little preparation or foresight. The Battle of Gettysburg resulted from just

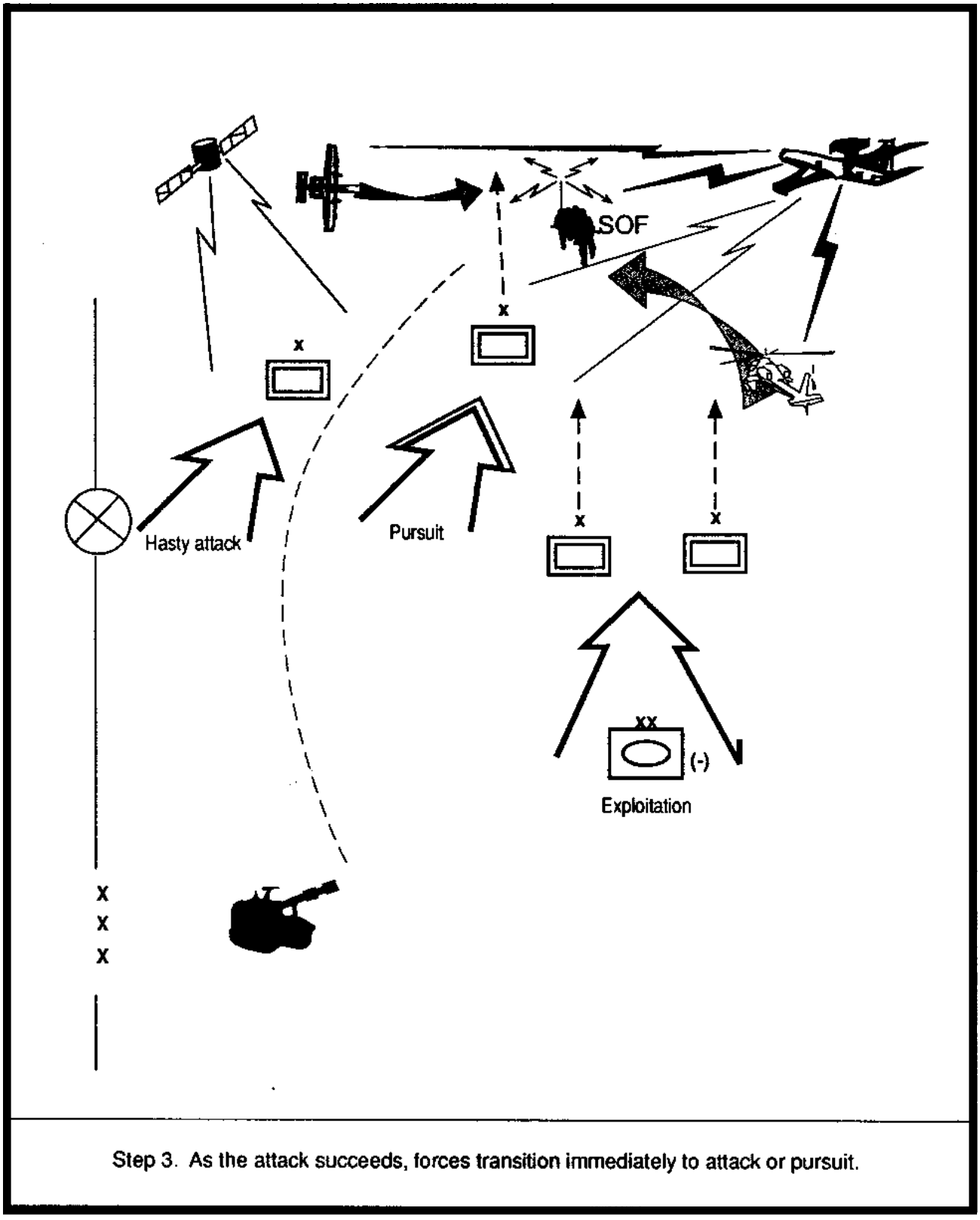


Figure 7-3. Offensive Operation, Step 3

such an unintended collision. Successful attack may give way directly to pursuit, bypassing exploitation altogether. Such a pattern was typical of engagements in Vietnam, where enemy forces attacked by US forces simply sought sanctuary in Laos or Cambodia. Pursuit occurs infrequently and exploitation usually ends short of annihilation, curtailed either by insufficient sustaining capability or by deliberate strategic restriction. Whenever possible, however, commanders use pursuit to overwhelm and shatter the enemy, making further resistance impossible.

Commanders rarely use all four forms of the offense; they select a combination and order that provide the greatest advantage. Thus, the objective sought from the different attack forms does not always lead to exploitation. Spoiling attacks and feints rarely develop into full exploitation, although unusual circumstances may convert either into a full-scale attack. Demonstrations, which seek no real contact, serve to deceive the enemy into expecting an attack.

Commanders recognize that the many types of operations they employ within the offensive and defensive forms may run into one another with no abrupt and discernible break. They employ spoiling attacks while defending to slow the tempo until they are ready to conduct a sustained offensive. As they prepare to transition from one offensive operation to another or from offense to defense, they can conduct a feint in one area to divert the enemy as the condition for conducting operations elsewhere.

FORMS OF MANEUVER

The forms of maneuver are *envelopment, turning movement, infiltration, penetration,* and *frontal attack*. Commanders use these forms of maneuver to orient on the enemy, not terrain. They determine what form of maneuver to use by their analysis of the factors of METT-T. However, this is art, not science, and more than one form of maneuver may apply. The forms of maneuver and the forms of tactical offensive operations complement one another (see Figures 7-2 and 7-3) and may apply to either linear or nonlinear battlefields. Further, a commander's statement of intent or concept of operations should articulate how fires will be used to support whatever form of maneuver he decides to use.

Reconnaissance is a precursor to maneuver and fire. Reconnaissance elements maintain contact with the enemy, develop the situation, and forewarn maneuver units prior to initial engagements. Orienting their movement on the movement of the enemy, reconnaissance elements avoid decisive engage-ments. Tactical reconnaissance includes cavalry regiments and squadrons, army aviation, drones, SOF, scouts, engineers, and maneuver units.

ENVELOPMENT

Envelopment uses maneuver and fires to put greater relative combat power against the defender and strip him of his advantages. To use this form of maneuver, commanders must find or create an assailable flank, pitting their strength against the enemy's weakness. Sometimes the enemy exposes his flank by his own forward movement, unaware of his opponent's location. In a fluid battle involving noncontiguous forces, the combination of air and indirect fires may isolate the enemy on unfavorable terrain and establish the conditions for maneuver against an assailable flank.

The attacker may develop the assailable flank by arriving from an unexpected direction. He may also fix the defender's attention forward through a combination of fires and supporting or diversionary attacks while he maneuvers his main effort to strike at the enemy's weak flanks and rear. The attacker needs to be agile enough to concentrate his forces and mass his combat power effects before the enemy can reorient his defense.

An encirclement is an extension of either a pursuit or an envelopment. A direct-pressure force maintains contact with the enemy, preventing his disengagement and reconstitution. It attempts to inflict maximum casualties. Meanwhile, an encircling force maneuvers to envelop the enemy, cutting his escape routes. If necessary, the encircling force organizes a hasty defense behind the enemy, blocking his retreat, while synchronizing the fires of the joint or combined team to complete the destruction of the encircled force. Forces must also be positioned to block or interdict the enemy's attempt to break through to the rear or break out of other points. All available means should be used to contain the enemy, including obstacles. Then, all available fires are brought to bear to weaken or collapse the enemy.

TURNING MOVEMENT

The *turning movement,* like the envelopment, uses freedom of maneuver to create a decisive point where the enemy is unprepared. The attacker secures key

terrain deep in the enemy's rear and along its LOCs by maneuvering around the enemy. Deep fires become relatively more important in this type of maneuver to protect the maneuver force and attack the enemy, especially when unaccompaned by artillery. This threat forces the enemy to abandon his prepared defense and attack in an undesirable direction and at a time of his opponent's choice. The X Corps and USMC amphibious assault at Inchon was a classic turning movement that achieved strategic and operational effects.

INFILTRATION

Infiltration uses covert movement of forces through enemy lines to attack positions in the enemy rear. Light infantry units are especially valuable for infiltration operations. Commanders may use infiltration to attack lightly defended positions or stronger positions from flank and rear, to secure key terrain in support of the main effort, or to disrupt enemy rear operations. Commanders are careful to avoid alerting the enemy as to their intentions by the position of maneuver and artillery units and the effects of fires in support of the infiltration. Commanders normally use infiltration in conjunction with other forms of maneuver.

PENETRATION

Commanders use *penetration* when enemy flanks are not assailable. They mass sufficient combat power at the point of penetration to overwhelm the enemy and gain the advantage (see Figure 7-2). They mass effects from fires of all available means at the point of penetration to make the breach, hold open the shoulder, and cripple any enemy counterattacks. Other attacking forces minimize losses by employing feints and demonstrations, fixing the defender with the intensity of their fires along the front, or catching the defender by surprise with rapid and violent execution.

Because penetration is an attack into the strength of the defense, it could be costly in friendly casualties. Penetration may be necessary to rupture enemy defenses on a narrow front to create assailable flanks and access to the enemy's rear. Commanders may attempt penetration on one or several axes, depending on the forces available. Commanders carefully weigh the advantage of attacks on multiple axes to avoid undue costs and casualties. Multiple penetrations may be desirable if they force the enemy to disperse his fires and consider multiple threats before committing his reserves.

FRONTAL ATTACK

The *frontal attack* strikes the enemy across a wide front and over the most direct approaches. It is normally used when commanders possess overwhelming combat power and the enemy is at a clear disadvantage. Commanders mass the effects of direct and indirect fires on enemy positions, shifting indirect and aerial fires just before the assault.

For deliberate attacks, the frontal attack may be the most costly form of maneuver since it exposes the attacker to the concentrated fires of the defender while limiting the effectiveness of the attacker's own fires. As the most direct form of maneuver, however, the frontal attack is useful for overwhelming light defenses, covering forces, or disorganized enemy forces. It is often the best form of maneuver for a hasty attack or meeting engagement in which speed and simplicity are paramount to maintaining battle tempo and, ultimately, the initiative. The frontal attack is an appropriate form of maneuver to be used by a fixing force as a supporting attack to an envelopment. The frontal attack may also be used during exploitation or pursuit and by subordinate elements of a large formation conducting an envelopment or penetration.

OPERATIONS IN DEPTH

As discussed in Chapter 6, tactical commanders, as well as operational commanders, conduct offensive operations simultaneously throughout the depth of the battlefield. The payoff is high-tempo operations that present the enemy with one continuous operation. Commanding forces in depth requires an understanding of the relationship of friendly forces to enemy forces in time, space, and purpose. Commanders determine the arrangement of battlefield activities within the width, depth, and height of the battlefield over time (see Figures 7-1, 7-2, and 7-3).

Three closely related activities occur in well-synchronized operations: deep, close, and rear operations. Commanders may pursue separate battle objectives by using deep and close combat operations, either of which may be the main effort. In addition, during the conduct of operations, the lines of distinction among these three activities tend to blur. As a result, commanders need to teach their staffs and subordinate commanders how to achieve the desired effects.

DEEP OPERATIONS

At the tactical level, commanders design operations in depth to secure advantages in later engagements and to protect the force. The preferred method is to simultaneously engage enemy forces throughout the depth of the battle area and achieve decisive results rapidly. The purpose of these operations is to deny the enemy freedom of action and to disrupt or destroy the coherence and tempo of his operations. Attack of enemy formations at depth destroys, delays, disrupts, or diverts enemy combat capability. These attacks also aim at enemy functions such as command, logistics, or air defense, thus exposing or creating a vulnerability that friendly forces can exploit.

Typical deep operations include interdiction by ground and air maneuver and fires, either singly or in combination; deep surveillance and target acquisition; and command, control, and communications countermeasures (C3CM). Other activities in depth, such as counterfire and electronic countermeasures, focus on effects that protect the force before and during the close battle. To synchronize activities that are both deep and close, commanders prioritize and integrate the available collection and intelligence resources with a plan of attack to give the tactical information necessary to make critical decisions.

Deep operations for different echelons may occur anywhere on the battle-field. To ensure unity of effort, higher echelons and joint forces coordinate deep activities that may affect or complement the operations of brigades and subordinate units.

CLOSE OPERATIONS

Close operations are when soldiers close with and destroy the enemy. Close combat is normally required for decisive and lasting effects on the battlefield. It is also the type of combat that places soldiers at greatest risk. Close operations are the activities of the main and supporting efforts around or through enemy defenses to occupy objectives that permit the defeat of defending forces. Commanders pick a combination of the forms of offensive operations and maneuver to use at the critical time and place to close with and destroy the enemy. Dispersed formations that mass to fight decisive, close battles disperse again to protect the force and allow attacking commanders to pick the time, place, and circumstances for the battle.

Commanders weight their combination of options to mass effects. For example, commanders may fix part of the enemy force with a frontal attack by a smaller force, while maneuvering the rest of the force in an envelopment to turn the enemy from his defensive positions and defeat him in detail. This causes commanders to designate the envelopment as the main effort so they can concentrate forces and mass the effects of combat power to achieve decisive results. Priority of fires shifts with the main effort during these operations. Massed fires are critical. Setting a base of fire and movement of forces to close with and destroy the enemy is the essence of close operations. Allocation of forces, selection of the location at which the enemy will be destroyed, and the tempo of the fight are functions of METT-T. Once committed, friendly forces press the fight to overwhelm the enemy rapidly.

In close operations, reconnaissance and security forces serve as covering forces. They are the advance, flank, or rear guards that locate the enemy, find gaps in his defenses, protect the force from surprise, develop the situation, and give commanders time and space in which to control enemy actions. Given extended and noncontiguous battlefields, tactical commanders may choose a variety of methods to secure the gaps between their subordinate units when they are operating at great distances from one another.

The reserve enters the action offensively at the proper place and moment to clinch the victory. This is its primary purpose. In this way it provides the source of additional combat power to commit at the decisive moment, and it provides a hedge against uncertainty. Once the attack begins, commanders shape the course of the battle and take decisive action, deciding when, where, and if to commit the fires of the supporting arms and their reserves. Thus, the initial strength and location of reserves vary with contemplated missions, the type of maneuver, possible hostile reaction, and clarity of the situation.

REAR OPERATIONS

Rear operations ensure freedom of action of committed and uncommitted forces and protect the means necessary to sustain combat operations and support the force. The location of CSS functions need not be contiguous to their supported combat forces. Sometimes a rear area may not be apparent. A rapid, extended major operation may place tactical units far from the original support area. Commanders may decide to separate their support units and extend their LOCs. They then consider the resources for temporary LOCs.

Additionally, they need to have procedures for ensuring support by keeping roads clear. On more constrained battlefields, rear areas are of particular concern to divisions and larger units that must allocate forces and other resources to maintain freedom of action and continuity of operations during and following an attack. The enemy will either bypass or attack these rear area units and facilities, depending on his objective. LOCs, reserves, and displacing support elements are the logical targets of the enemy's own deep operations. Commanders protect them by remaining capable of quick reaction to any posed threat.

CHAPTER 8

PLANNING AND CONDUCTING THE OFFENSE

Offensive doctrine leaves the commander wide latitude and the greatest possible freedom of action to accomplish the mission. Offensive operations are characterized by rapid shifts in the main effort to take advantage of opportunities by momentum and by the deepest, most rapid, and simultaneous destruction of enemy defenses possible. In applying the four forms of offense (see Chapter 7), commanders at all levels plan and synchronize joint intelligence and fires with their combat and CS systems to gain full advantage of their ability to see and strike the enemy simultan-eously throughout the depth and space of his AO. Within their AOs, commanders exploit their successes with additional forces and fires to increase the momentum of the attack and overwhelm the enemy.

Brigades and divisions accomplish major offensive tasks as part of corps or JTF operations. Battalions attack, delay, or defend as a function of the larger mission. Corps and divisions may employ divisions and brigades respectively as ground combat forces in a deep, combined arms battle. For smaller tactical units so employed, however, their activity is close combat.

PLANNING THE OFFENSE

Tactical planning centers on preparing for combat. Such planning can be relatively deliberate, such as before beginning offensive maneuver; or it might be more rapid, such as when done simultaneously with the conduct of the offense. Planning and fighting in the offense can, and usually does, occur simultaneously.

Essential to success is a succinct statement of the commander's intent (discussed in Chapter 6). The commander's intent should be complemented by a simple concept of operations that is clearly expressed in a manner that permits the attacker to press the fight by taking away the natural advan-tages of the defender.

Commanders tailor their offensive concept to the specific situation. Planning may occur while units are still in a defensive posture, preparing to begin offensive operations. It may also occur in anticipation of shifting efforts within the ebb and flow of continuous operations. Tactical units must be committed in the right place, at the right time, and in the right combination. Commanders attempt, where possible, to attack enemy forces simultaneously throughout their AO in order to stun and then rapidly defeat them.

The attacker seeks to maintain his momentum at all times. To avoid losing momentum after seizing their initial objectives in hasty or deliberate attacks, commanders plan for success. They exploit successes relent-lessly, choosing the appropriate combination of actions over time. They use reconnaissance, since most successful attacks are preceded or led by successful reconnaissance. Offensive plans facilitate transition to future operations, allow rapid concentration and dispersal of units, introduce fresh forces to exploit success, rest other forces, protect the force, and sustain combat operations throughout their duration.

Commanders conduct an estimate at the beginning of their planning process to determine how best to accomplish their mission. As they make this estimate, they consider the factors of METT-T, which have tactical, operational, and strategic applications. The commander's estimate is a continuous process. Since commanders remain alert to changes in their situation, they continuously review the METT-T analysis.

CONTENTS

MISSION

Commanders pass to their subordinates a clear statement of what is to be done and for what purpose. Different combinations of offensive and defensive operations allow subordinate commanders freedom of action. Whenever possible, commanders assign subordinates a force-oriented objective and a zone with few restrictive measures. They attempt to assign missions that last some time so that the momentum of the attack is not constantly interrupted. They give subordinate commanders a heads-up as to what they are thinking about for the future, and they issue warning orders when they are certain of future courses of action. Some operations require greater control and coordination, necessitating more detailed orders for attacks. In all cases, commanders anticipate likely developments during an attack. They bear in mind their superior's mission and intentions, prepare to continue beyond their assigned objectives, and assume additional responsibilities. Commanders and staffs gain and maintain the initiative by continuously developing executable options through the campaign to keep the enemy off balance.

ENEMY

Commanders consider the enemy's dispositions, equipment, doctrine, capabilities, and probable courses of action. The intelligence system serves commanders directly when it directs its capabilities to their needs. Commanders get directly involved in deciding priorities for reconnaissance and intelligence operations. Commanders aggressively seek gaps or weaknesses in the enemy's defenses; study enemy defensive preparations and attempt to obstruct and frustrate those preparations; and plan to penetrate enemy security areas, overcome obstacles, avoid the strengths of established defenses, and destroy the coherence of the defense. All of this requires an active, predictive intelligence effort oriented on critical units and areas.

In a force-projection army, where forces are often offset a great distance from their full complement of support, tactical units frequently turn to senior headquarters for answers to tactical intelligence requirements before they can do their own intelligence-gathering activities. These include identifying and locating enemy reserves as accurately as possible; locating and tracking enemy fire support systems; gathering information about enemy intelligence capabilities, to include air capabilities and air defenses. Aggressive reconnaissance to see the enemy and to anticipate his reactions, coupled with equally aggressive force-projection actions, is also important to getting and keeping the initiative.

TERRAIN AND WEATHER

Attacking forces select avenues of approach that permit rapid advance, afford maneuver opportunities to the attacking force, provide cover and concealment, permit lateral shifting of reserves, allow good communications, resist obstruction by enemy obstacles, and orient on key terrain. They exploit weather conditions that affect mobility, concealment, and air support whenever possible. Commanders and staffs demand tactical weather forecasts that will affect ground operations and operations by Army aviation in the ground environment, in addition to the more general theater weather patterns.

Terrain designated for the main effort should allow for rapid movement into the enemy's rear area. Commanders typically identify and avoid terrain that will hinder a rapid advance; however, an initial maneuver over difficult terrain may be desirable to surprise the enemy. Commanders personally reconnoiter the terrain whenever possible, particularly the terrain where they will conduct the main effort. Time spent in reconnaissance is time well spent.

Attackers pay particular attention to obstacles. Commanders plan to negotiate or avoid urban areas, rivers, extreme slopes, thick forests, or soft ground between their units and their objective. They use such terrain, when parallel to the axis of advance, to protect their own flanks. Light forces can use such areas as approaches, or they can capitalize on them for defensive positions, freeing heavier forces for maneuver. To deny key terrain to the enemy along the axis of advance, the commander either seizes it or controls it by fire. While the majority of operations are force-oriented, decisive terrain can become the focal point of the attack.

Weather and visibility conditions significantly affect offensive operations. The concealment and protection from air attack that weather or light conditions offer can be critical to success, especially air assault or airborne operations. Ground conditions increase or reduce the number of avenues available for maneuver and affect speed of movement for all forces. Maintenance and logistics support of heavy forces and limitations on air operations also increase with inclement weather.

TROOPS

The number and type of friendly troops available affect the tactical plan. Choosing which units for which types of actions is vital to success and is influenced by the status of the units' training and the experience of their leaders. Commanders consider relative mobility, protection, and firepower as they design a plan that makes full use of the reinforcing effects of combined arms. Commanders employ units according to their capabilities. Dismounted infantry can open approaches for armor and mechanized forces by attacking through heavy cover or by penetrating anti-armor defenses. Air assault or airborne units can seize objectives in depth to block enemy reserves or secure choke points.

Armor units can move rapidly through gaps to disorganize the defense in depth. Field artillery, ADA, engineer, and chemical units perform critical functions to support all elements of an attacking force. Aviation units engage the full range of enemy ground targets as well as enemy helicopters and fixed-wing aircraft. The extent of possible combinations of forces enhances agility.

TIME AVAILABLE

Offensive operations become harder to conduct when the defender has more time to organize the ground and bring up more troops. The attacker takes time to assure that he can concentrate his forces to generate all available combat power for the attack. The presence of space-age telecommunications and the electronic media also limit available time. Electronic media can report news of engagements on international and national news broadcasts before higher and adjacent commands are informed of the battle. In an austere environment, commanders may have limited awareness of media reporting and its effect on public opinion. Operational and higher-level tactical commanders need to recognize and plan for the presence and effects of news media.

Commanders acquire speed by making the necessary reconnaissance and providing the proper artillery and other tactical support, including air support. They also acquire speed by bringing up forces and then launching the attack with a predetermined plan to reduce the time under fire to a minimum. Once an attack is underway, time remains critical. The attack can succeed only if it achieves its objective before the enemy recovers his balance, identifies the threat to his defense, and masses forces and fires against the attack. Time is therefore vital to the attacker; he must prolong the enemy's surprise, confusion, and disorganization as long as possible and maintain the momentum of the attack. The aim is to conduct the attack at a tempo of operations and a degree of lethality—both applied simultaneously throughout the battle area—that the enemy cannot handle.

PREPARING FOR ATTACKS

Commanders maximize time available for planning and issuing orders. They give subordinates ample time to conduct necessary reconnaissance and coordination and to follow troop-leading procedures throughout the force. Commanders discuss possible courses of action with their subordinates and staffs; when sure of the course of action, commanders issue warning orders. Warning orders are vital in preparing for attacks; time is critical. Failure to provide ample time to executing forces creates great risk and threatens successful execution. Commanders carefully budget available time; they discipline themselves and their battle staffs to get information to the executing forces.

Attack orders embody the commander's intent and concept of operation. Commanders select only the control measures necessary to avoid unduly slowing the tempo of the attack and over-centralizing control. They include measures for coordinating and controlling operations. Control measures graphically illustrate the concept, assign zones, maintain separation of forces, concentrate effort, assist the C2 of forces, and add flexibility to the maneuver plan.

Whenever possible, commanders issue orders and review subordinates' planning concepts face-to-face. They attempt to issue orders that will last some time or from which adjustments can easily be made. They employ techniques to achieve clarity and synchronize operations between echelons. Immediately after issuing the order, for example, commanders have their subordinate commanders restate their missions in their own words. In this way, a commander ensures that his subordinate commanders understand his expectations before they begin their own planning activities.

As part of the preparation process (during the deliberate planning process for lower echelons before they issue their orders), commanders gather their subordinate commanders and battle staffs to review and adjust the synchronization of the battle plan. This brief-back is normally conducted over a map or terrain model. It begins with the subordinate commanders' descriptions

of the timing and employment of their concepts of maneuver and fires to execute their commander's course of action and likely contingencies. Face-to-face synchronization meetings serve to reveal operational gaps and synchronization problems. Commanders and staffs do a lot of *if this, then this* type of war gaming. They might even ask an element to role-play the enemy to effect a two-sided nature to planning—just as will occur in the attack. Commanders also provide for branches and sequels to the basic plan so that, during conduct of the operation, units can more easily adapt while sustaining the momentum. When commanders integrate the timing and trigger events for the maneuver and firepower of subordinate and supporting forces early in the preparation process, they have the time to adjust and refine their plans to enhance successful execution.

Coordination begins immediately upon receipt of a mission and is continuous throughout the operation. Subordinate commanders and staffs must have pertinent information and as much time as possible to prepare and rehearse their plans. Units at every level conduct route reconnaissance, rehearsals, and multiple activities to adjust coordination details and timing. They adjust the synchronization plan accordingly. When properly done, subordinate commanders' intents and concepts of operations support and complement the higher commander's plan.

During their preparations, commanders integrate their concept for support with their concept of operations. They carefully ensure that communications systems fully support the concept of operation in fast-paced and extended battles. Logistics operators stay fully informed of the action during the battle. Attackers carefully link CSS operations to ensure continuous sustainment of combat operations. This is especially key during high-tempo operations and is facilitated by habitually associated combat and CSS units. When the plans call for the attacking unit to pass through a defending unit, CSS operators seek assistance from the defending unit.

Commanders plan and coordinate movement of the force in detail to avoid confusion and delay and to gain surprise. They concentrate the force quickly and make maximum use of cover and concealment, signal security, and deception. An attacker avoids or masks actions that would alert the enemy to the coming attack to preserve surprise.

CONDUCTING ATTACKS

Timely issuance of plans and thorough rehearsals are vital to success; so is the ability of attacking units to adjust to the situation. Sustaining a tempo the enemy cannot handle is vital to the conduct of the attack. Units press the fight. They vary the tempo and methods of attack, but they maintain momentum. The ability of commanders to continually anticipate and visualize both enemy and friendly situations is vital in the attack. Their decision making is likewise key. This includes knowing when as well as what to decide.

The attack must be violent and rapid to shock the enemy and to prevent his recovery as forces destroy his defense. The attacker minimizes his exposure to enemy fires by using maneuver and counterfire, avoiding obstacles, maintaining security, ensuring C2, and remaining organized for the fight on the objective.

The attack erupts in a powerful and violent assault upon the objective. Its purpose is to destroy an enemy force or to seize the ground it occupies. Agile units are prepared to shift the main effort as conditions unfold. Synchronized fires, maneuver, and combat support are imperative to achieve superior combat power at the point of the assault. Firing artillery preparations and suppressive fires, isolating the enemy force, concentrating combat power, and overrunning the enemy all combine to destroy the defending force. Several forms of attack may be conducted in different combinations. During the execution phase, commanders read the battle and exploit in some areas while holding back in others. They may need to designate special C2 measures to adjust the main effort and sustain the momentum.

Commanders often mass all available firepower on the enemy at the beginning of the assault. This requires detailed planning, precise execution, and considerable discipline in the fire support force as well as in the assault force. Dismounted assault forces should move as closely behind their own fires as possible; armored forces should assault under overhead artillery fire. Air assault forces attack directly onto or as close as possible to objectives, once the enemy defender and supporting artillery and air defenses have been suppressed or defeated by fires. As the attacker nears the enemy force, he must overcome enemy resistance with violent massed firepower and a rapid advance. Speed during this phase of the attack is essential to reduce casualties and avoid becoming stalled.

A coordinated effort to suppress enemy field artillery not previously destroyed is critical during the assault. Reserve enemy forces in depth, enemy nuclear and chemical delivery systems, enemy C2 facilities, and enemy fire support units pose the greatest threat to the attacking force. As part of coordinated deep operations, commanders synchronize some combination of electronic warfare capabilities to jam these threats, artillery or air fires to attack them, and maneuver to counter them. Exploitation follows immediately, either by continuing the attack with the same force or by passing through another element.

The conduct of operations in depth and over time requires operations designed to pass one unit through another or to relieve units that are in contact. Commanders conduct these operations to rest soldiers, resupply the unit, and move it to new areas and missions. Like all operations, forward passage of lines and offensive relief require detailed planning and preparation to achieve successful execution.

Both attack and exploitation often begin with a forward passage of lines, an operation where one friendly unit moves forward through positions held by another. Such a passage must be well-planned and coordinated to ensure minimum congestion and confusion. When possible, passage should be through elements that are not in contact. Specific details of the passage are coordinated between the respective subordinate unit commanders.

The overall commander assigns boundaries to designate areas through which subordinate elements will move. Such boundaries usually correspond to those of the assisting force. This assisting force mans contact and passage points; provides information concerning the enemy, mine fields, and obstacles; and provides guides. To ensure continuous support without increasing battlefield clutter, the assisting unit may provide the passing unit initial logistical support. Once started, the passage is completed as quickly as possible to minimize the vulnerability of the two forces. The passing force assumes control of the battle as soon as its lead elements have moved through the assisting force. The assisting force integrates its artillery support and direct fires into the fire support plan of the passing unit.

To maintain offensive momentum, commanders conduct an offensive relief to pass fresh troops into the attack. Such reliefs are most common as the force enters the exploitation or pursuit but may also be necessary during the attack itself if previously committed units have suffered so severely that they are unable to reach their objectives. Commanders may conduct offensive reliefs as reliefs in place, but ideally they conduct them without a significant pause in offensive tempo.

The ability to continually mass combat power at key times and places, while maintaining the momentum of the attack at a tempo the enemy cannot handle, is essential. Issuing orders that are both simple and clear and anticipating and adjusting are key elements in successful offensive operations. Finally, successful and continuous reconnaissance by a variety of tactical, operational, and strategic means is vital for the success of offensive operations.

CHAPTER 9

FUNDAMENTALS OF THE DEFENSE

The immediate purpose of defensive operations is to defeat an enemy attack. Army forces conduct defensive operations as part of major operations and campaigns, in combination with offensive operations.

For a force-projection army, defensive operations by forces already in theater or early arriving forces at the tactical level support the campaign plan and maintain operational initiative for the joint or combined team. For example, if conditions do not support simultaneous operations to defeat an enemy rapidly, the mission of initial-entry forces might be to defend the forces, air bases, and seaports in the lodgment area to provide time for the JFC to build forces in the theater for future operations. In such cases, initial-entry forces would include sufficient combat power to deter attack or defend successfully while the buildup continues.

In other cases of offensive operations, commanders may require defensive operations by air assault, airborne, or amphibious forces. These forces would conduct an economy-of-force mission until a larger force could link up. Nonetheless, the preferred method is to conduct operations simultaneously throughout the depth and space of the AOR. This method can require defensive operations in some areas.

THE PURPOSES OF THE DEFENSE

Military forces defend only until they gain sufficient strength to attack. Though the outcome of decisive combat derives from offensive operations, it is often necessary, even advisable, to defend. Commanders choose to defend when they need to buy time, to hold a piece of key terrain, to facilitate other operations, to preoccupy the enemy in one area so friendly forces can attack him in another, or to erode enemy resources at a rapid rate while reinforcing friendly operations.

They make this choice and create the conditions for a smooth transition from offense to defense or defense to offense, as the situation allows. Understanding the commander's intent is especially key in the defense, since more precise synchronization is normally required, thus requiring close teamwork.

An effective defense consists of active and passive components combined to deprive the enemy of the initiative. It uses all arms and services in most effective combinations to fight the defense so that the enemy losses mount rapidly and the defender can quickly attack his vulnerabilities. As in the offense, passage of lines will be frequent, moving in all directions¡rearward, forward, and laterally. Even in the defense, commanders seek greater freedom of maneuver while degrading or denying the enemy's.

The defender withstands and holds the enemy while continuously seeking every opportunity to assume the offensive at the appropriate time. With each engagement or battle, commanders seek conditions that favor future operations. They try to reduce options available to the enemy and increase their own, thereby seizing the initiative. They take risks to gain the initiative. There may be few opportunities in the early phases of an engagement or battle to assume the offensive. As the battle develops, such opportunities become more numerous. This is especially true during lulls in the

CONTENTS

battle when the defender should take steps to uncover enemy vulnerabilities and attack and destroy them if possible. Whatever the immediate purpose, the greater intent of the defense is to force the attack to culminate, to gain the initiative for friendly forces, and to create the opportunity to shift to the offensive.

CHARACTERISTICS OF DEFENSIVE OPERATIONS

Prepared positions, security, disruption, mass and concentration, and flexibility characterize defensive operations.

PREPARATION

The defender arrives in the battle area before the attacker, making the most thorough preparations that time allows. In the early stages of battle, the defender capitalizes on the advantage of fighting from prepared positions of his selection. Defense always includes a point of main effort. Preparations involve positioning forces in depth, improving terrain to favor the defender, wargaming plans, organizing the force for movement and support, rehearsing, and taking measures to protect the force, such as mounting reconnaissance and surveillance operations forward of the defended area.

Mobilizing reserves and auxiliary forces, strengthening air and missile defenses or critical areas, conducting security operations to deny the enemy effective reconnaissance, and preparing deceptions to mislead the enemy are equally important tasks. During the course of the battle, the defender looks for opportunities to wrest the initiative from the attacker.

He prepares for this by designating counterattack forces and rehearsing counterattack plans for the eventual transition to the offense. Cunning and guile are part of defensive preparations in order to keep the enemy off balance and make him begin early to doubt his ability to continue the attack.

SECURITY

Defending forces provide security. Since a force defends to conserve combat power for use elsewhere, or at a later time, commanders must provide protection of their force. They do this principally through deception and physical means in the defended area. Defending units want to deceive the enemy as to their strengths and weaknesses. Normally a security area is designated with a covering force. The purpose of these measures at all tactical echelons is to coordinate and synchronize the defense, to provide early warning, and to begin disrupting the integrity of the enemy attack early and continuously.

DISRUPTION

The defender disrupts the attacker's tempo and synchronization by countering his initiative and preventing him from massing overwhelming combat power. Defending commanders also use disruption to attack the enemy's will to continue. They do this by defeating or misleading enemy reconnaissance forces, separating the enemy's forces, isolating his units, and breaking up his formations so that they cannot fight as part of an integrated whole. The defender interrupts the attacker's fire support, logistics support, and C2. He deceives the enemy as to his true dispositions and intentions, unravels the coordination of the enemy's supporting arms, and breaks the tempo of the offensive operations. The attacker is never allowed to get set. He is hit with spoiling attacks before he can focus his combat power and is counterattacked before he can consolidate any gains.

MASS AND CONCENTRATION

The defender seeks to mass the effects of overwhelming combat power where he chooses and shifts that mass repeatedly in accordance with his point of main effort. To obtain an advantage at decisive points, the defender economizes and takes risks in some areas; retains and, when necessary, reconstitutes a reserve; and maneuvers to gain local superiority at the point of decision. The defender may have to surrender some ground to gain the time necessary to concentrate his forces.

The defender normally masses effects and concentrates forces repeatedly during battle. He does so swiftly, since periods that allow them to develop superior combat power will be brief. Commanders accept risks in some areas to concentrate forces for decisive action elsewhere. Obstacles, security forces, and fires can assist in reducing these risks. Since concentration of the force increases the threat of large losses from weapons of mass destruction, commanders use deception and concealment to hide this vulnerability from the enemy. They also protect their forces with strong air and missile defenses to decrease the threat from weapons of mass destruction.

FLEXIBILITY

Defensive operations epitomize flexible planning and agile execution. In exercising the initiative, the attacker initially decides where and when combat will take place. The defender who is agile enough to counter or evade the attacker's blow can then strike back effectively. Tactical flexibility stems from detailed planning, particularly in IPB. It is also needed for organizing in depth and retaining reserves. The plan enables commanders to shift their point of main effort quickly without losing synchronization. Commanders add flexibility to their basic plans by designating supplementary positions throughout the battlefield, designing counterattack plans, and preparing to assume the offensive.

Once the defender controls the attacker's thrust, he can operate against the enemy's exposed flanks and rear. The defender, under the cover of his own fires, can then maneuver over previously reconnoitered terrain against extended elements of the attacking force. The defender's fires cover all approaches and accommodate changes in priority and in sequencing targets and effects. Reserve commanders prepare for movement. They formulate counterattack plans that address their on-order and be-prepared missions and likely contingencies.

DEFENSIVE PATTERNS

The two primary forms of defensive operations are mobile and area defense. These apply to both the tactical and operational levels of war. Mobile defenses orient on the destruction of the attacking force by permitting the enemy to advance into a position that exposes him to counterattack by a mobile reserve. Area defenses orient on retention of terrain by absorbing the enemy in an interlocking series of positions and destroying him largely by fires.

Although these descriptions convey the general pattern of each type of defense, both forms of defense employ static and dynamic elements. In mobile defenses, static defensive positions help control the depth and breadth of enemy penetration and ensure retention of ground from which to launch counterattacks. In area defenses, commanders closely integrate patrols, intelligence units, and reserve forces to cover the gaps among defensive positions, reinforcing those positions as necessary and counter-attacking defensive positions as directed. Defending commanders combine both patterns, using static elements to delay, canalize, and ultimately halt the attacker and dynamic elements (spoiling attacks and counterattacks) to strike and destroy enemy forces. The balance among these elements depends on the enemy, mission, force composition, mobility, relative combat power, and the nature of the battlefield.

MOBILE DEFENSE

Mobile defense orients on the destruction of the enemy force by employing a combination of fire and maneuver, offense, defense, and delay to defeat his attack. The minimum force possible is committed to pure defense; maximum combat power is placed in a striking force that catches the enemy as it is attempting to overcome that part of the force dedicated to the defense. Commanders conducting a mobile defense take advantage of terrain in depth, obstacles, and mines, while employing firepower and maneuver to wrest the initiative from the attacker. A mobile defense requires a mobility greater than that of the attacker. The defenders cause the natural aggressiveness of the attacker to focus on the wrong objective, setting him up for attack from an unexpected direction and driving that attack home with overwhelming force and violence.

Defenders place minimum forces forward, forming powerful forces with which to strike the enemy at his most vulnerable time and place. Defenders track the enemy throughout his attack. They identify critical enemy nodes, such as C2, radars, logistics trains, and indirect fire support elements. They blind or deceive enemy critical reconnaissance elements; they allow less critical reconnaissance elements to draw attention to the friendly forces' secondary efforts. At the decisive moment, defenders strike simultaneously throughout the depth of the attacker's forces. They jam or destroy the enemy's C2 systems, attack ammunition carriers and POL tankers by fires, and emplace minefields aerially or by field artillery behind and in front of the attacking enemy. They strike the enemy by air and ground attacks, assaulting him from an open flank and defeating him in detail.

Terrain is traded for maximum effect to divert the attention of the enemy from the defender's main force, overextend the attacker's resources, exposing his flanks, and leading him into a posture and terrain that diminishes his ability to defend against the counterattack of the larger, mobile reserve. The mobile defense sets up large-scale counterattacks that offer the defender the opportunity to gain and retain the

initiative, going over to the offense and moving into exploitation and pursuit. See Figure 9-1.

AREA DEFENSE

Commanders conduct an area defense to deny the enemy access to designated terrain or facilities for a specified time. In a theater campaign, selective use of an area defense can be part of a theater's mobile defense. Those elements designated to conduct area defense must understand their role in the larger campaign plan. In an area defense, the bulk of defending forces deploy to retain ground, using a combination of defensive positions and small, mobile reserves. Commanders organize the defense around a static framework provided by defensive posi- tions, seeking to destroy enemy forces with interlocking fires. Commanders also employ local counterattacks against enemy units penetrating between defensive positions. A security area or covering force is also part of an area defense.

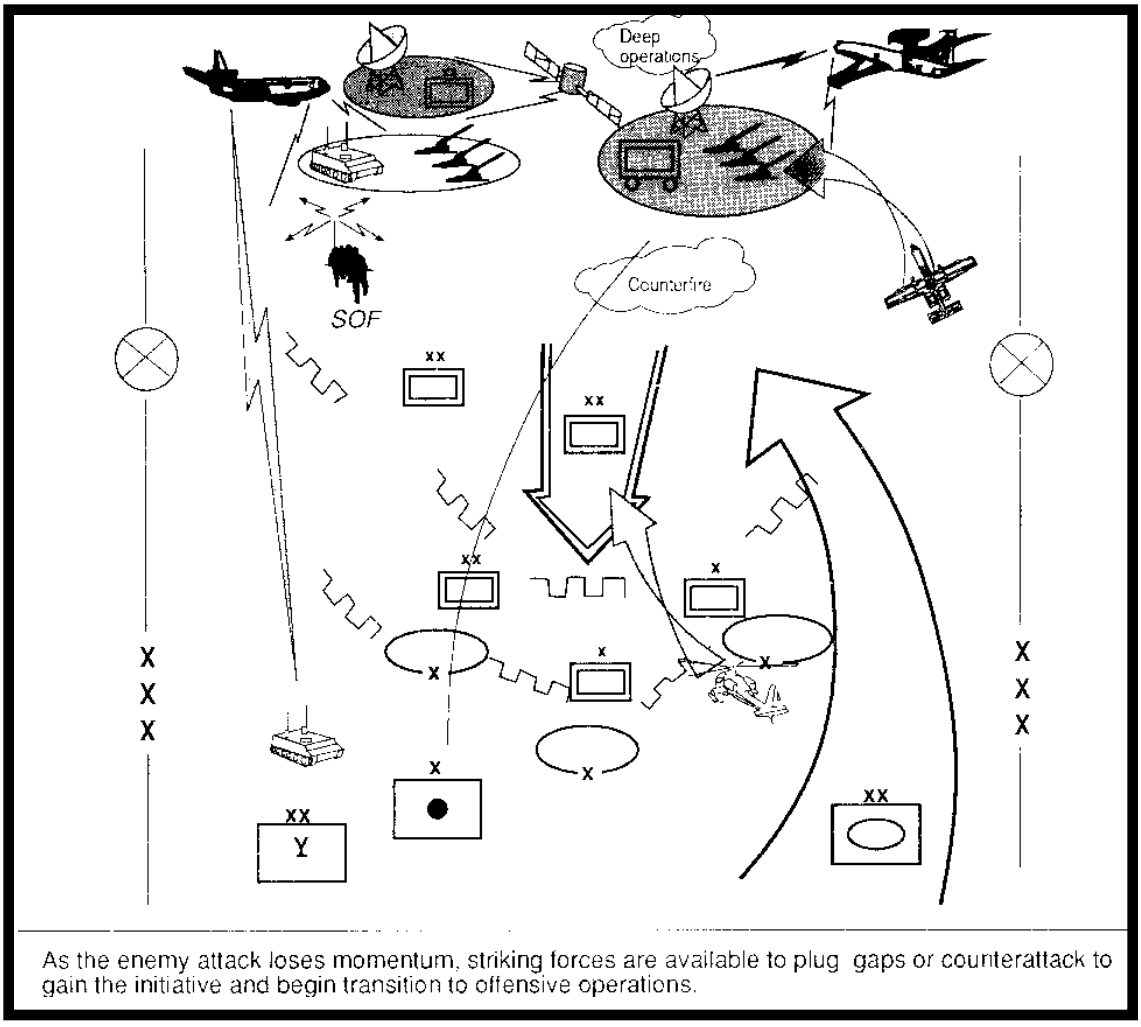


Figure 9-1. Mobile Defense

At times, commanders may be required to deny or hold key terrain, if the friendly situation gives the defender no other option or friendly forces are fighting outnumbered. In such situations, the key to success is making wise use of all resources in the time available to prepare positions and to ensure troops are fit and ready. This is a continuing process that ends only when the defender is ordered to give up the terrain. The factors of METT-T drive the tasks to be done and their priority, making maximum use of obstacle and barrier plans. Engagement areas and control and distribution of fires are keys to a successful area defense.

To make maximum use of the depths of their AO, commanders weigh all the factors of METT-T and use the defense pattern that offers the best advantage. A position defense in depth provides positions throughout the battlefield that provide mutual support and force the attacker to expose his force in the attack of one position after another. While such a forward defense may be necessary, it is more difficult to execute than an in-depth defense. Mobile defenses require considerable depth, but area defenses vary in depth according to the situation.

Commanders position their forces in platoon, company, or battalion battle positions on suitable terrain, with a specific orientation and direction or sector of fire. On occasion, commanders may also direct the construction of a strongpoint in order to deny key terrain to the enemy and force his movement in a different direction. The construction of a strongpoint requires considerable time and combat engineer support. In some cases, because of terrain restrictions, requirements to hold specific terrain, or when enemy forces are weak and disorganized, area defenses without much depth may be necessary, requiring the main effort to be well forward. See Figure 9-2.

OPERATIONS IN DEPTH

A concise and comprehensive in-depth concept of operations is the basis for a successful defense. Simultaneous application of combat power—throughout the depth of the battle area—that defeats the enemy rapidly with minimum friendly casualties is preferable to the attrition nature of sequential operations. Quick, violent, and simultaneous action throughout the depth of the defender's battle space can hurt, confuse, and even paralyze an enemy just as he is most exposed and vulnerable. Such actions weaken the enemy's will and do not allow his early successes to build confidence. Operations in depth prevent the enemy from gaining momentum in the attack. Sudden strikes by both fire and maneuver from a variety of directions—synchronized with other disruptive effects on the enemy such as jamming, smoke, and deception—can stall and overwhelm an attack even before it has begun. Commanders synchronize three complementary elements to defensive actions when executing their defensive plan: deep, close, and rear operations.

Although deep, close, and rear operations may not be contiguous to one another, commanders do not allow enemy forces freedom of movement within the gaps formed by extended, noncontiguous battles. They dominate their battle space throughout the depth of operations, designating responsibilities for unoccupied ground and providing the combat power as needed to attack the enemy wherever he ventures. Security of the force is a continuous concern of the command, and commanders must clearly designate this responsibility.

Regardless of the proximity or separation of various elements, command-ers see their defense as a continuous whole. They fight deep, close, and rear operations as one battle, synchronizing simultaneous operations to a single purpose—the defeat of the enemy's attack and early transition to the offense.

DEEP OPERATIONS

Commanders design deep operations to achieve depth and simultaneity in the defense and to secure advantages for future operations. Deep operations disrupt the enemy's movement in depth, destroy high-payoff targets vital to the attacker, and interrupt or deny vital enemy operating systems such as command, logistics, or air defense at critical times. As deep operations succeed, they upset the attacker's tempo and synchronization of effects as the defender selectively suppresses or neutralizes some of the enemy's operating systems to exploit the exposed vulnerability. Individual targets in depth are only useful as they relate to the destruction of a critical enemy operating system such as air defense or CSS. As the defender denies freedom of maneuver to the attacker with deep operations, he also seeks to set the terms for the friendly force transition to offense.

Deep operations provide protection for the force as they disrupt, delay, or destroy the enemy's ability to bring combat power to bear on friendly close combat

forces. As with deep operations in the offense, activities in depth, such as counterfire, focus on effects to protect the close combat operations directly. To synchronize the activities that encompass both deep and close objectives, commanders integrate and prioritize reconnaissance, intelligence, and target acquisition efforts to focus fires and maneuver at the right place and time on the battlefield.

CLOSE OPERATIONS

Close operations are the activities of the main and supporting efforts in the defensive area to slow, canalize, and defeat the enemy's major units. The defending commander may do this in several ways. Often, he fights a series of engagements to halt or defeat enemy forces. This requires him to designate a main effort, synchronize effects to support it, then shift it to concentrate forces and mass effects against another threat. This may be done repeatedly. Maneuver units defend, delay, attack, and screen as part of the defensive battle.

Security operations warn of the enemy's approach and attempt to harass and to slow him. A covering force meets the enemy's leading forces, strips away enemy reconnaissance and security elements, reports the attacker's strength and locations, and gives the commander time and space in which to react to the enemy.

Reserves conduct operations throughout the defense and may require continual regeneration. They give commanders the means to seize the initiative and to preserve their flexibility; they seek to strike a decisive blow against the attacker but prepare to conduct other missions as well. They provide a hedge against uncertainty. Reserves operate best when employed to reinforce and expedite victory rather than prevent defeat.

REAR OPERATIONS

Rear operations protect the force and sustain combat operations. Successful rear operations allow commanders freedom of action by preventing disruption of

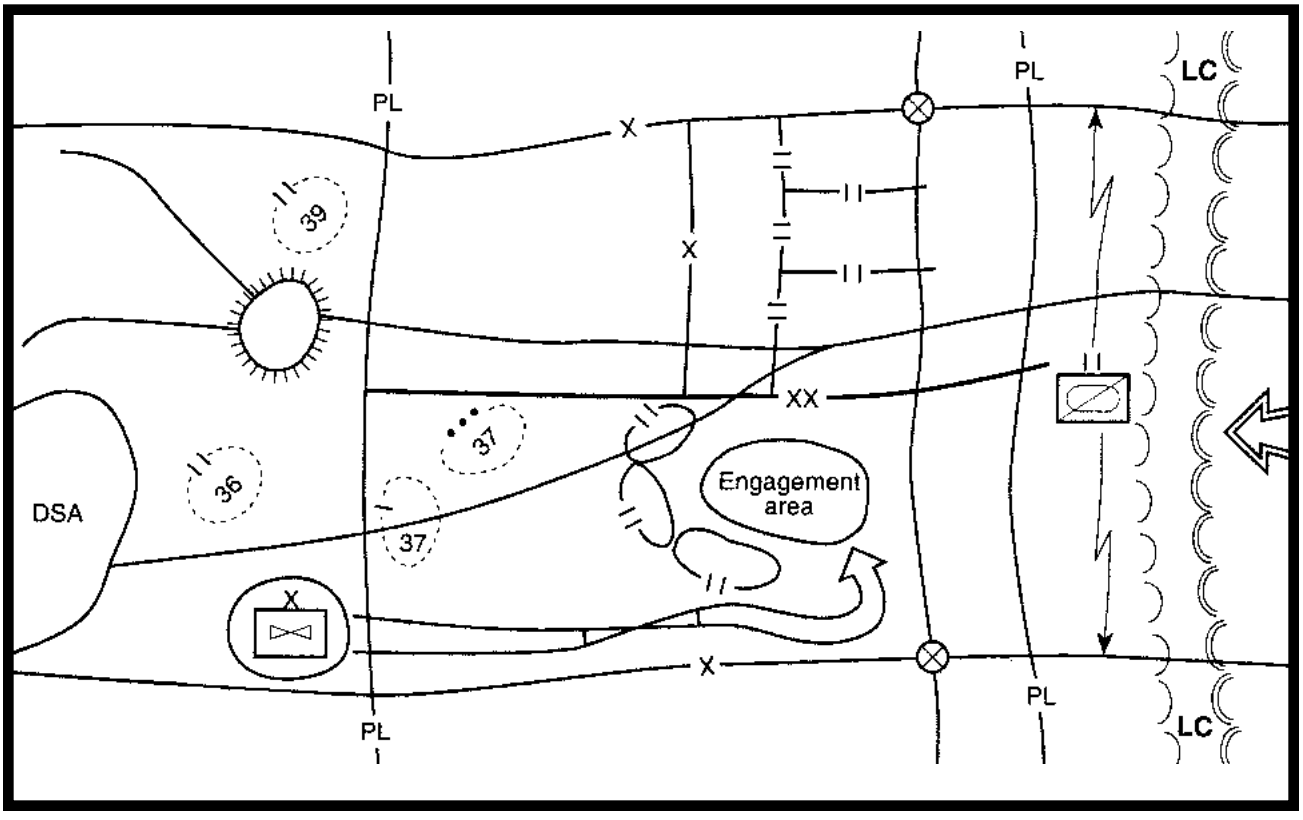


Figure 9-2. Area Defense

C2, fire support, logistical support, and movement of reserves. Destroying or neutralizing enemy deep battle forces achieves this goal.

Enemy forces may threaten the rear during establishment of the initial lodgment and throughout operations in theater. In the first case, close and rear operations overlap due to the necessity to protect the buildup of combat power. In the second case, deep, close, and rear operations may not be contiguous. When this situation occurs, rear operations must retain the initiative and deny freedom of action to the enemy, even if combat forces are not available. A combination of passive and active defensive measures can best accomplish this. Commanders assess threat capabilities, decide where risk will be accepted, and then assign the units necessary to protect and sustain the force. Unity of command facilitates this process.

Regardless of the proximity or separation of elements, defense of the rear is integrated with the deep and close fight. Simultaneous operations defeat the attacking enemy throughout the battlefield and allow an early transition to the offense.

CHAPTER 10

PLANNING AND CONDUCTING THE DEFENSE

Defense doctrine describes two general forms of defense at the tactical level—area and mobile. Normally, operational-level defense is some combination of both. The design of an operation that lays out where, when, and in what sequence to conduct each form of defense is operational art. That design is largely conditioned by METT-T and imperatives to attempt to gain the initiative early. Doctrine provides commanders great freedom in formulating and conducting their defense consistent with mission require-ments. Commanders may elect to defend well forward with strong covering forces by striking the enemy as he approaches, or they may opt to fight the decisive battle well forward within the main battle area. Nevertheless, they will strike the enemy wherever they find him. If they do not have to hold a specified area or position, defending commanders may draw the enemy deep into their defenses and then strike his flanks and rear. They may even choose to preempt the enemy with spoiling attacks if conditions favor such tactics.

A simple concept of operations flexible enough to meet the enemy wherever he chooses to attack is essential to success. Commanders tailor their defensive concept to their specific situation; they pay particular attention to their mission, operations against the enemy in depth, and the efficient and effective use of available time.

PLANNING THE DEFENSE

Planning the defense begins when commanders receive a mission or perceive a requirement to defend. The results of the defense should satisfy the intent of the next two higher commanders and set the terms for future operations.

Defending commanders must use terrain wisely and designate a point of main effort. They choose defensive positions that force the enemy to make costly attacks or conduct time-consuming maneuvers to avoid them.

A position that the enemy can readily avoid has no defensive value unless the enemy can be induced to attack it. The defense, no less than the offense, should achieve surprise. As commanders conduct their estimates of how to meet the requirements of the mission, they consider the factors of METT-T.

MISSION

The first consideration in planning the defense is the mission. It defines the parameters of the defense or the force to defeat and logically flows from the concept of operations of the higher headquarters. Assignment of missions to subordinates is one way commanders influence the outcome of the defense. Defending broad frontages forces commanders to take risks and accept gaps, while defending shallow sectors or positions reduces flexibility and requires commanders to fight well forward. Narrow frontages and deep sectors increase the elasticity of the defense and the number of options available. Commanders also consider subsequent missions.

ENEMY

Commanders consider the enemy's doctrine, equipment, recent or past tendencies, intent, and probable courses of action (most likely and most dangerous) in planning the defense. Commanders and units respect enemy capabilities but are not paralyzed by them. Defending commanders view themselves and their sectors through the enemy commander's eyes to anticipate whether the enemy will orient on seizure of terrain or destruction of forces. They analyze the enemy and determine the critical points in time and space for enemy

CONTENTS

and friendly vulnerabilities during the battle by answering a series of questions:

- Where and when is the enemy most vulnerable?
- When, where, and how can the defender exploit those vulnerabilities?
- What are the specific conditions that trigger the exploitation of those vulnerabilities?
- What is the worst thing the attacker can do to the defending force?

To determine the enemy's vulnerabilities and effective countermeasures to their attack, defending commanders conduct a thorough IPB. The IPB enables commanders and their staffs to anticipate the enemy's objectives and courses of action and helps determine what control measures are needed. Sometimes the IPB is helped by an enemy who is predictable, rational, and doctrinal. The IPB, however, is more difficult if friendly units are fighting irregular forces that have no doctrine and adapt their methods rapidly when fighting conventional forces.

In a defense against an enemy in echelon, commanders determine the location and response time of reserves and follow-on forces. Delaying the enemy follow-on forces may allow defeat in detail. When the defense forces the enemy to increase his tempo of operations, the enemy may commit forces earlier than planned, thereby disrupting his concept of operations and creating exploitable gaps between the committed and subsequent echelons. Accurate and timely targeting of enemy units, facilities, and operating systems and rapid-to-near-real-time shooter-to-user links are crucial to defeat an attacking enemy in depth.

The foundation of a defensive plan is locating, containing, and defeating the attacker's main and supporting efforts. Commanders use every resource available to offset the attacker's numerical advantage, to identify dangerous threats, and to mass combat power against the vulnerabilities of the enemy force. In particular, planners anticipate the enemy's use of indirect approaches and his ability to project combat power into the rear area by long-range fires, infiltration, air mobility, unconventional warfare, and weapons of mass destruction.

TERRAIN AND WEATHER

The defender must decide where he can best kill the enemy and plan accordingly. A study of the terrain that the enemy must traverse to conduct his attack gives valuable information. This study indicates the probable positions of assembly areas, logistics dispositions, artillery locations, ground favoring armored and mechanized attack, and an area most advantageous for the main attack. Personal reconnaissance is essential. The characteristics of the terrain may exercise a decisive influence on the positioning of the defense. The defending force exploits any aspect of terrain that impairs enemy momentum or makes it difficult for the enemy to achieve mass or conduct maneuver.

Defenders engage the attacker at points where the terrain puts him at the greatest disadvantage. Defending commanders use man-made obstacles to improve the natural impediments, to slow or canalize enemy movement, and to protect friendly positions and maneuver. Some terrain may be so significant to the defense that its loss would prove decisive. When terrain is a critical factor in a defense, commanders make it a focal point of their plan.

Weather and visibility affect how defenders organize the terrain. In periods of adverse or limited visibility, commanders plan for the impact on weapons systems and optical devices. A defensive plan that succeeds in clear conditions may be less effective in periods of bad weather. Contingencies 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

Commanders consider the composition of their force. They also consider teamwork, state of training, and experience of leaders when they assign missions. The mobility, protection, morale, and training of their troops determine to some extent how they defend. Differences in mobility, training, and leadership make some units more suitable for some missions than for others. In combined operations, for example, particular arrangements may be necessary to accommodate national pride or interests. In joint operations, specific weapons systems, rates of consumption, and tactical doctrine might prohibit certain missions. In addition, the lack of ground combat forces in the initial stages of forcible-entry operations makes effective synchronization of joint forces critical at that stage. The ability of the joint force to synchronize effects is essential to protect the lodgment area and force buildup during this vulnerable stage of operations. The defender should

exploit relative strengths such as skill in night combat, infiltration, long-range fires, or air assault that give the defender an advantage over the attacker.

TIME AVAILABLE

The amount of time to prepare is a crucial factor in organizing a defense. The defense is far more effective when time is available to conduct reconnaissance and deliberately occupy positions; designate security and main battle areas; fortify the ground; plan fires; install obstacles; coordinate maneuver, fires, and logistics support; and rehearse. To gain time for organization of the battle area, commanders may order a delay by a covering force or a spoiling attack by ground or air units. Lack of time may compel a commander to maintain a larger-than-normal reserve force or accept greater risks than usual. While small units train to defend with minimal preparation, strong defenses take time to organize and prepare. Time is a critical element the defender cannot waste.

PREPARING THE DEFENSE

Commanders and battle staffs take advantage of all the time available in preparing the defense. Just as in the offense, commanders have subordinates demonstrate their understanding of the commander's intent and order by restating the commander's missions in their own words. This should be done immediately after the order is issued. Preparations should begin as early as possible and continue until the battle begins. As staffs prepare plans, leaders conduct personal reconnaissance. Noncom-missioned officers see to it that soldiers and units are fit and prepared for battle by resting soldiers and conducting precombat checks. There is no substitute for actually seeing and walking the defensive area. In forcible-entry operations, detailed rehearsals with mockups and simulations can substitute for lack of opportunity to see the defensive area. Parallel planning activities facilitate simultaneous preparation at all command levels.

Among the most important activities are designation of security and main battle areas; rear areas; reconnaissance of the sector; preparation of routes, positions, and obstacles; and coordination of maneuver with direct and indirect fire support. Adjustments as a result of preparation activities are integrated at and affect each echelon. The higher echelon refines its orders to achieve better synchronization, while lower echelons are still in the deliberate planning process.

Senior commanders gather their subordinate commanders and staffs before they issue their orders to review and adjust the synchronization of their battle plan. This meeting is normally conducted at prominent terrain overlooking the battle area, with a terrain model or map. This meeting describes the desired timing and effects of their schemes of maneuver and concepts of fires. In particular, commanders ensure that specific resources have been tasked to identify high-payoff targets and the enemy's main attack, to track these when found, and to mass the desired effects at the right place and time. This mutual discussion permits adjustments to the superior commander's plan and refines responsibilities for actions and contingencies at critical points in the battle. Following this meeting, subordinate commanders complete their plans and have their leaders brief, train, and rehearse troops for their specific tasks. Liaison takes place between adjacent units and joint and combined forces.

Commanders and battle staffs continue to wargame their plans and are flexible enough to amend them based on their analyses. They take advantage of preparation time to develop alternate routes and positions, to time movements between positions and along routes, and to rehearse counterattacks. They personally inspect the preparations of their troops in all areas. They develop branches and sequels to the plan.

Preparation for the defense also entails the stocking of forward supply points, liaison with civilian officials, adjustment of air defense coverage, and security of installations in the rear area. If time permits, units prepare alternate sites for command posts, artillery firing positions, and logistics facilities. Early identification of enemy units gives commanders a better idea of when the attack will begin and is vital for executing deep operations.

Commanders can strengthen their defense of the most dangerous approach by narrowing the sector of the unit astride it. A significant obstacle to the front, such as a river, built-up area, swamp, or escarpment, favors an area defense. Such an obstacle adds to the relative combat power of the defender. Open terrain or a wide sector favors a mobile defense that orients on the enemy. The primary function of committed units in a mobile defense is to control the enemy penetration pending a counterattack by a large reserve. Obstacles support static elements of the defense and slow or canalize the enemy in vital areas.

Commanders determine the mission, composition, and size of the reserve and counterattack forces. Reserves by definition are uncommitted forces. Reserve forces are not uncommitted if the commander's concept of defense depends upon their employment as a counterattack force to strike a decisive blow. Counterattacking, blocking, reinforcing defending units, or reacting to rear area threats are all actions a reserve may be required to perform. Each situation is unique. The primary mission of the reserve derives directly from the commander's concept of the defense and, therefore, the commander who established the requirement to have a reserve must approve its commitment.

Mobile defenses sometimes rely on reserves to strike the decisive blow. They require a large, mobile, combined arms reserve. When conditions favoring counterattack occur, the main effort shifts to the reserve, which then strikes with overwhelming combat power. Area defenses are more likely to use reserves to block and reinforce at lower tactical levels, leaving major counterattacks to divisions, corps, and higher echelons. Brigade- and battalion-level area defenses may benefit from the use of mobile reserves when such a force is available and the enemy uncovers his flanks. The actual size and composition of the reserve depend on the commander's concept of operation.

In planning a counterattack, commanders carefully consider the enemy's options and the likely locations of his follow-on echelons. Commanders then decide where to position their reserves, what routes and avenues of approach to use, what fire support is necessary, and what interdiction or deep attack will isolate the enemy's forces. Counterattacks seek to avoid enemy strengths. Brigade and battalion counterattacks seize positions from which to fire on the enemy's flanks and rear. Division or corps counter-attacks either strike isolated enemy maneuver units or pass around the enemy's forces to strike directly at his reserves, artillery, and other supporting forces.

Reserves may be air or ground maneuver units. Divisions, brigades, and battalions become reserves as part of their higher commander's defense. When counterattacking, they conduct hasty or deliberate attacks. Army air assault and air attack forces can respond rapidly as reserves. On suitable terrain, they can reinforce positions to the front or on a flank. In a threatened sector, they are positioned in depth and can respond to tactical emergencies. Air assault forces are also suitable for swift attack against enemy airborne units landing in the rear area. Once committed, however, they have limited mobility.

Commanders tend to be more stationary in the defense, yet they should anticipate and provide for the means to command and control on the move in the defensive area. To minimize the vulnerability of rear operations, C2 and support facilities in the rear area are redundant and dispersed. Air defense elements provide defense in depth by taking positions to cover air avenues of approach and vital assets. When rear battle response forces are insufficient, tactical combat forces prepare to respond rapidly against rear area threats and prepare to move to their objectives by multiple routes.

CONDUCTING THE DEFENSE

Forces conduct the defense aggressively. Commanders continuously seek opportunities to take advantage of the enemy's errors or failures. The objective of the defense is to gain and maintain the initiative rapidly. The integrity of the defense depends on maneuver and counterattack, as well as on the successful defense of key positions. As the attack begins, the defender's first concerns are to identify the enemy's committed units, determine his direction of attack, and gain time to react. Security forces, intelligence units, SOF, and air elements con- ducting deep operations will be the first sources of this information. During the battle, commanders track battle damage to know how much combat power remains as a prerequisite to exploiting opportunities.

Battle command in the defense differs from the attack. Defensive operations tend to be more closely synchronized, thus commanders tend to monitor the battle in more detail. Visualizing the present and future state and setting in motion actions to move from one to the other are more difficult and can more easily break up synchronization of the defense. Battle tracking of both enemy and friendly units and frequent assessments, often face-to-face, help with these decisions. Commanders provide themselves with the means to command while moving about the battlefield in the defense. The tendency will be to reduce the size of the staff element moving with the commander. Commanders also look for opportunities to rest units, if even for a few hours.

AOs extend far enough forward to give commanders time to react to approaching enemy forces, to assess their options, and to execute operations accordingly.

Operations in depth begin before the enemy closes with maneuver forces. They continue against follow-on forces to isolate them well forward, to guard against interference with the commitment of reserves, and to shape the conditions of the next set of engagements.

Operations in depth are an integral part of the defense. Commanders use them to create opportunities for decisive action. Simultaneous operations in depth are commanders' means of ensuring the success of their decisive engagements and counterattacks by limiting the enemy's options, disrupting his coordination, and affecting the closure times of his follow-on elements. In conducting them, commanders view the entire battlefield with an understanding of the critical tactical decisions they must make and an appreciation of the current intelligence picture of enemy forces. They keep the focus of available collection assets on items of particular concern.

As enemy formations enter their battle space, commanders monitor their activities and movement and locate the elements of the enemy force most threatening to their plans. They then track and attack high-payoff targets and disrupt and delay selected enemy reserves to facilitate specific actions within their overall defense. For example, a division commander might act to isolate an enemy regiment by interdicting forces that could reinforce or support it during a counterattack.

Commanders position and employ fire and maneuver to control or repel enemy penetrations. They employ reserves to block penetrations, to destroy penetrating enemy formations, and to regain the initiative. The force responsible for the most critical sector normally receives priority in the initial allocation of artillery, engineer, and close air support. It is usually the initial main effort.

Commanders slow the enemy's movement in some areas or separate their formations to deny the enemy the ability to mass or establish a tempo that will make defense impossible. Defending commanders normally have to economize or take risks in some parts of their sector to concentrate forces and fires in the areas of greatest danger. They may employ long-range surveillance to assist in monitoring economy-of-force sectors. However, they weigh such employment against the need to direct sufficient assets toward enemy elements that could directly influence the battle. Covering forces and ground or air maneuver units can delay in less threatened areas to gain time for actions against committed enemy units.

In an area defense, committed brigades counterattack whenever conditions are favorable. Brigade commanders use their reserves in cooperation with static elements of their defenses—battle positions and strong-points—to break the enemy's momentum and reduce his numerical advantage. As the attack develops and the enemy reveals his dispositions, reserves and fires strike at objectives in depth to break up the coordination of the attack.

Using mobile defenses, commanders anticipate enemy penetration into the defended area and use obstacles and defended positions to shape and control such penetrations. They also use local counterattacks either to influence the enemy into entering the planned penetration area or to deceive him as to the nature of the defense. As in area defenses, static elements of a mobile defense contain the enemy in a designated area. In a mobile defense, the counterattack is strong, well-timed, and well-supported. Preferably, counter-attacking forces strike against the enemy's flanks and rear rather than the front of his forces.

During the defense, commanders shift their main effort to contain the enemy's attack until they can take the initiative themselves. This requires the adjustment of sectors, repeated commitment and reconstitution of reserves, and modification of the original plan. To deny the enemy passage through a vital area, commanders may order a force to remain in a strong position on key terrain. They also might leave a unit in position behind the enemy or give it a mission that entails a high risk of entrapment. Defending units may be unintentionally cut off from friendly forces. Whenever an unintentional encirclement occurs, the encircled commander who under-stands his mission and his higher commander's intent can continue to contribute to the mission of his higher commander.

An encircled force acts rapidly to preserve itself. The senior commander assumes control of all encircled elements and assesses the all-around defensive posture of the force. He decides whether the next higher commander wants the force to break out or to defend its position. He reorganizes and consolidates expeditiously. If the force is free to break out, it should do so before the enemy has time to block escape routes. Breaking out might mean movement of the entire encircled force, where one part is attacking and the other

defending. The entire formation moves through planned escape routes created by the attacking force. If the force cannot break out, the senior commander continues to defend while planning for and assisting in a link-up with a relieving force.

Reserves preserve commanders' flexibility in the defense. They provide the source of combat power that commanders can commit at the decisive moment. Commanders may use reserves to counterattack the enemy's main effort to expedite his defeat, or they may elect to exploit enemy vulnerabilities, such as exposed flanks or support units and unprotected forces in depth. Reserves also provide a hedge against uncertainty. Reserves may reinforce forward defensive operations, block penetrating enemy forces, conduct counterattacks, or react to a rear area threat.

Timing is critical to counterattacks. Commanders anticipate the circumstances that require committing the reserves. At that moment, they seek to wrest the initiative from the attacker. They commit their reserves with an accurate understanding of movement and deployment times. Committed too soon, reserves may not have the desired effect or may not be available later for a more dangerous contingency. Committed too late, they may be ineffective. Once commanders commit their reserves, they should immediately begin regenerating another reserve from uncommitted forces or from forces in less threatened sectors.

During battle, protection of rear areas is necessary to ensure the defender's freedom of maneuver and continuity of operations. Because fighting in the rear area can divert combat power from the main effort, commanders carefully weigh the need for such diversions against the possible consequences and prepare to take calculated risks in rear areas. To make such decisions wisely, commanders require accurate information to avoid late or inadequate responses and to guard against overreacting to exaggerated reports.

Threats to the rear area arise throughout the battle and require the repositioning of forces and facilities. When possible, defending commanders contain enemy forces in their rear areas, using a combination of passive and active defensive measures. While commanders can never lose focus on their primary objectives, they assess risks throughout their battle space and commit combat power where necessary to preserve their ability to accomplish the mission.

Commanders protect their forces at all times. They achieve the effects of protection through skillful combinations of offense and defense, maneuver and firepower, and active and passive measures. As they conduct operations, they receive protective benefits from deep and close operations as they disrupt the attacker's tempo and blind the enemy reconnaissance efforts. Defenders also employ passive measures such as camouflage, terrain masking, and OPSEC to frustrate the enemy's ability to find them. Commanders should remain aware that their forces are at risk. They should adjust their activities to maintain the ability to protect their forces from attack at vulnerable points.

Weapons of mass destruction present defenders with great risks (see Chapter 6). These weapons can create gaps, destroy or disable units, and obstruct the defender's maneuver. Commanders anticipate the effects of such weapons in their defensive plans. They provide for dispersed positions for forces in depth, coordinating the last-minute concentration of units on positions with multiple routes of approach and withdrawal. They also direct appropriate training and implement protective measures.

TERMINATING THE DEFENSE

An attacking enemy, through its own maneuvers, losses, errors, exhaustion, skillful friendly defense, or other causes, may be in such an unfavorable position that the initiative passes to the defender. The defender then has a prospect of success in conducting a decisive counterattack to reach a tactical decision and transition to the offensive. Without a compelling reason to defend, such as those conditions described herein, the defender attacks.

CHAPTER 11

RETROGRADE OPERATIONS

A retrograde operation is a maneuver to the rear or away from the enemy. It is part of a larger scheme of maneuver to regain the initiative and defeat the enemy. Its purpose is to improve the current situation or prevent a worse situation from occurring. Its objectives are to gain time, to preserve forces, to avoid combat under undesirable conditions, or to maneuver the enemy into an unfavorable position. Retrograde operations may facilitate repositioning forces, shortening LOCs, or permitting unit withdrawals for employment elsewhere.

PURPOSE OF RETROGRADE OPERATIONS

Commanders use retrograde operations to harass, exhaust, resist, delay, or damage an enemy. While retrograde operations are difficult, delays and withdrawals are particularly risky. Due to their rearward orientation, retrograde operations tend to cause increased levels of psychological stress in soldiers. They tend to see movement away from the enemy as a harbinger of defeat. Unless held in check, such concerns can lead to rout and panic. Success in retrograde operations requires strong leadership, exemplary organization, and disciplined execution. A disorganized retrograde operation in the presence of a strong enemy invites disaster.

Units in retrograde must avoid decisive engagement. Subordinate elements endeavor to deny the enemy critical intelligence on the movement of the main force. Intelligence on the enemy is constantly updated to avoid surprise. Deception and delaying actions are combined to prevent the enemy from closing in strength. The actions of friendly troops are swift but never precipitous. Because of their effects on other units, retrograde operations require the prior approval of the next higher command. Retirements, on the other hand, are conducted when units are not in contact and are usually not risky.

As do other operations, retrograde operations rely on logistics support. Logistics planners advise commanders and operational planners on the status, capabilities, and limitations of the logistics support for retrograde operations.

The ability to conduct a timely withdrawal is especially dependent upon sufficient transport. Logisticians assist in formulating courses of action, adjusting support operations to conform to the commander's decisions. Logistics unit commanders and staff officers play a key role in assisting and preparing the force for retrograde operations.

TYPES OF RETROGRADE OPERATIONS

The three types of retrograde operations are delays, withdrawals, and *retirements*. In delays, units yield ground to gain time while retaining flexibility and freedom of action to inflict the maximum damage on the enemy. Withdrawing units, whether all or part of a committed force, voluntarily disengage from the enemy to preserve the force or release it for a new mission. In each type of a retrograde, a force not in contact with the enemy moves to the rear—normally by a tactical road march. In all retrograde operations, firm control of friendly maneuver elements is a prerequisite for success.

CONTENTS

Commanders directing retrograde operations plan and coordinate complementary operations to enhance the probability of success. These operations should attempt to reduce the enemy's strength, concentrate forces in another area, prepare stronger defenses, or maneuver the enemy into areas where he is vulnerable to counterattacks. As in other operations, depth is important. Enemy movement is impeded in depth; countermobility, interdiction, and long-range fires are integrated to slow his advance.

Commanders combine different forms of retrograde into simultaneous or sequential actions. For instance, the withdrawal of one unit may precede the retirement of another. Another unit's delaying action may cover both operations. Synchronizing these operations requires detailed planning, close and continuous coordination, and precise execution.

DELAYS

Units conduct delays when forces are insufficient to attack or defend or when the design of the operation dictates maneuvering the enemy into an area for subsequent counterattack. Delays gain time for friendly forces to reestablish the defense, to cover a defending or withdrawing unit, to protect a friendly unit's flank, and to participate in an economy-of-force effort. Delays also slow or break up enemy momentum or do not allow it to begin.

Considering the Factors of METT-T

Commanders preparing to delay consider the factors of METT-T in their estimate of the situation.

Mission. The mission states the higher commander's delay requirements, outlines the concept of operations, and specifies the duration and terrain limitations. If the commander's intent is to employ the delaying force in subsequent operations, he must specify the critical parameters of the delay¡duration, terrain to retain or deny, and the nature of the subsequent operation.

Enemy. The strength, location, tactics, mobility, and capabilities of the enemy have a direct impact on how the commander plans for and organizes a delay. Some important considerations are the enemy's likely courses of action and his vulnerabilities to friendly counterattack, interdiction, nonlethal technology, aerial attack, and obstacles. Commanders also examine the enemy's capabilities to conduct air attacks on the delaying force, to insert forces behind friendly units, and to employ weapons of mass destruction.

Terrain and Weather. Terrain determines the extent of the commanders' options for designing delays. Open, unobstructed terrain makes delays more difficult. While such terrain favors the use of armored, mechanized, and aviation units by the delaying force, it requires major engineer effort. The delaying force may be subject to air attack and long-range, observed fires.

Close or broken terrain slows enemy movement but also makes maintaining contact with the enemy more difficult. In wooded, swampy, or rugged terrain, infantry forces are ideal units for a delay. The primary effect of weather on the delay is to enhance or degrade cross-country movement, aviation support, and obstacle construction. Limited visibility requires greater troop unit numbers to cover a given sector and affects the way troops maneuver and fight.

Troops. The troops available to the delaying commanders will determine their operational design. As a rule, a delaying force should be at least as mobile as the enemy. Because delaying commanders attempt to avoid decisive combat, their forces should be capable of constructing significant obstacles and delivering accurate, long-range fires. The organization and training of cavalry units make them uniquely suited to conduct a delay and cover other delaying forces.

When infantry units move by air to positions in depth, they provide great flexibility to a delaying unit, although their limited mobility makes disengagement complex. Delaying forces rely heavily on artillery, attack helicopters, CAS, and engineers. The longer these forces are required to delay, the more support they will need. MI units assist by tracking the dispositions of the enemy and impeding enemy operations by interrupting communications.

A delay can be most effective when deception confuses the enemy as to the true dispositions and intentions of the delaying force. Deception, therefore, can be a force multiplier in conducting delaying actions. Freedom of movement is essential to a successful delay. Therefore, when the force cannot achieve air supremacy, the positioning of air defense assets around critical points is important.

Time Available. Time to prepare and the duration of the delay are the commanders' final preliminary

considerations. They use available time effectively to provide subordinates with time to plan and prepare their own operations. The duration of the delay determines the tactics they use and the risks they must accept.

Deploying, Dispersing, and Employing Forces

In conducting a delay, commanders deploy their maneuver forces forward and disperse their CS and CSS units farther to the rear to reduce their vulnerability. Artillery fire control, generally centralized in the defense, should be in position to support all delaying units. When feasible, commanders designate maneuver reserves and use them to disengage committed units and retard the enemy's advance by blocking or counterattacking his vulnerable forces.

Organizing and Conducting the Delay

Delays can involve echelons up to entire corps or divisions. Corps may conduct delays as part of an operational withdrawal. Divisions may conduct delays as part of a corps defense or in accomplishing their missions as a corps advance, flank, or rear guard. If the delay is of short duration, units may fight for a single set of positions or delay using alternate or successive positions.

Normally, unit commanders organize their delays in parallel sectors of considerable depth, using ever-reforming combinations of friendly combat power. The correct combination of attack, defense, and delay from alternate or successive positions is essential to such operations. Considerations that affect those choices are normally METT-T. The aim is to prevent enemy momentum, inflict maximum destruction, and preserve friendly unit integrity while thinking of subsequent operations to maintain the initiative. For instance, a commander delays initially from alternate positions along his most dangerous approach, while delaying from successive positions in less threatened areas. Simultaneously, commanders establish defensive positions in depth in particularly critical areas to impede the enemy. During the delay, commanders may shift from one technique to another as the operation develops and the posture of the enemy force changes.

By contesting the enemy's retention of the initiative, the delaying force avoids a passive pattern that favors the attacker. Commanders seize the initiative whenever possible. Assaulting an advancing enemy throws him off balance, disorganizes his forces, prolongs the delay, and deceives him as to the intentions of the delaying force. However, delaying commanders try to avoid decisive engagement. Commanders must frequently pass units through each other forward, rear, or laterally in order to keep units fresh, throw the enemy off balance, and preserve the integrity of the force.

Commanders plan and prepare positions in depth to interrupt enemy movement. Orderly repositioning of the delaying force depends on preparation of friendly positions in depth. While engineer efforts center on countermobility throughout the delay, they also improve the delaying force's mobility and construct protected positions. Throughout the delay, engineer efforts remain flexible and orient on the enemy force.

At all levels, commanders integrate natural obstacles into their delay plans and cover them with direct and indirect fires. The efficient use of combat power throughout the depth and duration of the delay is crucial since delays often accompany economy-of-force operations. Due to the fluid nature of the delay, the fastest means of massing fires on the enemy are indirect artillery and aerially delivered mines. Indirect mortar and artillery fires protect defensive positions, cover obstacles, and provide maneuver forces with obscurants and illumination. See Figures 11-1 and 11-2.

Ending the Delay

The delay ends when enemy forces halt their attack or when the delaying force completes its mission and passes through another force. If attrition or lack of logistical support halts the enemy force, the delaying force commander can either maintain contact, withdraw for another mission, or use the opportunity to strike a counterblow and regain the initiative. A counterblow larger than a limited counterattack usually requires support from the higher commander, perhaps including commitment of his reserve. For example, if the division commander perceives that the enemy has reached a culminating point during a division-level delay, the time may be right to commit the reserve or ask for the corps reserve. Taking advantage of such opportunities requires a clear understanding of the intent of the next two higher commanders.

WITHDRAWALS

Commanders conduct withdrawals to extract subordinate units from combat, adjust defensive positions, or relocate the entire force. Whether it is a local or general withdrawal, forces voluntarily disengage from the enemy and move rearward. Normally, withdrawals are free from enemy pressure

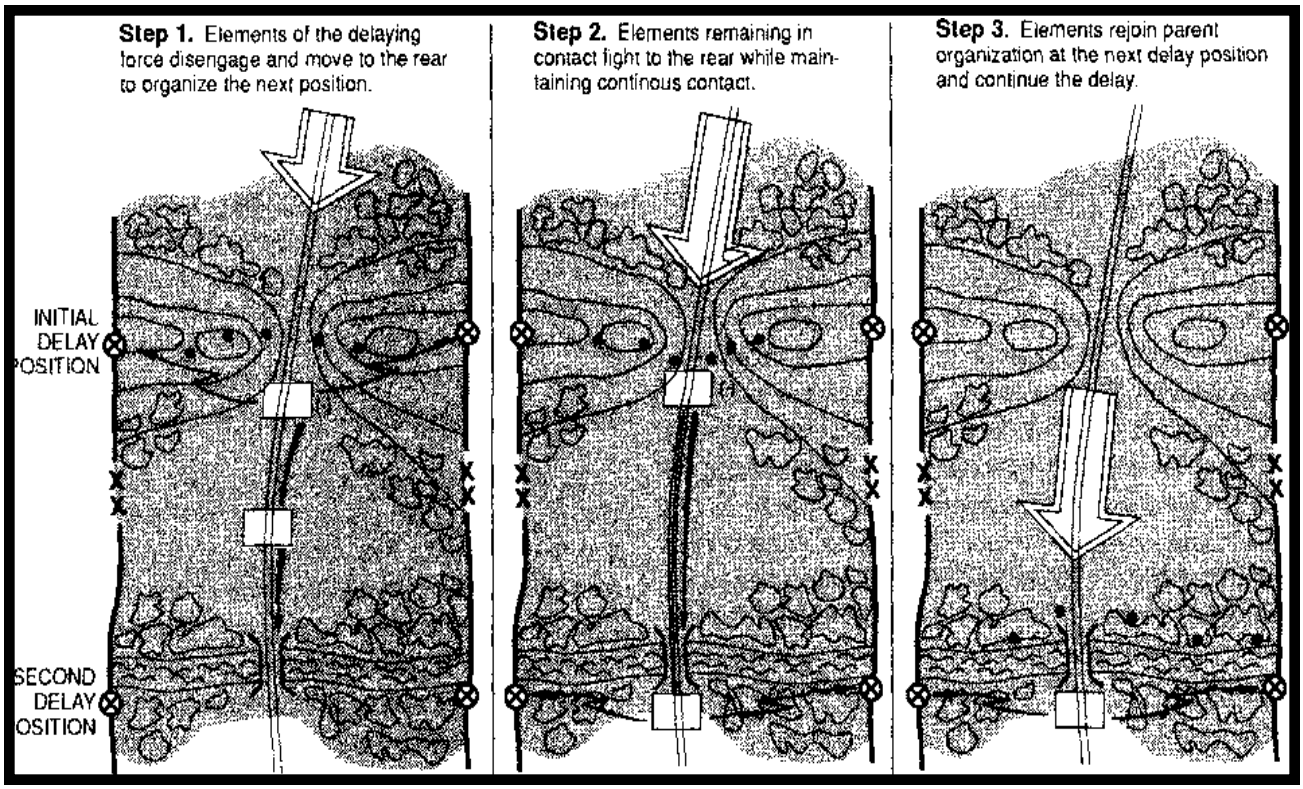


Figure 11-1. Delay from Successive Positions

and do not require the assistance of other friendly units. Since the force is the most vulnerable if the enemy attacks, commanders plan for a withdrawal under pressure first. Then they develop plans for a withdrawal without pressure.

Withdrawals are inherently dangerous. Whatever their size, withdrawing forces prepare as thoroughly as time allows and defend themselves if the enemy interrupts the operation. In a general withdrawal by a division or corps, commanders organize a covering force and a main body. The covering force prevents effective pursuit or interference with the main body's withdrawal; the main body forms behind the covering force and moves to the rear.

In all withdrawals, commanders attempt to deceive the enemy. The plan includes deception for the covering force and main body, using multiple routes, additional transportation, route improvement, and coordinated traffic control and movement planning.

Normally, air and ground reserves are available to support a general withdrawal. Since withdrawing forces are extremely vulnerable to enemy detection and interdiction, the presence of effective indirect and missile counterfires, strong air defenses, and air superiority in the AO is desirable. Conducting demonstrations in adjacent areas can also divert the enemy's focus on the withdrawing forces.

Whenever possible, withdrawals take place at night or in adverse weather to help negate enemy detection. Commanders anticipating withdrawals avoid signaling their intentions by obvious relocation of CS and CSS facilities, premature obstacle installation, or route destruction. Jamming enemy C2 nodes slows the enemy's reaction once the withdrawal is underway. The foundation of withdrawal plans and orders is the commander's intent and scheme of maneuver. The plan also prescribes combat organization, primary and alternate withdrawal routes, and the movement schedules of the withdrawing units.

In the conduct of a withdrawal, commanders anticipate enemy interference by fires, direct pressure, and envelopment. Withdrawing under enemy pressure, they fight a delay, permitting the main body's withdrawal. Main body units reinforce the covering force as necessary and will themselves delay or defend if the

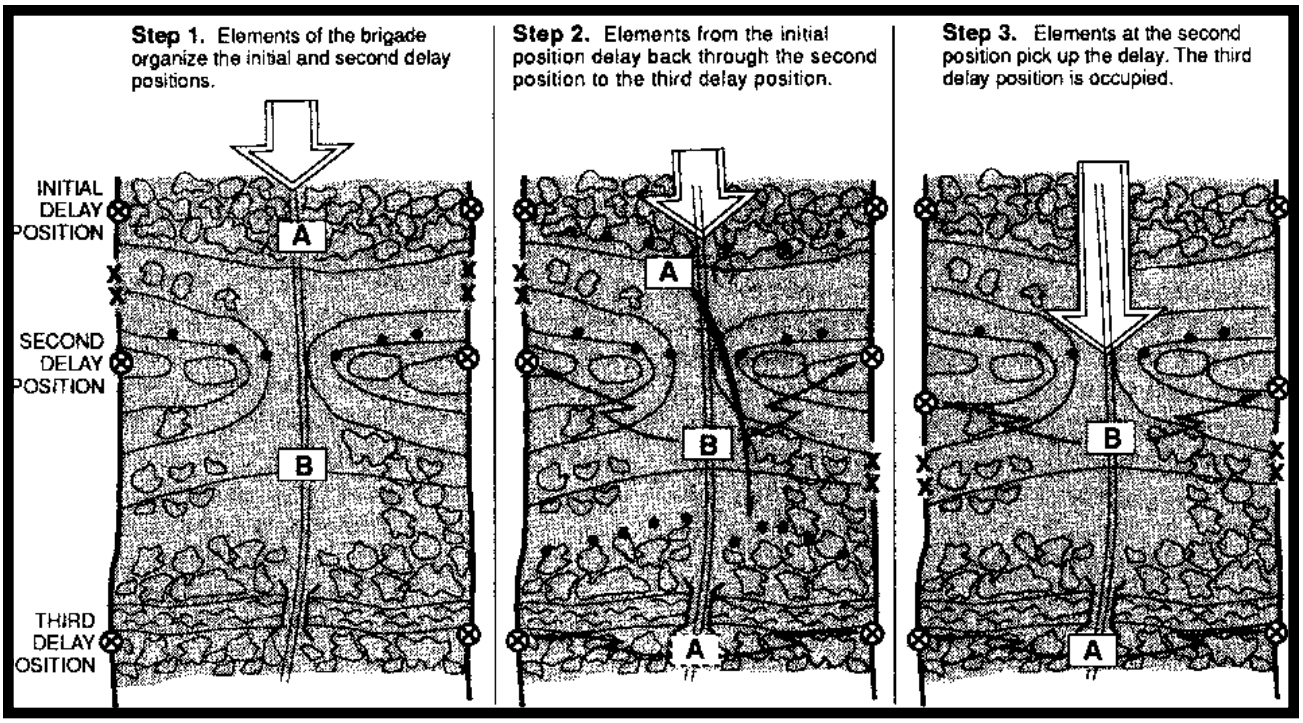


Figure 11-2. Delay from Alternate Positions

covering force fails to slow the enemy. All available fires, electronic warfare assets, and obstacles support the withdrawal of these closely engaged forces. Deep operations may be useful in relieving pressure on units in contact with the enemy. Commanders must tightly control rearward movement and maintain synchronization throughout the force.

If the withdrawal begins without enemy pressure, the covering force may remain in position to prolong the deception. If the enemy does not attack during the withdrawal, covering forces and rear guards remain between the enemy and the main body. The main body moves as rapidly as possible rearward. After the main body withdraws a safe distance, the covering force can move to intermediate or final positions. Every withdrawing force element must be capable of defending itself, at least temporarily, against ground attack.

Reports of enemy activity in the rear area are a matter of great urgency. When the enemy blocks movement to the rear, commanders either shift to alternate routes to bypass the interdicted area or attack through the roadblock. When simultaneous withdrawal of all forces is not practicable, commanders determine the sequence of withdrawal. Withdrawing the most heavily engaged units from the greatest actual or potential pressure area may result in enemy attempts to encircle or destroy the remaining units. Withdrawing the least heavily engaged units first may find commanders unable to withdraw those most heavily engaged or most dangerously threatened. Commanders decide which course of action best preserves the force while accomplishing the mission.

When corps or divisions withdraw, their reserves remain well forward to assist other units by fire or ground attacks. While units withdraw under pressure, reserves launch spoiling attacks to disorganize and delay the enemy. Reserves can extricate encircled or heavily engaged forces.

Defending forces may provide the withdrawing unit with fire support, EW support, air defense, and logistical assistance. More importantly, they assume sector responsibility once the withdrawing force passes through them. When a defending force is in position, the withdrawing unit coordinates support as early as possible. The unit conducts the withdrawal in the usual way until the withdrawing force passes behind the

assisting force. Once in the defended area, the withdrawing force either joins the defense or continues to the rear in a retirement.

RETIREMENTS

Retirements are rearward movements conducted by units not in contact. Large tactical units can execute a retirement. Typically, another unit's security forces cover their movement as they conduct a tactical road movement. Nonetheless, they cannot assume absolute protection from a resolute enemy. Retiring units must organize to fight, but they fight only in self-defense. Mobile enemy forces, unconventional forces, air strikes, air assaults, or long-range fires may interdict the retiring unit. Commanders plan such actions. Prearranged rear guards, artillery and aviation coverage, engineer obstacles, and command arrangements are essential to a successful retirement.

The terrain objective toward which the retiring force moves should support the mission of the command and the purpose of the movement. Its selection should favor the future action of the command should combat occur during the retirement.

Security and speed are important considerations when conducting a retirement. Retiring units move at night when possible. They conduct daylight movement only if their mission requires or if the enemy is incapable of interfering. When the enemy controls the air or can otherwise interdict friendly movement in depth, a retiring force moves by infiltration. Commanders conducting any retrograde operation must emphasize OPSEC during the entire movement.

CHAPTER 12

LOGISTICS

Logistics is the process of planning and executing the sustainment of forces in support of military operations. It includes the design, development, acquisition, storage, movement, equipping, distribution, and evacuation functions of supply, field services, maintenance, health service support, personnel, and facilities. Accordingly, it is an overarching function that occurs across the range of military operations. At the tactical level it focuses on the traditional CSS functions of arming, fixing, fueling, manning, moving, and sustaining the soldier and his equipment. Logistics cannot win a war, but its absence or inadequacy can cause defeat.

Geographical conditions, space and time dimensions, and a determined enemy work to make logistics operations difficult. Branches and sequels of campaigns should stress logistics plans made in earlier phases. Logistics operations are designed and protected so they continue to sustain forces throughout conflict, adapting as conditions change.

Logistics support for a force-projection army has unique characteristics. It takes on dimensions far moving different from moving units and supplies from the United States to an already-established theater. The Army relies on joint—and sometimes combined—support to project forces, which must be planned in detail prior to the onset of operations. Failure to anticipate needs properly and to provide security for LOCs, supplies, facilities, and infrastructures undermines the success of combat operations.

Operations tend not to begin all at once from a standing start. They develop by bits and pieces. Initial positioning of the force in theater often influences the outcome of war. Contingency operations initially limit support to essentials, relying on logistics estimates and strategic airlift for rapid resupply.

Commanders should assess the resources and capabilities that are available in the theater and tailor follow-on forces accordingly. Surface transportation moves outsized equipment, mounted units, and bulk supplies. Force-projection operations require comprehensive logistics support from initial planning at the strategic level to effective support for the soldier in the foxhole.

CONTENTS

Historical Perspective

The logistics support for Operations Desert Shield and Desert Storm demonstrates the impact of developing a theater plan for supporting deployed forces. The replacement operations management system processed and deployed 18,000 filler personnel. Of the 139,000 reserve personnel mobilized, 124,500 of them were in 1,033 units and 14,900 were from the individual ready reserve. While 40 percent of the Army's CSS assets were deployed to the theater, 60 percent of those assets came from the reserve components.

The modern division consumes as much as a World War II field army. During Operation Desert Shield, the defensive phase of the Gulf War, each division required 345,000 gallons of diesel fuel, 50,000 gallons of aviation fuel, 213,000 gallons of water, and 208 40-foot tractor-trailers of other supplies each day, ranging from barrier material to ammunition. During Operation Desert Storm, a 100-hour offensive, a single division consumed 2.4 million gallons of fuel transported on 475 5,000-gallon tankers.

THE UNDERPINNINGS OF LOGISTICS

A dependable, uninterrupted logistics system helps commanders seize and maintain the initiative. Conversely, attacking the enemy's support system can often threaten or weaken its center of gravity. Destruction of the enemy's support system and protection of our own are important aspects of campaigns and major operations. Strategic concentration and operational maneuver and the exploitation of operational or tactical success often hinge on the adequacy of logistics and the ability of the force to safeguard its critical LOCs, materiel, and infrastructure. While effective logistics operations sustain combat effectiveness throughout the duration of operations, they retain the ability to surge in support of decisive operations. As the scale and complexity of Army operations increase, so does the importance of logistics to the success of these operations.

The objective of logistics is to ensure that operations succeed. Logistics arrangements cannot be so meager that they do not meet the needs of commanders as they execute their operations, nor can they be so excessive that they overwhelm the ability of commanders to move, protect, and employ them efficiently. The logistics system must strike a balance of sufficient support to sustain operations throughout the peaks and valleys of their duration without burdening commanders with more support than is necessary to succeed.

Logistics is one of the combat functions that helps commanders build and sustain combat power (see Chapter 2). It is also a major operating system at each level of war. Combat operations and logistics increasingly merge at higher levels of war. Neither can be conceived without consideration of the other. Strategic and operational logistics support wars, campaigns, and major operations; tactical logistics supports battles and engagements.

STRATEGIC LOGISTICS

At the strategic level of war, logistics is largely the purview of the CONUS industrial and civilian sector. National political and military-strategic leaders, as well as civilian and military suppliers and contractors, effectively combine efforts to provision the force. Strategic logistics deals with mobilization, acquisition, projecting forces, strategic mobility, and the strategic concentration of logistics in the theater base and COMMZ. It links a nation's economic base (people, resources, and industry) to its military operations in a theater. Strategic and operational logistics interface in the theater of war.

OPERATIONAL LOGISTICS

Operational logistics focuses on force reception, infrastructure develop-ment, distribution, and the management of materiel, movements, personnel, and health services. Contractors and civilians provide support from within as well as from outside the theater

of operations. In theater, contractors and DOD civilians assigned to a logistics support element perform specified support functions. The combatant commander provides strategic guidance and priorities for operations while the service component commanders identify strategic and operational requirements to the national industrial logistics base. Deployment and integration of forces and logistics in the theater are based on the combatant commander's theater-strategic design in his campaign plan. Centralized management and distribution of supplies and materiel at the strategic level facilitate decentralized execution of logistics at the operational and tactical levels.

Operational logistics encompasses those support activities required to sustain campaigns and major operations. It enables success at the tactical level of war. Logistics significantly impacts on the ARFOR commander's decision process. METT-T analysis determines logistics time and distance factors, throughput, and LOCs. *Assured logistics communications* supporting high data-transmission rates with the national industrial base provide *total asset visibility* of critical items. *In-transit visibility* enables the commander to know the location of resources in transit and to allocate them based on their projected arrival.

TACTICAL LOGISTICS

Tactical logistics, which includes construction engineering activities, sustains the tactical commander's ability to fight battles and engagements.
Successful tactical logistics provides the right support at the right time and place to units in the CZ. The focus at the tactical level is on manning and arming tactical units, fixing and fueling their equipment, moving soldiers, equipment, and supplies, and sustaining soldiers and their systems. Tactical commanders thoroughly integrate the concept of logistical support with their concept of operations during tactical planning. Mobile, responsive capabilities are essential for preparation and execution of tactical logistics.

LOGISTICS CHARACTERISTICS

Successful logistics must be both effective and efficient. Logistics operations are not successful unless they provide effective support. Scarce resources require logistics operations to be efficient. Effectiveness, however, cannot be handicapped by efficiency. These two aspects of logistics are balanced to provide the foundation for successful logistics operations.

Five characteristics facilitate effective, efficient logistics operations. Foremost among these characteristics is *anticipation*. Commanders and logisticians anticipate requirements. They *integrate* logistics concepts and operations with strategic, operational, and tactical plans. Logistics operations and systems must be *responsive* to the commander, providing *continuous* support to forward-deployed forces. Finally, logisticians *improvise* to expedite actions when needed. These five characteristics—anticipation, integration, continuity, responsiveness, and improvisation—enable operational success. They apply to war and operations other than war.

ANTICIPATION

Accurate anticipation of requirements can enhance both the agility of the force and its ability to seize and retain the initiative and synchronize activities in depth. Though no one can predict the exact course of events, future logistics demands must be estimated as accurately as possible. Anticipation means identifying, accumulating, and maintaining the assets and information necessary to support operations at the right times and places. Anticipation also means developing logistics capabilities that are versatile and mobile enough to accommodate likely operational or tactical events. Strategic and operational commanders and logisticians visualize the entire course of a major operation or campaign while planning in detail for the current phase.

Logistics planners should anticipate requirements in order to push the right support forward; this minimizes the need for improvisation in the theater. Anticipation requires constant coordination between the operations and logistics staffs.

Base facilities, priorities of support, LOCs, and troop movements in the theater support the main lines of operation. Successful logistics plans anticipate shifts in demand based on the changing nature of operations. Examples include operations that shift from high-ammunition to high-petroleum consumption or the transition from combat operations to operations other than war.

Anticipation may mean pre-positioning critical supplies, end items, and replacement crews behind each corps sector at the beginning of high-tempo operations. This precludes the impracticality of cross-leveling between corps at the start of combat operations.

INTEGRATION

Tactical and operational success depend on fully integrated concepts of logistics and operations. Integration during planning ensures support of operations during execution. Logistics capabilities often affect the feasibility of a concept of operations. Based on the theater strategic and operational concept, logisticians develop a logistics concept that gives commanders the greatest possible freedom of action and enhances the agility and versatility of an operation. Supporting unit commanders are bold and innovative in their support operations and contribute to surprise by helping the supported force do more than the enemy believes possible. Even deception plans should incorporate logistics activities.

Since Army forces usually operate as part of joint and combined forces, integrating support operations may yield efficiencies not otherwise achievable. The Army seeks opportunities for such integration throughout the planning and execution of operations by determining who can best provide support. The Army continues to promote standardization and interoperability of its forces and equipment with other services and allies.

CONTINUITY

Any interruption in logistics operations diminishes the combat power of a force. During operations, committed forces require continuous supply and service support to sustain their fighting strength and agility. Continuity of support is the lifeblood of combat operations at all levels. For example, a tactical plan should provide for logistics support to friendly units that may be isolated by enemy action. This can be done by ensuring that CSS capabilities accompany isolated or detached units or by specifically planning resupply, health service support, and personnel replacement operations.

While both combat operations and logistics can vary in intensity, combat operations may enter periods of relative inactivity; logistics operations do not. Commanders use every opportunity to increase sustaining capabilities. When the pace of combat activity diminishes, CSS units replenish their capabilities while continuing support to combat units.

Continuity requires that the logistics effort never become hostage to a single source or mode of support. It means adapting to changing missions and priorities quickly and adjusting to temporary or permanent losses of key seaports and airports and LOCs. Forward-positioned bases and alternate facilities enhance continuity of support. These options may require additional construction or a reduction in current consumption. Force-projection operations require balancing the cost of these options against the risk of interrupting continuity of support.

RESPONSIVENESS

The logistics system must react rapidly in crises. Moreover, seldom will requirements for units and supplies be known. Logistics commanders and staffs must adapt units to requirements, often on short notice. Tailoring organizations will be the rule. Often units will operate with troop lists different from normal garrison and home station training situations. Provisional units might need to be formed. Logistics units, like combat and CS units, will frequently be task-organized for force-projection requirements that will be difficult to forecast with complete accuracy. Training CSS and base development engineering units to respond on short notice and surge their support for brief periods develops quick reaction to increased demands. Such quick-reaction efforts may temporarily disrupt long-range logistics planning but are often required to win.

At the operational level, the logistics system meets similar extraordinary demands on an even greater scale. Efforts to reestablish a ruptured defense or exploit a tactical success may require relocation of logistics bases, repositioning of forward health service support, major redirection of LOCs, reallocation of transportation and construction means, or short-notice transfer of replacement personnel or units from one part of the theater to another. The mental and physical ability to cope with such requirements and the discipline to refocus in a crisis is built into the logistics system by effective organization, careful planning, solid training, and strong leadership. Supply discipline includes adhering to movement tables, declaring and distributing excess materials, and observing senior commanders' logistics priorities. Supply discipline contributes to a responsive logistics system.

Responsive logistics, especially when time or other resources are constrained, relies greatly on worldwide, assured communications and automation networks. These capabilities assist in integrating the full spectrum of logistics functions into a single system. This may eliminate unnecessary accounting, bookkeeping, and information processing during combat operations.

IMPROVISATION

Improvisation is the talent to make, invent, arrange, or fabricate what is needed out of what is at hand. Successful logistics operations adapt to changing situations. The American soldier is a master at this. Improvised methods and supply sources can maintain logistics continuity when standard procedures fail.

Commanders and planners continually review planning factors and consumption rates, maintain in-transit asset visibility, and revise logistics planning estimates. Creative commanders and smart logisticians learn to anticipate the unexpected and adjust accordingly. Enemy action, interruption of sealift or airlift, and natural disasters can disrupt plans and require improvisation. Logistical improvisation will often spell the difference between success and failure of combat operations.

The need to improvise is even necessary in best-case scenarios. As ground operations enjoyed great success in Operation Desert Storm, Army units had to deal with an unexpectedly large number of enemy prisoners of war (EPW). Coalition forces collected 60,000 EPWs during the 100 hours of combat and thousands more following the cease-fire. Since the engineer units that would normally construct new EPW facilities were still committed to other operations, the 800th MP Brigade (EPW) constructed the additional EPW camps they were to operate to accomplish their mission.

In fast-breaking situations, commanders are prepared to press tactical or civilian vehicles into service as supply transporters, to conduct battle damage assessment (BDA), to cannibalize equipment for parts, or to establish emergency supply points. Less dramatic circumstances¡such as unexpected maintenance failures in a particular type of equipment, loss of support equipment, destruction of vital infrastructure, shortage of a particular blood type, or unanticipated peaks in work load¡may also require improvised solutions. While improvisation is not a substitute for anticipation, it is a necessary complement.

LOGISTICS PLANNING CONSIDERATIONS

Planning for logistics at all levels involves several critical decisions concerning the interface of combat, CS, and CSS activities. Support of major operations, battles, and engagements requires organization of capabilities and resources into an overall logistics concept. Logistics planning and operations must be versatile; they must complement combat plans and operations and enhance the ability of the supported unit to accomplish its mission. Balanced logistics means enough support to do the mission but not so much that it overwhelms the system. Although logistics factors constrain combat operations, the supported commander's concept of operations, priorities, and allocations dictate the actions of the supporting logistician.

Logistics planners seek innovative ways to minimize strategic-lift requirements. Strategic lift is a scarce resource. Some of the ways that help reduce the demands on strategic-lift requirements include echeloning capabilities and CSS units, establishing split-based operations, precon-figuring the packaging of material, and using civilian contractor, allied, and host nation capabilities.

LOGISTICS PREPARATION OF THE THEATER

Logistics preparation of the theater combines peacetime planning actions taken by logisticians at all echelons to maximize means (force structure, resources, and strategic lift) of logistically supporting the commander's plan. These planning actions include identifying and preparing the bases of operations; selecting and improving LOCs; projecting and preparing forward logistics bases; and forecasting and building operational stock assets forward and afloat. These actions focus on identifying the resources currently available in the theater of war or operations for use by friendly forces and ensuring access to them.

As time and resources allow, the Army will program actions to improve the infrastructure of the theater, assisting the move toward greater stability and military capability. Logistics preparation of the theater is a tool to optimize the volume of deploying resources and personnel, as well as the number of logistics units that compete for strategic lift.

FORCE COMPOSITION

The active and reserve components' force composition, as well as the ratio of combat, CS, and CSS troops, influences the time needed to create a logistics base in the theater and prepare it for operations. For example, force-projection operations may begin as contingency operations, consisting primarily of active component combat forces. Reserve component forces may assist in the deployment, providing CS and CSS. Planners also consider that assured availability of

civilian and contractor support will be necessary for virtually all deployment and logistics operations. The theater support structure may be augmented from TDA organizations such as an AMC logistics support organization.

In operations other than war, the reserve components may furnish the primary forces for certain types of missions. Since a large portion of the Army's CSS units are in the reserve components, the preparedness of those units and the time necessary to mobilize and deploy them will be significant planning factors. Specialized force structures require specialized support structures, often drawn from the reserve components.

Theater entry considerations require a thorough review of the mobilization and deployment plans to ensure the best mix of units and integration of arrival times. This ensures logistics support for combat forces as they arrive in theater. A force-projection army needs the capability to develop the logistics base concurrently with building combat power. As combat power builds, the logistics base must be dynamic and expand to meet the needs of the combat force.

LOGISTICS PRIORITIES

Commanders conserve resources by establishing priorities for support. The priorities of all supporting commanders are governed by the theater commander's guidance and priorities under his combatant command authority (COCOM). This is a prerequisite for developing a support plan. Priorities may shift between units or to different areas. As they do, it is necessary to evaluate the capability of the existing logistics system to support such a shift.

Exploiting an operational situation, reconstituting, preparing for future battles, or continuing current operations may alter priorities. Any shifting of priorities may require the relocation of certain supply, medical, service, maintenance, or personnel units to ensure full support. During relocation, logistical planners anticipate a temporary reduction in CSS capability but ensure continuous support throughout the relocation. Such relocations may require diverting transportation and other logistics assets from support of combat units to move the support base.

JOINT LOGISTICS

Joint integration of logistics is crucial to unity of effort. The concept of joint logistics cannot be fully realized until accountability and acquisition procedures are completely integrated. At the strategic levels of logistics, this integration is already unified and joint. The theater combatant commander may direct the service components to support the joint force with particular logistics functions, based on the dominant-user or most-capable-service concepts. For example, the Army may provide all Class I (subsistence) support, construction, movement control, mortuary affairs, or water support. Duplication of support among the services is expensive and wasteful. Support plans must be versatile enough to realize the efficiencies possible with joint logistics.

COMBINED LOGISTICS

Combined logistics operations require similar integration. Operations with other nations require as much standardization as possible between forces to ensure interoperability. While this ideal is rarely achievable, the Army integrates its efforts as much as possible to that end. The Army cannot rest on the notion that logistics is a national responsibility. While that is an accepted principle, the Army endeavors to streamline multinational efforts toward focused combat power. Complementary arrangements work best when each partner contributes national assets as it is able. The coalition or alliance coordinates these efforts. Army forces can benefit from assistance from their allies. During both deployment and entry operations, combined logistics can be crucial. Although other nations' logistical structures may not have the same technological capabilities or the same level of sophistication, Army forces must work toward integrating logistics systems.

HOST NATION SUPPORT

In a forward-presence theater, preestablished arrangements for host nation support can significantly reduce the requirement for early augmentation of US logistics assets. Host nation support can maximize early strategic lift by reducing requirements for moving resources to the theater. Host nation support arrangements may include operation, maintenance, and security of seaports and airports; construction and management of routes, railways, and inland waterways; provision of some health service support, subsistence support, laundry and bath support, petroleum pipelines, and bulk storage or warehouse for other facilities; logistics civil augmentation programs; and operation of existing communications networks. Host nation support could also include transportation, civilian labor, and local security and police forces.

Whether or not the Army has a host nation support agreement, logistics contracting support (including comptroller and finance personnel) should deploy early to arrange access to host nation capabilities. While certainly a logistics multiplier, host nation support cannot be relied on as a sole source for support.

SUPPORTING OPERATIONS OTHER THAN WAR

Supporting operations other than war places special demands on the logistics system. Operation Andrew, in the wake of Hurricane Andrew's devastation of southern Florida in 1992, is an example of a disaster relief mission where soldiers supported local and state domestic authorities. Throughout Andrew, soldiers distributed relief supplies, constructed temporary shelters, and removed debris.

Other typical support operations involve constructing roads, bridges, and other key infrastructure and providing emergency medical support abroad in support of diplomatic initiatives. Combatant commanders tailor logistics support of these operations based on theater needs much as they would do in wartime situations. In some cases, CS or CSS units may be the only units involved in operations other than war. The logistical operation may well be the main effort in certain situations. The level of support, however, should not overwhelm indigenous forces or cause them to become solely dependent on Army resources. Army efforts must be integrated with host nation or local resources and activities. The wide variety of potential support requirements demands a flexible logistics structure tailored to theater missions.

LOGISTICS OPERATIONS

The logistics needs of the force determine the logistics structure. The operational logistics system links tactical CSS units to strategic logistics support structures. Theater-strategic logistics supports the theater campaign and links logistics support from the CONUS, or other theater base, to operational logistics. It includes all activities in the theater base and theater rear portion of the COMMZ. Operational logistics includes those support activities required to sustain campaigns and major operations within a theater. It extends forward from theater port facilities and support bases to CSS units and facilities organic to major tactical formations. It also extends to the rear from the same ports or bases to the strategic industrial base in the United States. Tactical logistics directly supports tactical units throughout the theater. Figure 12-1 depicts the relationship of strategic, operational, and tactical logistics operations.

Depending on the factors of METT-T, commanders decide when to deploy CSS and construction engineer units with respect to the deployment of combat forces. Prior to deployment of these units, combatant commanders consider deploying a logistics planning cell to begin evaluating requirements, assessing host nation capabilities, and contracting for those items necessary to sustain initial units. Based on METT-T, combatant commanders build logistics forces from those resources provided by the services. Combatant commanders also provide limited support for *ad hoc* multinational coalition forces.

With total asset visibility (TAV), supply managers will know the locations of all supplies throughout the supply system. TAV allows managers to quickly locate, distribute, and redistribute equipment and supplies, including ammunition associated with specific weapon systems. Current and certain knowledge of the location of supply items allows managers to divert materiel to priority units and locations.

The heart of any logistics system is the distribution system—the complex of facilities, installations, methods, and procedures designed to receive, store, maintain, issue, and move materiel to using activities and units. LOCs connect the critical points of this system. Both logistical and combat operations rely on an effective and efficient distribution system.

THE CONUS BASE

The CONUS base includes the national industrial base with its national inventory control points, distribution centers, arsenals, plants, manufacturing facilities, and medical and personnel support centers. The CONUS base is the strategic foundation for the logistics system.

THE COMMUNICATIONS ZONE

The COMMZ extends from the rear of the CZ in the theater of operations to the CONUS base. The COMMZ includes the LOCs; the establishments within the theater logistics bases that provide supply, maintenance, field services, transportation, health services, personnel support, and evacuation; and other agencies required for the immediate support and sustainment of the field forces. The theater support structure can

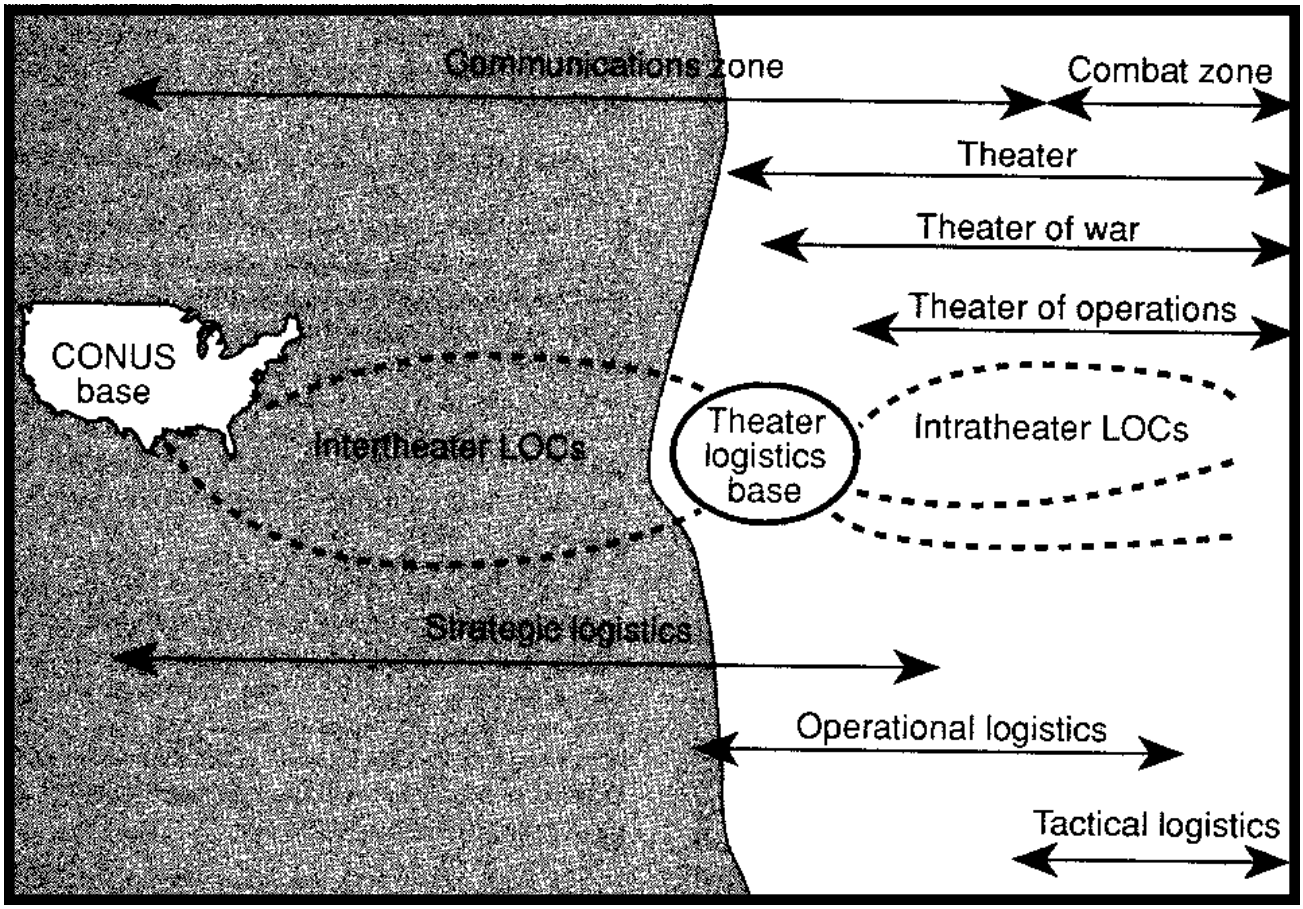


Figure 12-1. Theater Logistics System

be formed around Army organizations and can be augmented by the Army, other government agencies, and civilian resources.

The national industrial base and bases in other theaters are linked to the theater logistics base through intertheater LOCs. Theater army commanders assume responsibility for distribution management at theater port facilities. The mission of the entire logistics system—from CONUS to the most forward-deployed CSS forces in the CZ—is to provide support in the right quantities at the right time and place.

Theater logistics capabilities support units located in and passing through the COMMZ and absorb requirements that are beyond the capability or capacity of the forward support units. Theater logistics bases are often located well behind the CZ. Positioning selected theater logistics capabilities forward can help disperse critical assets and be more responsive to units in the CZ.

SPLIT-BASED OPERATIONS

The full integration of supply and transportation functions into a vertical distribution system is critical. Enhanced and assured communications allow selected logistics management functions to be accomplished from CONUS or from a forward-presence location, deploying only those functional capabilities absolutely necessary. This is called *split-based operations.* Split-based operations can be used as a means of providing materiel management support to the force, wherever it is located. To do this, part of the materiel management center (MMC) remains in CONUS or its peacetime forward-presence location, while force-projection cells deploy to an AO with the force they support.

The deployed MMC cells consist of personnel and equipment in modular components that provide a conduit for electronic transmission of logistics data and message and voice communications traffic. The rear MMC continues to support the stay-behind force while concurrently interfacing with the deployed cells to provide the required support forward. With assured communications and automation, the forward-deployed MMC cell is able to interface back to the supporting MMC. Split-based operations apply to all other logistics functions. Planners assess the capabilities and assets available in the theater and determine how to supplement them without unnecessary duplication.

LINES OF COMMUNICATION

LOCs are all the routes (land, water, and air) that connect an operating military force with a base of operations and along which supplies and military forces move. They are different than lines of operation, which describe the direction from a combat force's base of operations to its objective. Traditionally, limited clearance capacities at ports and airfields and limited inland transportation networks constrain combat operations. Significant logistics coordination takes place at those key nodes. Land, naval, and air forces of various nations, for example, compete for real estate, ship berthing and unloading facilities, transportation, labor, and construction materials. Identifying bottlenecks en route to or within the theater is the first step in coordinating activities to avoid overloading LOCs or determining how to increase throughput.

Maintaining uninterrupted logistics support throughout all phases of an operation or campaign is the central challenge of logistics. Effective and efficient distribution of logistics along LOCs is critical. Depending on the geography of the theater, the availability of transportation assets, and the threat, ALOCs and SLOCs may supplement ground LOCs. Strategic LOCs are linked with a predominantly ground LOC network at the theater base. Intratheater ALOCs are required to maintain flexibility and effect emergency high-priority resupply and replacement actions.

A campaign or major operation should never depend on a single LOC. Moreover, where austere logistics resources limit multiple LOCs, security for air and ground LOCs is particularly important. Protecting LOCs at minimum cost to committed combat units includes using geographic features, friendly civil security forces, and uncommitted combat units. It may be necessary to conduct a major operation to secure the LOCs required to support later phases of a campaign.

On a fluid battlefield, LOCs may change orientation rapidly. Unexpected threats may require the rapid redeployment of combat forces to block or counterattack the enemy. Unexpected opportunities may develop which might disappear unless quickly exploited. Doing so might require a significant reorientation of the main effort. Ideally, the locations of LOCs allow shifts in operational direction without major adjustment of the sustaining effort. More frequently, however, shifts in lines of operation require a corresponding change in LOCs. Such a change may also be necessary to compensate for damage to or interruption of existing LOCs.

The operational commander understands the relationship between time, LOCs, and forward combat power. Time spent in deliberate preparation—moving units and stockpiling resources—can result in greater operational capability in the future. This was the case in Operations Desert Shield and Desert Storm, where bases were positioned forward to support future operations. The commander weighs these advantages against current operational requirements. The operational commander seeks to support each major operation efficiently and, as the campaign progresses, to adjust his LOCs and support bases as necessary.

Versatility is built into the logistics system to make these adjustments with minimum confusion and delay. Forces decrease risk associated with shifting LOCs by terrain and route reconnaissance, assignment and reconnaissance of alternate transhipment and supply point areas, construction and maintenance of alternate facilities and transportation networks, development and rehearsal of rapid relocation procedures, and continuous contingency planning. Logistics operations can avoid shortfalls by carefully integrating intratheater airlift and using host nation support and tactical support assets during the actual relocation of facilities and traffic. Logistics planners estimate the time required to make those adjustments and begin the relocation process early.

ESTABLISHING A THEATER LOGISTICS BASE

Combat and supporting logistics activities rely on an underlying infrastructure system. The Army will often be required to provide engineering and base development support to joint and combined operations.

The throughput capacity of airports and seaports constrains units and materiel flowing into a theater. Engineer resources can expand this capacity. Theater logistics bases are characterized by facilities for storage and transfer of ammunition and bulk petroleum, maintenance of sensitive equipment, power generation and distribution, and protection of vital materiel. Roads and bridges should be sufficient to move traffic to the forward combat areas. Logistics preparation of the theater includes determining maintenance priorities for existing infrastructure, repairing damaged or destroyed infrastructure, and constructing facilities to compensate for infrastructure shortfalls. Balancing requirements for combat engineers with base development engineering needs and considering host nation engineering capabilities along with those of other services are also part of the planning process. During initial base establishment, split-based logistics operations are often a necessity.

The depth, simultaneity, and tempo of operations challenge planners to forecast and respond to the needs of forward-deployed units. Even in a developed theater, operational and logistical planners continually reassess the location of their principal and supplementary bases of support. The choice of where to establish the initial lodgment or support base could influence the course of the entire campaign. Lodgments should allow easy access to strategic sealift and airlift, offer adequate space for storage, facilitate transhipment of supplies, and be accessible to multiple LOCs. Lodgments are thus often established near key seaport or airport facilities. Logistics-over-the-shore (LOTS) operations may augment undeveloped or damaged facilities or provide ports where none exist. The vulnerability of ports to long-range, highly destructive enemy weaponry will increase the importance of the ability to conduct LOTS operations from anchorages.

Seldom will logistics base locations contain the ideal mixture of desired characteristics. Commanders make difficult choices as they organize a theater of operations. They weigh the risks and benefits of particular logistics base sites, seeking a structure that is flexible, supports the campaign design, and meets the needs of the fighting force.

EXPANDING THE THEATER LOGISTICS BASE

As the force in a theater increases, the commander ensures an appropriate balance of combat, CS, and CSS units throughout expansion. Plans to build up forces in a theater reflect any necessary acclimatization, reequipping, or in-theater training, as well as establishing and enhancing life support infrastructure. The support capacity of the logistics base must accommodate the flow of combat forces.

With the arrival of each unit in the theater, logistics planners revise support plans, assign missions to newly arrived CSS units, adjust the missions of CSS units already in support, and cross-level supplies and personnel. With the integration of each new unit, commanders reevaluate and adjust their logistics priorities. Each time the force expands or contracts, planners review facilities and logistics requirements to ensure they are adequate to accomplish the mission.

Using information provided in the logistics estimate, the logistics system responds to meet the increased demands for supplies and services caused by the expanding force. Both logistics and operational planners prepare to meet the increased competition for space on the battlefield. Units preparing for future missions require adequate terrain to train and prepare for combat. Commanders carefully balance sustaining the force with retaining the initiative, protecting the force, and preparing for future operations.

RECONSTITUTION OPERATIONS

At the strategic level, reconstitution consists of those functions and activities required to restore the Army's capability to respond to any mission across the full range of possible operations. Strategic reconstitution refers to the industrial and mobilization base of the nation. The Army's strategic reconstitution depends on the integration of national efforts to restore its capability to mobilize, deploy, and conduct future operations.

At the tactical level, reconstitution consists of the reorganization or regeneration of people and equipment to restore combat capability. Reorganization is restoring combat effectiveness by cross-leveling assets within a unit or by forming a composite (smaller) unit. For example, an attrited battalion could be reorganized into two full-strength companies. Reorganization provides a means to maintain a level of continuous combat effectiveness. Regeneration is the rebuilding of a unit in which the mission capability has been reduced or degraded. Normally, the headquarters two levels higher is responsible for regeneration. It is accomplished through replacement of personnel and equipment, reestablishment of effective C2, and conduct of essential training. During regeneration, consideration should be

given to maintaining the integrity of the remaining effective squads, teams, or crews. Taking this action preserves the cohesion, trust, and confidence of a unit to the maximum extent possible. Regenerated units need training before being reintroduced into combat.

TACTICAL LOGISTICS FUNCTIONS

CSS units, supported by engineer units, accomplish tactical logistics functions. Tactical logistics units normally operate from tactical rear operations areas. Commanders choose rear operations areas as part of the battlefield framework, with close and deep areas appropriate to accomplish the mission at least cost. Commanders, however, may choose to separate their tactical rear operations in time and distance to a noncontiguous or adjacent area. Such separation might be temporary or permanent. Commanders make these choices as a result of their METT-T analysis.

Logistics operations at the strategic and operational levels make the execution of logistics at the tactical level possible. Tactical logistics functions are manning, arming, fueling, fixing, moving the force, and sustaining soldiers and their systems.

MANNING

The systems of personnel readiness management, replacement management, and casualty management meet the Army personnel requirements from mobilization and deployment through redeployment and demobilization. The Army personnel readiness system provides a flexible tool for selecting and assigning soldiers with the correct skills to meet the requirements before, during, and after combat. The replacement management system moves soldiers and civilians through the CONUS replacement centers to unit commanders in the theater of operations. The replacement system responds to commanders through the personnel-readiness management system. Casualty management helps the personnel-readiness manager replace losses incurred during battle.

ARMING

During periods of intense combat, arming the force is extensive and time-sensitive. It begins with peacetime planning and covers all phases of force-projection operations. Arming the force requires detailed planning and coordination among the combat users and the ammunition and transportation logisticians at all levels. Modern warfare consumes large amounts of ammunition. Much of the Army's ordnance depends on high-quality electronic and optical technologies for precision and effectiveness. Logistics provides the total package of components, technical maintenance, and skilled soldiers to keep weapons systems firing. The key to arming soldiers in the field is planning for a flexible logistics distribution system capable of surging for the main effort. Given the large variety of ammunition and weapons in use and the fluid nature of battle, arming soldiers has become an even greater challenge.

FUELING

While the high performance air and ground vehicles of the Army furnish great potential mobility for both heavy and light forces, they also consume large quantities of fuel. Wheeled vehicles use less fuel than tracked vehicles and heavy equipment but still make great cumulative demands on the logistics system. Providing clear priorities for fueling, accurately estimating fuel consumption, and economizing assets whenever possible contribute to ensuring adequate support of operations. Logisticians operate a high-volume refueling system to support routine consumption rates; they also provide a surge capability. In peak consumption periods, victory may depend on the ability of the logistics system to increase the flow of fuel. Whether combat, CS, or CSS, all units require uninterrupted fueling to function effectively.

FIXING

Maximizing equipment availability is a necessity in supporting a force-projection army. Sound maintenance practices in all units, forward positioning of maintenance capabilities, quickly accessible repair parts, and well-understood priorities for recovery and repair may spell the difference between success and failure. Repairing equipment far forward is key. A tailored maintenance capability will deploy, move with, and redeploy with supported units. Modular support teams will provide additional capabilities. Battle damage assessment and repair (BDAR) provides the capability to quickly repair and return equipment to combat or expedite recovery and evacuation to the closest

maintenance facility with required capabilities. The maintenance focus is on supporting combat operations.

MOVING

Soldiers, equipment, and supplies must move rapidly and in sufficient quantities to support combat operations. Tactical actions require timely concentration of units and materiel and often demand short-notice movement of large forces and major shifts in direction of movement. Automated systems provide in-transit visibility. At the tactical level, units, supplies, and important facilities move as battles progress to ensure responsive support of committed units as large as corps. While moving, CSS units must protect themselves and provide logistical support to combat units. Planning, controlling, and executing transportation operations require detailed preparation and extensive training of CSS staffs and units. The complicating effects of terrain, weather, and enemy interdiction demand well-planned engineer support and great flexibility of transportation planners and operators.

SUSTAINING SOLDIERS AND THEIR SYSTEMS

The five elements to sustaining soldiers and their systems are personnel services, health services, field services, quality of life, and general supply support.

Personnel Service Support

Personnel service support is the management and execution of personnel services; resource management; finance services; chaplaincy activities; command information services; and legal service support. Soldiers are reassured by concerned, positive leadership and a personnel system that ensures care for them while they perform their missions.

Health Service Support

The HSS system provides flexibile, versatile, and fully modernized HSS units to support the rapid deployment of a CONUS-based, force-projection army. The medical force will assure a medical presence with the soldier and, at the same time, provide state-of-the-art medical and surgical treatment and evacuation, limited only by the operational environment. This support will ensure that battlefield casualties are treated and evacuated quickly.

The HSS system is a continuum of health care from the forward line of own troops through the CONUS sustaining base. It is a system designed to provide continuous medical management of patients throughout the differing levels of care and evacuation. The medical challenge is to provide HSS simultaneously to the CONUS base and to establish an HSS system within the theater that provides requisite care and support to soldiers, including progressive treatment and evacuation. An additional requirement exists to provide HSS to redeployment and demobilization operations at the conclusion of military operations. Furthermore, HSS requirements will surface in support of operations other than war. Typical operations include disaster relief, nation assistance, support to domestic civil authorities, and peacekeeping activities.

HSS is based on far-forward surgical and medical treatment to sustain the health of the force and treat life-threatening injuries; standardized medical units using a modular medical support system throughout the division, corps, and COMMZ areas; standardized air and ground medical evacuation units, using air evacuation as the primary means of medical evacuation; flexible and responsive hospitals designed and structured with medical modules to allow for strategic deployment; and enhanced ancillary and functional support systems using advanced state-of-the-art technology.

Field Service Support

Field services consist of food preparation, water purification, bakery, clothing and light textile repair, laundry and shower, parachute packing, air item maintenance, rigging supplies and equipment for airdrop, and mortuary affairs. Technological advances have improved the quality of field service support to the soldier from tactical showers to improved food service support from modular field kitchens. Provision of these basics is essential for the maintenance of soldier health, morale, and welfare.

Quality of Life

Ensuring quality of life is a command responsibility. Quality of life and family considerations affect every soldier's readiness and willingness to fight. Effective personnel services, health services, and field services ease immediate soldier concerns. The soldier who fights best is the one who is reassured that his loved

ones are adequately cared for at the home station, especially when units deploy from forward-presence locations. The family supports the soldier best when it is assured that the soldier is appropriately cared for. Accurate and timely delivery of mail enhances the quality of life of the soldier in the field. Command information provided to family members must be as timely and accurate as possible, especially in an age of instant communications where a soldier's friend may be sharing news about a loved one in almost real time. A direct relationship exists between adequate, well-thought-out soldier and family quality of life programs, soldier morale, and combat effectiveness.

General Supply Support

General supply support encompasses the provision of clothing, water, barrier material, and major end items in support of the force. These classes of supply include all the systems that support the soldier. The quality and acceptability of rations, clothing, and sundry packages are critical in sustaining the morale of soldiers, enhancing their ability to perform effectively.

CHAPTER 13

OPERATIONS OTHER THAN WAR

The Army's primary focus is to fight and win the nation's wars. However, Army forces and soldiers operate around the world in an environment that may not involve combat. Chapter 2 describes fundamentals that apply to all Army operations. This chapter describes the principles and tenets associated with Army operations other than war.

THE ENVIRONMENT

In preparing to fight the nation's wars, the Army develops the leadership, organizations, equipment, discipline, and skills for a variety of operations other than war. Doctrine for war complements that for operations other than war. Though modified to accommodate different situations, some of the same principles apply to both environments.

Properly applied to the situation at hand, these principles balance the Army's response to challenges and confrontations in situations other than war. They ensure that the efforts of Army forces are effective and proportional to the task at hand.

Army forces have participated in operations other than war in support of national interests throughout its history. They have protected citizens at the edge of the frontiers of an expanding America; built roads, bridges, and canals; assisted nations abroad; and served our nation in a variety of other missions.

Thus, operations other than war are not new to the Army. Their pace, frequency, and variety, however, have quickened in the last three decades. Today, the Army is often required, in its role as a strategic force, to protect and further the interests of the United States at home and abroad in a variety of ways other than war.

Army forces face complex and sensitive situations in a variety of operations. These range from support to US, state, and local governments, disaster relief, nation assistance, and drug interdiction to peacekeeping, support for insurgencies and counterinsurgencies, noncombatant evacuation, and peace enforcement.

Operations other than war often are of long duration and undergo a number of shifts in direction during their course. Immediate solutions to difficult problems may not be obvious or may jeopardize long-term objectives. Peacekeeping, for example, demands that the peacekeeping force maintain strict neutrality. One or more of the belligerents may attempt to provoke a response from peacekeeping forces that could undermine long-term peacekeeping efforts. Certain military responses to civil disturbance may solve the immediate crisis but subvert the legitimacy of local authorities and cause further civil unrest. Humanitarian relief and

CONTENTS

nation assistance should not promote dependency on aid from outside sources. Quick, efficient action by US forces that resolves an immediate issue without considering the long-term consequences and goals may promote instability. In operations other than war, victory comes more subtly than in war. Disciplined forces, measured responses, and patience are essential to successful outcomes.

Operations other than war may precede and/or follow war or occur simultaneously with war in the same theater. They may be conducted in conjunction with wartime operations to complement the achievement of strategic objectives. They may support a combatant commander's forward-presence operations or a US ambassador's country plan. They may occur in the United States. They are designed to promote regional stability, maintain or achieve democratic end states, retain US influence and access abroad, provide humane assistance to distressed areas, protect US interests, and assist US civil authorities. The NCA employs Army forces to such ends in support of *US National Military Strategy*. Such employment serves to preserve and promote American democratic values peacefully, minimizing the need for combat operations by defusing crises and nurturing peaceful resolution of contentious issues.

The Army conducts such operations as part of a joint team and often in conjunction with other US and foreign government agencies. Operations other than war are intrinsic to a combatant commander's peacetime theater strategy, an ambassador's country plan, or civil assistance at home. Army soldiers serve daily in this capacity: engineers help host nations build roads and improve infrastructures; MPs assist in the restoration of civil order; medics provide inoculations and advice for preventing disease; mobile training teams enhance local militaries' expertise in securing their nations' interests. Operations in this environment can present a special leadership challenge since the activities of relatively small units can have operational—and even strategic¡impact. The entire Army—active, reserve, and civilian components—is involved daily in operations other than war.

The United States seeks to further regional stability and peace through the effective integration of all elements of national power. The Department of State will often be the lead agency and the ambassador the key individual in this process. Other agencies such as the Drug Enforcement Admini-stration, Central Intelligence Agency, Defense Intelligence Agency, Agency for International Development, Department of Justice, Environmental Protection Agency, Department of Agriculture, and Department of Commerce, among others, contribute to these activities.

Combatant commanders integrate activities into theater - and country -specific plans in order to achieve regional or national objectives. As in wartime operations, they define desired objectives that would

Historical Persepctive

Hurricane Andrew swept ashore near Miami, Florida, during the early morning hours of 23 August 1992. Its 140 mile-an-hour winds and torrential rains left a wide swath of destruction and killed several people. Entire suburbs were in ruin and hundreds of thousands of people were without shelter, power, and drinking water.

More than 17,000 active component soldiers and nearly 7,000 from the USAR and National Guard—along with other uniformed servicemen and women - supported state and local authorities, the American Red Cross, and the Federal Emergency Management Agency (FEMA) in disaster relief operations. The Army Corps of Engineers, as well as other Army units and soldiers, provided food, shelter, and medical assistance; cleared debris; moved furniture; provided construction materials; and helped elderly citizens. Constant coordination with civilian authorities enabled commanders to provide responsive and appropriate support during this emergency.

signify victory. These may be open-ended objectives such as the continued prevention of hostilities in peacekeeping operations, or they may be specific such as the reopening of public schools on a target date following a national disaster.

Theater assessments that incorporate information and intelligence from a variety of sources form the basis for theater planning. Peacetime operations rely heavily on cultural orientations and regional expertise. A diverse group of forces—military units, international and national relief groups, police and fire departments, local governmental agencies, and others—integrate their efforts and cooperate to achieve specific objectives. Other military and nonmilitary headquarters develop supporting plans, allocate resources, and provide services to assist committed forces. The entire effort is brought together in an overarching campaign plan that synchronizes each agency's effort with others to achieve the desired end state.

Operations other than war will not always be peaceful actions. Determined opponents may resort to fighting or other aggressive acts in an attempt to defeat our purposes and promote theirs. While all military forces have an intrinsic right of self-defense, the use of overwhelming force may complicate the process toward the Army's stated objectives. As a result, operational commanders may find themselves operating under restrictive ROE.

The operations other than war environment is a complex one that will require disciplined, versatile Army forces to respond to different situations, including transitioning rapidly from operations other than war to wartime operations. Counterdrug operations, for example, may move through various activities, beginning with education and training and eventually including interdiction and direct action. Drug dealers, in turn, may resort to propaganda and legal protection activities and outright armed combat that employs significant firepower. While the dividing line between the two may not always be clear, commanders seeking to retain the initiative should plan for combat operations as a branch or sequel to the overall campaign plan.

In the turbulent period immediately following the end of combat operations, a number of units will be required to transition to operations other than war. Pending the reestablishment of a civilian infrastructure, military forces may be in the best position to conduct refugee control, to reestablish civil order and public services, and to provide health assistance and other postconflict activities. While military forces will

Historical Perspective

In late November 1989, conditions in El Salvador intensified when the Farabundo Marti National Liberation Front (FMLN), a communist front organization, launched a major offensive. It involved countrywide attacks against the El Salvadorian Armed Forces (ESAF). The FMLN used newly acquired SA-7 surface-to-air missiles against ESAF aircraft. This early FMLN success impacted immediately on the ESAF. The balance and momentum could have shifted in favor of the FMLN.

USSOUTHCOM responded rapidly to restore ESAF initiative by coordinating an interagency response helpful to the military balance. ESAF received additional small arms and ammunition. The continuted resolve of the ESAF was due in part to this responsive US support. This type of support continued through the following summer, allowing the ESAF to maintain a high tempo of operations. This period of sustained, hard-hitting operations kept the FMLN on the defensive, while reacquiring lost territory. It also facilitated the ability of the government of El Salvador in peace negotiations. The signing of a peace treaty between the FMLN and the government on 16 January 1992 was the end result.

initially be heavily involved in providing these services, as civil government is reestablished and the military threat wanes, civilian agencies will be expected to assume these activities.

The Army's presence and its ability to operate in crisis environments and under extreme conditions may give it the *de facto* lead in operations normally governed by other agencies. In this environment Army forces must work competently, while properly subordinating military forces to the agency in charge. Planning and conducting postconflict activities requires a variety of perspectives, expertise, cooperation, and assistance from governmental agencies, other services, and alliance or coalition partners.

THE PRINCIPLES

Army warfighting doctrine has long been based on well-established principles of war that have withstood the tests of time and experience and remain embedded in our doctrine. Operations other than war also have principles that guide our actions. For those operations other than war that involve our forces in direct combat, the principles of war apply. Some, such as the principles of *objective* and *security*, apply equally to noncombat operations. *Unity of command* requires modification as described below. The Army must supplement these three with principles more suited to the noncombat operations that comprise most operations other than war. While these principles are not immutable, they serve as guides for action.

The relative application of each principle will vary depending on the specific operation. The principle of perseverance, for example, will impact more during long-term nation assistance and counterdrug operations than during a short-term noncombatant evacuation mission. Commanders must balance these principles against the specific requirements of their mission and the nature of the operation.

OBJECTIVE

Direct every military operation toward a clearly defined, decisive, and attainable objective.

This principle of war applies also to operations other than war. Each separate operation must be integrated with every other to contribute to the ultimate strategic aim. Leaders of disparate units, military and otherwise, must understand the strategic aims, set appropriate objectives, and ensure that they contribute to unity of effort with other agencies.

Historical Perspective

On 5 April 1991, President Bush announced the beginning of a relief operation in the area of northern Iraq. The US responded immediately. By 7 April, US aircraft from Europe dropped relief supplies over the Iraqi border. More than 6,000 soldiers from units which had just participated in Operation Desert Storm eventually redepolyed to Turkey and northern Iraq in support of Operation Provide Comfort.

During the next four months, Army forces demonstrated agility, versatifity, and deployability during operations other than war. Missions included providing supplies to refugee camps, construction, medical assistance, refugee control, PSYOP, and CA. Operation Provide Comfort was a joint and combined operation execurted with no formal agreements between participating agencies and countries. It exhibited the unity of effort essential to operations of this nature.

UNITY OF EFFORT

Seek unity of effort toward every objective.

The principle of unity of command in war also applies to operations other than war, yet can be adapted to meet special challenges. Our military command structure is suited to achieve unity of command and effort in war. However, in operations other than war, this may be more difficult to attain. In such operations, other government agencies will often have the lead. Commanders may answer to a civilian chief, such as an ambassador, or may themselves employ the resources of a civilian agency. Command arrangements may often be only loosely defined, causing commanders to seek an atmosphere of cooperation rather than command authority to achieve objectives by unity of effort. Military commanders consider how their actions contribute to initiatives that are also political, economic, and psychological in nature.

LEGITIMACY

Sustain the willing acceptance by the people of the right of the government to govern or of a group or agency to make and carry out decisions.

Committed forces must sustain the legitimacy of the operation and of the host government. Legitimacy derives from the perception that constituted authority is both genuine and effective and employs appropriate means for reasonable purposes. If committed forces solve an immediate problem within a nation or region but detract from the legitimacy of the government in so doing, they may have acted detrimentally against long-term, strategic aims.

PERSEVERANCE

Prepare for the measured, protracted application of military capability in support of strategic aims.

Operations other than war may be of short duration or protracted. Peacetime operations may require years to achieve the desired effects. Underlying causes of confrontation and conflict rarely have a clear beginning or a decisive resolution. Commanders must assess quick contingency response options against their contribution to long-term, strategic objectives. This does not preclude decisive military action but does require careful, informed analysis to choose the right time and place for such action. Commanders balance their desire to attain objectives quickly with a sensitivity for the long-term strategic aims and the restraints placed on operations.

RESTRAINT

Apply appropriate military capability prudently.

The actions of soldiers and units are framed by the disciplined application of force, including specific ROE. In operations other than war, these ROE will be more restrictive, detailed, and sensitive to political concerns than in war. Moreover, these rules may change frequently. Restraints on weaponry, tactics, and levels of violence characterize the environment. The use of excessive force could adversely affect efforts to gain legitimacy and impede the attainment of both short-and long-term goals. Transmission of and assured understanding of ROE throughout the totality of units requires follow-through, rehearsals with situations to check understanding and compliance, and continuing brief-backs. Soldiers who thoroughly understand ROE are better prepared to act with initiative and defend themselves and members of their unit.

SECURITY

Never permit hostile factions to acquire an unexpected advantage.

The presence of US forces in nations around the world may provoke a wide range of responses by factions, groups, or forces of an unfriendly nation. Regardless of the mission, commanders must protect their forces at all times. They must be ready to counter activity that could bring harm to their units or jeopardize their mission. They should never be lulled into believing that the nonhostile intent of their mission does not put their forces at risk. Inherent in this responsibility is the need to be capable of rapid transition from a peaceful to a combat posture, should the need arise. Commanders should never be misled about the risks to their forces. The intrinsic right of self-defense always applies.

THE ACTIVITIES

Operations other than war include, but are not limited to, the following. Note that not all of these activities require the use of force.

NONCOMBATANT EVACUATION OPERATIONS

Noncombatant evacuation operations (NEOs) relocate threatened civilian noncombatants from locations in a foreign country or host nation. These operations may involve US citizens whose lives are in danger but could include selected host nation citizens or third

country nationals. NEOs occur in a peaceful, orderly fashion or may require force. Army forces may conduct NEOs under the combatant commander in the environments of conflict or war.

ARMS CONTROL

Arms control focuses on promoting strategic military stability. It encompasses any plan, arrangement, or process controlling the numbers, types, and performance characteristics of weapons systems. This extends not only to weapons themselves but also to C2, logistics support, and intelligence-gathering mechanisms. Selected Army units provide assistance in monitoring the proliferation of weapons and technology, in verifying the status of arms control agreements, and in demilitarizing munitions and hardware.

SUPPORT TO DOMESTIC CIVIL AUTHORITIES

When appropriate governmental authority directs the armed forces to assist in domestic emergencies within CONUS, the Army has primary responsibility. Army units support disaster relief, humanitarian assistance, and similar operations.

Federal law also authorizes the domestic use of military force to suppress domestic violence or insurrection. The Constitution and federal law, however, restrict its use in this manner. Under the provisions of the *Posse Comitatus Act*, neither the active component nor the US Army Reserve may execute the law in the place of duly appointed law-enforcement means without specific presidential or congressional approval and direction. However, the *Posse Comitatus Act* does not apply to National Guard Title 32 soldiers until federalized. See FM 100-19.

HUMANITARIAN ASSISTANCE AND DISASTER RELIEF

Humanitarian assistance operations use DOD personnel, equipment, and supplies to promote human welfare, to reduce pain and suffering, to prevent loss of life or destruction of property from the aftermath of natural or man-made disasters. In some circumstances, humanitarian assistance may include medical, dental, and veterinary care to rural areas of a country; construction of rudimentary surface transportation systems; well-drilling and construction of basic sanitation facilities; and rudimentary construction and repair of public facilities.

Disaster relief operations fall within the overall context of humanitarian assistance. They are conducted in emergency situations to prevent loss of life and property. Such operations may be in the form of immediate and automatic response by US military commanders or in response to domestic or foreign governments or international agencies. Army elements involved in international disaster relief operations are often responsible for supporting the implementation of assistance programs developed by the Office of Foreign Disaster Assistance within the Department of State. The coordination of federal response to domestic disaster relief efforts are generally under the direction of FEMA, although immediate response is permitted to prevent loss of life and property. The Army's global reach, its ability to deploy rapidly, and its capability to operate in the most austere environments make it ideally suited for these missions.

The Army can provide logistics support to move supplies to remote areas, extract or evacuate victims, establish emergency communications, conduct direct medical support operations, and render emergency repairs to vital facilities. The Army can also provide manpower for civil relief, or it can assist civil authorities with public safety.

SECURITY ASSISTANCE

Security assistance consists of the groups of programs authorized by the *Foreign Assistance Act of 1961* (amended), the *Arms Export Act of 1976* (amended), and other related statutes. Through security assistance programs, the United States provides defense materiel, military training, and defense-related services by grant, loan, credit, or cash sales to further its national policies and objectives. A predominant interface of the US Army with host nations occurs through the Security Assistance Training Program (SATP). This program has two primary subcomponents—the International Military Education and Training Program (IMETP) and the Foreign Military Sales Program (FMSP).

The IMETP is designed to enhance the proficiency, professional performance, and readiness of foreign armed forces. The US conducts international education and training in CONUS as well as in the host nation. This typically takes the form of formal courses, orientation tours, and on-the-job training.

The FMSP allows designated governments to purchase military equipment, services, and training from

Historical Perspective

A humanitarian assistance operation conducted by a US Army CA unit in the Republic of Cameroon in Africa provided relief to a nation devastated by disease. In 1989, the US Embassy and the Ministry of Public Health in Cameroon proposed a campaign to inoculate citizens against meningitis, a disease tha ravages that tropical country each year during the dry season. The embassy defense attached office (DAO) contacted USEUCOM and plans were drawn to support a humanitarian assistnace exercise in conjunction with CA support. In February 1991, a medical team from the 353d Civil Affairs Command, working in conjunction with the host nation, inoculated more than 58,000 people against menigitis and treated an additional 1,700 people for other ailments. This exercise not only accomplished its humanitarian goals but also provided an opportunity for the unit to train and use its language skills. At the same time, it enhanced the image of the United States with a grateful country.

the US. The sale of defense items may require training on the operation and maintenance of military equipment. Mobile training teams, resident instruction in US Army schools, and similar methods are used to conduct this training. The FMSP differs from the IMETP in that the recipient pays for equipment, services, and training.

Occasionally situations require accelerated security assistance when allied or friendly nations face an imminent threat. During these surges of increased assistance, operations focus on logistical support but may require more forceful measures.

NATION ASSISTANCE

Nation assistance supports a host nation's efforts to promote development, ideally through the use of host nation resources. In United Nations terms, nation assistance equates to peace-building operations. The interagency orchestration of all the elements of national power is essential for success. It supports the ambassador's country plan and the CINC's regional plans. The goals of nation assistance are to promote long-term stability, to develop sound and responsive democratic institutions, to develop supportive infrastructures, to promote strong free-market economies, and to provide an environment that allows for orderly political change and economic progress. These goals can only be accomplished through education and the transfer of essential skills to the host nation.

SUPPORT TO COUNTERDRUG OPERATIONS

Military efforts principally support law enforcement agencies, the counterdrug efforts of other US agencies, the states, and cooperating foreign governments to interdict the flow of illegal drugs at the source, in transit, and during distribution.

Support to host nations includes assistance to their forces to destroy drug production facilities; collaboration with host nation armed forces to prevent export of illegal drugs; and nation assistance to help develop economic alternatives to production, exportation, and distribution of drugs. Support to interdiction efforts centers on monitoring and detecting illegal drugs in transit as well as integrating C3I systems. US forces may well assist host nation forces at war while they are in an operations-other-than-war posture.

Support for domestic counterdrug operations includes military planning and training assistance for domestic law enforcement agencies, National Guard participation, equipment loans and transfers, use of military facilities, and other assistance as requested and authorized. This support may expand as national policy and legal prohibitions evolve.

COMBATTING TERRORISM

The Department of State is the lead US agency in combatting terrorism overseas or on the high seas; the Department of Justice (the Federal Bureau of

Investigation) has this responsibility within the US. The Department of Transportation (Federal Aviation Administration) combats terrorism related to aircraft in flight within the territories of the US. The Department of Defense supports each of these agencies in these activities.

Combatting terrorism has two major components—antiterrorism and counterterrorism. During peacetime, the Army combats terrorism primarily through antiterrorism, which is those passive defensive measures taken to minimize vulnerability to terrorism. Antiterrorism is a form of force protection and, thus, the responsibility of Army commanders at all levels. Antiterrorism complements counterterrorism, which is the full range of offensive measures taken to prevent, deter, and respond to terrorism. Army elements, such as SOF, assist in this interagency effort by applying specialized capabilities to preclude, preempt, and resolve terrorist incidents abroad. Counterterrorism occurs in conflict and war; antiterrorism occurs across the range of military operations.

PEACEKEEPING OPERATIONS

Peacekeeping operations support diplomatic efforts to maintain peace in areas of potential conflict. They stabilize conflict between two belligerent nations and, as such, require the consent of all parties involved in the dispute. The US may participate in peacekeeping operations unilaterally or when requested by the UN, with a regional affiliation of nations, or with other unaffiliated countries. US personnel may function as impartial observers, as part of an international peacekeeping force, or in a supervisory and assistance role.

Peacekeeping often involves ambiguous situations requiring the peacekeeping force to deal with extreme tension and violence without becoming a participant. These operations follow diplomatic negotiations that establish the mandate for the peacekeeping force. The mandate describes the scope of the peacekeeping operation. Typically, it determines the size and type of force each participating nation will contribute. It also specifies the terms or conditions the host nation intends to impose on the presence of the force or mission, and it specifies a clear statement of the functions the peacekeeping force is to perform.

The peacekeeping force deters violent acts by its physical presence at violence-prone locations. It collects information through means such as observation posts, patrols, and aerial reconnaissance.

PEACE ENFORCEMENT

Peace enforcement operations are military intervention operations in support of diplomatic efforts to restore peace or to establish the conditions for a peacekeeping force between hostile factions that may not be consenting to intervention and may be engaged in combat activities. Peace enforcement implies the use of force or its threat to coerce hostile factions to cease and desist from violent actions. Units conducting peace enforcement, therefore, cannot maintain their objective neutrality in every instance. They must be prepared to apply elements of combat power to restore order, to separate warring factions, and to return the environment to conditions more conducive to civil order and discipline.

SHOW OF FORCE

A show of force is a mission carried out to demonstrate US resolve in which US forces deploy to defuse a situation that may be detrimental to US interests or national objectives. Shows of force lend credibility to the nation's commitments, increase regional influence, and demonstrate resolve. These operations can influence other governments or politico-military organizations to respect US interests and international law. They can take the form of combined training exercises, rehearsals, forward deployment of military forces, or introduction and buildup of military forces in a region. The appearance of a credible military force can underscore national policy interests and commitment, improve host nation military readiness and morale, and provide an insight into US values.

SUPPORT FOR INSURGENCIES AND COUNTERINSURGENCIES

At the direction of the NCA, US military forces assist either insurgent movements or host nation governments opposing an insurgency. In both instances, the military instrument of US national power predominantly supports political, economic, and informational objectives.

The US uses its military resources to provide support to a host nation's counterinsurgency operations in the context of foreign internal defense (FID) through logistical and training support. FID is the participation by civilian and military agencies in any of the action programs another government takes to free and protect its society from subversion, lawlessness, and insurgency. The US ambassador, through the country team, provides the focal point for interagency coordination

and supervision of FID. Military support to FID is provided through the unified CINC.

The US supports selected insurgencies opposing oppressive regimes that work against US interests. The feasibility of effective support and the compatibility of US and insurgent interests are major considerations. Because support for insurgencies is often covert, SOF is frequently involved. Due to their extensive unconventional warfare training, SOF are well-suited to provide this support. General-purpose forces may also be called upon when the situation requires their particular specialties or when the scope of operations is so vast that conventional forces are required.

ATTACKS AND RAIDS

The Army conducts attacks and raids to create situations that permit seizing and maintaining political and military initiative. Normally, the US executes attacks and raids to achieve specific objectives other than gaining or holding terrain. Attacks by conventional ground, air, or special operations forces, acting independently or in concert, are used to damage or destroy high-value targets or to demonstrate US capability and resolve to achieve a favorable result. Raids are usually small-scale operations involving swift penetration of hostile territory to secure information, temporarily seize an objective, or destroy a target. Raids are followed by a rapid, preplanned withdrawal. These operations also occur in war. As in all operations, to conduct successful attacks and raids, commanders must conduct successful reconnaissance, consider the factors of METT-T, conduct deliberate planning, rehearse, and follow up with swift, violent execution.

The Army organizes, trains, and equips to fight and win the nation's wars. This remains its primary mission. The leadership, organization, equipment, discipline, and skills gained in training for war are also of use to the government in operations other than war.

CHAPTER 14

THE ENVIRONMENT OF COMBAT

Warfare presents a challenging environment to any military organization and its soldiers. In a force-projection army, soldiers and units must remain trained and ready for rapid deployment anywhere in the world. The environment will often be harsh. Extreme temperatures, rugged terrain, fear, uncertainty, confusion, exertion, and fatigue will take their toll. Poorly trained soldiers and units succumb to the hostilities of the environment, withdraw inside themselves, and permanently surrender the initiative. Conversely, soldiers and units that are prepared to cope with a tough environment take a giant step toward victory.

The environment of combat combines human and physical dimensions. Soldiers, the first dimension, are the centerpiece of the Army's doctrine and warfighting ability. Their training, initiative, resilience, and understanding of the demands put on them are key to success on the battlefield.

Their physiological and psychological limitations make them the most vulnerable part of the warfighting system. Their character-¡as individuals and as members of their units¡makes them the most valuable. Their spirit and perseverance, their will to win, their dedication to the cause and their devotion to fellow soldiers and their unit are distinctly human elements that can make the difference between victory and defeat.

The second dimension of this environment is physical. In accordance with the US National Military Strategy, US Army forces must be prepared to fight and win on short notice anywhere in the world, from blistering deserts to frigid wastelands, in rain forests, tundra, mountains, jungles and swamps, urban sprawl, and all types of terrain in between. Combat operations occur day and night, for weeks or months on end, among friendly or hostile populations, and in areas infested with blight, disease, and epidemics.

Mastering environmental dimensions is vital to survival on the battlefield. Operational and tactical commanders lead their organizations to overcome and take advantage of dimensions. Only then can they hope to achieve decisive results at minimum cost to soldiers and materiel. Understanding the total environment and its potential impact on combat is essential to successful planning and execution.

THE HUMAN DIMENSION

Soldiers are central to Army doctrine. They are the foundation of the Army's will to win. Their spirit, initiative, intelligence, discipline, courage, and competence comprise the basic building blocks of a victorious Army. The combination of quality soldiers with professional, caring, and competent leaders in versatile, cohesive units presents an indomitable force on the battlefield.

Leaders have special challenges and responsibilities in regard to soldiers. They successfully lead them through danger, mold and protect their spirit, and channel their energies toward mission accomplishment. Leaders consider the physiological, psychological, and ethical challenges soldiers will face, providing them the proper training and leadership that give them the will to fight. They build units and teams that have the courage to overcome odds to accomplish the mission and the determination to press on to victory.

The geopolitical and social realities of the modern world often obscure the reasons for following a particular course of action to achieve national goals. Leaders

CONTENTS

must ensure they and their soldiers clearly understand why their nation is engaged in a particular course of action and how it is essential for protecting America's vital national interests. When soldiers understand why American forces have been committed, they follow their leaders and risk their lives to accomplish the mission despite all odds.

THE PHYSIOLOGICAL PERSPECTIVE

Physically unfit or unhealthy soldiers do not withstand the rigors of combat well. Hardened soldiers, kept healthy and reasonably rested, can persevere under harsh conditions. Commanders ensure their soldiers' fitness and enhance their self-confidence through tough, realistic training, provision of proper uniforms and equipment, disciplined hygiene and health practices, enforced rest plans, and intelligent assignment of operational missions.

Soldiers are capable of withstanding a great deal of physical exertion, but they must be cared for. Commanders may find it necessary to drive their soldiers hard, but they must not abuse them.

THE PSYCHOLOGICAL PERSPECTIVE

The harsh environment of combat is likely to have a greater effect on the soldier's mind than on his body. Since the mind directly affects the soldier's will to win, it must be prepared to accept the stress of combat.

Combatants no longer deploy or defend in the ranks, files, and echelons of the nineteenth and early twentieth centuries. Distance from fellow soldiers can heighten fear and a sense of abandonment on the modern battlefield. The threat of chemical and biological weapons compounds psychological challenges because of the debilitating protective measures that have to be taken to conduct operations and survive. Loneliness and fear on the battlefield increase the fog of war. They can be overcome by effective training, unit cohesion, and a sense of leadership so imbued in the members of a unit that each soldier, in turn, is prepared to step forward and give direction toward mission accomplishment.

In battle it can also be overcome by unit chatter, soldiers talking to each other and constantly reinforcing other members of the team. New or replacement soldiers must be quickly made to feel part of the team and not isolated. Mutual trust, confidence, self-respect, and a strong sense of teamwork are elements that build a cohesive combat unit. FM 22-102 outlines methods to create an effective, combat-ready soldier team.

Psychiatric casualties decrease when morale, unit cohesion, leadership, and training are strong. The leader is the key. He must develop realistic, tough training programs that promote individual confidence and unit capabilities. At the same time, he must inspire in his soldiers the confidence that he will do everything in his power to protect them as the unit drives toward its objective. Leaders must understand the conditions that can lead to battlefield stress and deal with them quickly and effectively. A well-led, disciplined, and mentally conditioned soldier can overcome extremes of hardship and uncertainty.

THE ETHICAL PERSPECTIVE

The nation expects its Army to adhere to the highest standards of professional conduct and to reflect the ideals of American values. The American people demand a high-quality Army that honors the core values of the Constitution it is sworn to uphold—a strong respect for the rule of law, human dignity, and individual rights.

Despite the difficult environments in which Army forces operate, soldiers are expected to obey the laws of land warfare, to protect civilians and other noncombatants, to limit collateral damage, to respect private property, and to treat EPWs with dignity. Amid the rigors of combat, the integrity of every soldier—from the highest to the lowest ranks—is of paramount importance. Since lives hinge on accurate reporting, there can be no room for half-truths or falsehoods. Soldiers must be counted on to do what is right even when no one is watching.

Leaders have a special responsibility to subordinates. They must never risk their soldiers' lives needlessly. They return their soldiers' trust with the greatest care for their well-being, while aggressively pursuing the accomplishment of the mission. Leaders treat subordinates with respect; never do they seek self-gain at the expense of their soldiers or their subordinate commanders. Leaders imbue soldiers with a sense of honor, share their hardships, and acknowledge their accomplishments. Leaders set the example by ethical behavior and a selflessness that puts duty above all personal concerns.

The human dimension of war will be decisive in the campaigns and battles of the future, just as in the past. In this difficult environment, soldiers must have faith

in their leaders and fellow soldiers. Trust is the basic bond of leadership. Good leaders occupy a position of special trust and confidence in the eyes of their soldiers. A motivated soldier in the hands of a competent leader, loyal to and supported by his fellow soldiers, can accomplish the most difficult of missions.

Wars are fought and won by soldiers, not machines. The human dimension of war will be decisive in the campaigns and battles of the future, just as in the past. Soldiers are the heart and soul of the Army. Leaders mold them, discipline their efforts, supply them resources, and give them direction. But, in the end, it is soldiers who do the job. Ultimately, soldiers make the difference.

THE PHYSICAL DIMENSION

The four major physical elements of the environment of operations are *geography, terrain*, *weather*, and *infrastructure*. These greatly affect Army operations within the physical dimension. They form an important component of the planning tool—METT-T. The combinations of effects of the physical elements are infinite. Good commanders have an eye for ground, understand the effects of weather, and can turn a tough environment to advantage. They use the IPB process to help them understand the environmental conditions of the physical dimensions on military operations.

Factors of the physical dimension normally affect the time required to accomplish a mission. For example, the time necessary to move a large, armored force over dry, open terrain may increase dramatically after a day of heavy rain. Factors such as drainage, soil composition, and vehicle characteristics affect movement. Infrastructure availability may increase or decrease time required for operations. A well-established road net may greatly aid movement toward or away from the enemy but limit lateral movement if the roads are built on berms. The physical environment may include operations in an NBC environment, as well as night and limited visibility conditions. These dimensions must be considered in operations planning. The net effect may be a decrease in the commander's ability to maneuver against the enemy.

GEOGRAPHY

Commanders may operate over many different terrain types within a single geographic area. The Army must be able to operate in any geographic area. Each area presents a unique set of physical characteristics and requires a unique set of operational and tactical guidelines. A human factor is also associated with geography. Populations in an area of conflict may directly affect the commander's operations. The will of the people, their urbanization and industrial efforts, their agricultural underpinnings, their social and cultural predilections, their political leanings, and, from a tactical perspective, their physical movement during conflict, may all impact.

Mountain Operations

Light forces and aviation units can operate more effectively than heavy forces in mountainous regions because their movement is less limited by the terrain. Effective communications and air operations are important factors in obtaining the advantage in mountainous regions. FM 90-6 discusses mountain combat.

Jungle Operations

The features of jungles and swamps combine to restrict movement, observation, fields of fire, signal systems, battlefield surveillance, and target acquisition. The use of advanced technology navigation devices helps overcome these challenges. Air operations are very important in the jungle environment. They facilitate troop movement and provide a degree of firepower not otherwise available due to the shortened fields of fire and thick vegetation. FM 90-5 discusses jungle warfare.

Desert Operations

All types of forces can operate in desert environments. Armored, mechanized, and aviation forces are especially suitable. The lack of prominent terrain features complicates land navigation and requires the use of dead reckoning and advanced technology navigation devices. This environment has a debilitating effect on soldiers who are not properly trained and acclimated. It induces mental fatigue, impaired perception, and possible depression that can overwhelm unprepared soldiers. The impact on machines can be even more severe unless commanders establish appropriate maintenance programs. FM 90-3 discusses combat in desert areas.

Cold Weather Operations

The weather conditions in extremely cold areas make operations for friendly and enemy forces difficult. Special training is required to acclimate soldiers. Leaders must ensure that troops and their equipment are protected from the physical effects of extremely

low temperatures. FM 90-11 discusses cold weather operations.

Urban Operations

Urban operations present unique and complex challenges to Army forces. Urban operations can occur in any of the geographical environments. They can constrain technological advantages; they impact on battle tempo; they force units to fight in small, decentralized elements; they also create difficult moral dilemmas due to the proximity of large numbers of civilians. Commanders must enforce discipline in their operations to minimize unnecessary collateral damage and civilian casualties. FM 90-10 discusses fighting on urbanized terrain.

TERRAIN

Terrain is not neutral—it either helps or hinders each of the opposed forces. Commanders must develop an eye for terrain; they must recognize its limitations and possibilities for protecting friendly forces and putting the enemy at a disadvantage. Successful commanders understand terrain and how it affects operations. They are able to grasp the potential capabilities and limitations of the space in which they operate.

At each level of war commanders view and evaluate terrain differently. At the tactical level, commanders are concerned with close-in terrain such as hills, rivers, mountains, swamps and marshes, streams, and valleys. Their perspectives influence the conditions for engagements and battles.

At the operational level, the commander's analysis broadens to major road systems and movement corridors that can accommodate large friendly and enemy maneuver forces. The operational-level commander is also concerned with air corridors for both friendly and enemy air and aviation operations.

He considers the opportunities for the movement of large units and the posturing of the force, where he must disperse, and where he should concentrate his forces. He understands where intelligence assets will serve him best and where and when he will begin to operate in a less clear environment.

At the strategic level, analysis of the terrain encompasses both tactical and operational considerations, but it broadens to include the considerations associated with the value of occupying or controlling large amounts of territory (at its larger expansion, terrain begins to define geography). The strategic-level commander considers the constraints and opportunities affecting deployment and supporting the force over the duration of the campaign. He considers the assets that are available to him within his assigned geographic space and how they help or limit his operations.

Commanders consider terrain from not only their perspective but also from the enemy's perspective. They conduct detailed personal reconnaissance wherever possible. Sources of terrain intelligence include, but are not limited to, military and civilian topographic studies, civilian officials and area residents, EPW, and air, space, and ground reconnaissance units. Commanders ensure that terrain information gets down to the level where it can assist in operations planning,

WEATHER

Weather conditions affect soldier performance, the capabilities of equipment to perform at the optimum level, and the ability of forces to maneuver on the ground and in the air. Commanders pay attention to local tactical weather in the ground environment as it may differ from broader weather patterns in the AO. They also understand the effects of weather patterns on future operations and the enemy. The commander who can best measure and take advantage of weather and terrain conditions has a decided advantage over his opponent. By understanding the effects of weather, seeing the opportunities it offers, and anticipating when they will come into play, the commander can set the terms for battle to maximize his performance and take advantage of limits on enemy forces. Weather forecasts must be tailored to the specific operational and tactical environment to assist commanders and staffs to determine effects on the operation. Moreover, different weather conditions impact parts of the organization and weapons systems differently.

Weather and terrain information systems provide commanders and their planning staffs with known and forecasted conditions in the air and on the ground. These enable them to plan for conditions before a battle, helping the commander to choose the time, manner, and place of engagement. For example, in adverse weather the effectiveness of long-range, precision-strike weapons with electro-optical sensors and laser-guided systems becomes severely limited. In such cases, employment of conventional systems would be more effective. Technological developments, such as

direct, satellite-linked forecasting and observing systems that provide advance knowledge of environmental conditions on the battlefield, can serve as a force multiplier.

Training, physical conditioning, and discipline at the small-unit level remains the most effective way to offset adverse effects of the weather. Training in poor weather conditions builds confidence and teaches soldiers and commanders how to adjust to weather extremes. This training should supplement map and weather analysis. Good training can mitigate the effects of weather so that the unit's combat power increases relative to the enemy's. The commander's primary tool for analyzing the effects of terrain and weather is the IPB.

INFRASTRUCTURE

Infrastructure consists of the facilities, equipment, and framework needed for the functioning of a system, city, or region. The area's infrastructure impacts on the commander's planning for entering and operating within a theater. Commanders consider not only the physical structures but also the cultural, religious, and ethnic customs in the region that affect their use. In considering infrastructure, commanders must analyze its impact upon operations; its impact upon the enemy; how its condition promotes or hinders postconflict activities; and the extent of indigenous public support.

At the strategic level, commanders assess the availability of seaports, airfields, power networks, road and rail networks, communications networks, and natural fuel reserves. The availability of warehousing, water, and food sources is crucial to planning. At the operational level, the presence or absence of an underlying infrastructure framework affects operational tempo. Local transportation networks, for example, can contribute greatly to force movement, maneuver, and logistics. If a combat force has long lines of resupply and cannot rely on existing infrastructures within a country, robust operations are limited. Regeneration of forces is also more difficult in an area of limited infrastructure. Similar considerations apply at the tactical level.

In Operation Just Cause, the proximity and utility of key airfields to both friendly and enemy forces influenced planning for the early hours of fighting. In Operation Desert Shield, the great expanses of terrain, austere landscapes, and limited road nets affected operational and logistics planning. In Operation Restore Hope, Army units had to build an infrastructure since little was present in the host country. Extending the uninterrupted flow of units and supplies from the well-developed seaports influenced the tactical, operational, and strategic levels. As these recent operations demonstrate, consideration of infrastructure is crucial to both rapid contingency operations and those of longer duration.

While the physical environment of combat often presents harsh conditions to soldiers, they cannot only persevere but can predominate over the environment and the enemy. A well-led, force-projection army, prepared to go anywhere in the world on short notice, remains trained and ready at all times to meet whatever conditions present themselves in the environment of combat.

GLOSSARY

AC
active component
ACR
armored cavalry regiment
ADA
air defense artillery
AFSOF
Air Force special operations forces
agility
the ability of friendly forces to act faster than the enemy
AI
air interdiction
alliance
the result of formal agreements between two or more nations for broad, long-term objectives
AMC
United States Army Materiel Command
AMOPES
Army Mobilization and Operations Planning and Execution System
anticipation
the ability to avoid surprise as operations unfold; mental and physical adjustments as a result of monitoring operations and determining future actions
antiterrorism
defensive measures to reduce the vulnerability of individuals and property to terrorism
AO
area of operation
AOR
area of responsibility
ARCENT
Army component to Central Command
area defense
denying the enemy access to designated terrain for a specific time to retain ground using a combination of defensive positions and small, mobile reserves
area of operations
geographical area assigned to an Army commander by a higher commander—an AO has lateral and rear boundaries which usually define it within a larger joint geographical area
ARFOR
Army forces headquarters
Army force
that force provided by the Army service component to the joint force commander for the conduct of joint operations
Army service component commander
the commander of the Army component in support of a theater commander, combatant commander, or joiont force commander. The ASCC is responsible for preparing, maintaining, training, equipping, administering, and supporting Army forces assigned to unified and specified commands. The ASCC normally advises the combatant or subordinate unified commander on the proper employment of the forces of the Army component. The ASCC is normally not a part of the joint force staff.
ARSOF
Army special operations forces
ASCC
Army service component commander; Army service component command
ASI
all-source intelligence
assured communications
the certainty of priority electronic transmission capability when needed throughout the strategic, operational, and tactical areas of operations
audacity
bold action in concert with calculation of risk
AWACS
airborne warning and control system

battle
a series of related tactical engagements

battle command
the art of battle decision making, leading, and motivating soldiers and their organizations into action to accomplish missions. Includes visualizing current state and future state, then formulating concepts of operations to get from one to the other at least cost. Also includes assigning missions; prioritizing and allocating resources; selecting the critical time and place to act; and knowing how and when to make adjustments during the fight.

battle damage assessment
the process of determining the essential tactical reconstitution requirements for an attrited unit; the process of determining the combat effectiveness of the enemy after engagement by friendly force

battlefield framework
an area of geographical and operational responsibility established by the commander; it provides a way to visualize how he will employ his forces; it helps him relate his forces to one another and to the enemy in time, space, and purpose

battlefield operating systems
the major functions performed by the force on the battlefield to successfully execute Army operations (battles and engagements) in order to accomplish military objectives directed by the operational commander; they include maneuver, fire support, air defense, command and control, intelligence, mobility and survivability, and combat service support

battle space
components determined by the maximum capabilities of a unit to acquire and dominate the enemy; includes areas beyond the AO; it varies over time according to how the commander positions his assets.

BDA
battle damage assessment

BDAR
battle damage assessment and repair

BOS
battlefield operating systems

branch
a contingency plan (an option built into the basic plan) for changing the disposition, orientation, or direction of movement of the force

C2
command and control

C3CM
command, control, and communications countermeasures

C3I
command, control, communications, and intelligence

C3IC
coalition, coordination communications, and integration center

CA
civil affairs

campaign
a series of related military operations designed to achieve one or more strategic objectives within a given time and space

CENTAG
Central Army Group (NATO)

center of gravity
the hub of all power and movement upon which everything depends; that characteristic, capability, or location from which enemy and friendly forces derive their freedom of action, physical strength, or the will to fight

CINC
commander-in-chief

CJCS
Chairman of the Joint Chiefs of Staff

CJTF
commander, joint task force

close operations
offensive or defensive operations where forces are in immediate contact with the enemy

coalition
an *ad hoc* agreement between two or more nations for a common action

COCOM
combatant command

combat service support
the focus of logistics at the tactical level of war; the synchronization of essential functions, activities, and tasks necessary to sustain soldiers and their weapon systems in an area of operations; includes but is not limited to that support rendered by service support troops to arm, fuel, fix, move, man, and sustain soldiers and their equipment

combatant commander
a commander of one of the unified or specified commands established by the President

combatting terrorism
actions, including antiterrorism (defensive measures taken to reduce vulnerability to terrorist acts) and counterterrorism (offensive measures taken to prevent, deter, and respond to terrorism), taken to oppose terrorism throughout the entire threat spectrum

combined arms
application of several arms, such as infantry, armor, artillery, and aviation

combined operation
an operation conducted by forces of two or more allied nations acting together for the accomplishment of a single mission

commander's intent
a concise expression of the purpose of an operation, a description of the desired end state, and the way in which the posture of that goal facilitates transition to future operations

communications zone
the rear part of the theater of war or theater of operations that contains the lines of communications, theater logistics bases, forward operating bases, and other agencies required for the immediate support and maintenance of the field forces; extends back to the CONUS base

COMMZ
communications zone

concept of logistics support
a verbal or graphic statement, in broad outline, of a commander's assumptions or intent in regard to the logistics support to be provided to an operation or campaign; always developed concurrently and closely integrated with a companion concept of operations

conflict
the period characterized by confrontation and the need to engage in hostilities other than to secure strategic objectives

conflict termination
the process and period during which military forces transition from active combat operations to postconflict activities and from postconflict activities to redeployment

constraint
limitations placed on the command by a higher command. Constraints restrict freedom of action for planning a mission by stating what must be done.

CONUS
continental United States

counterattack
an attack with a reserve or lightly committed forward element that is launched after the enemy begins its attack, after the commander has identified the enemy's effort, or when a resolute defense creates an assailable enemy flank

counterterrorism
offensive measures taken to prevent, deter, and respond to terrorism

CRC
control and reporting center

crisis response forces
AC and RC CONUS-based units, including forward-presence units, trained and configured to deploy anywhere in the world, based on the unit's deployability posture

CS
combat support

CSS
combat service support

culmination
the point in time and space when the attacker's combat power no longer exceeds that of the defender or when the defender no longer has the capability to defend successfully

CZ
combat zone; that area required by combat forces for the conduct of operations forward of the army rear area boundary

DA
Department of the Army

DAO
defense attache office

decisive force
applying overwhelming forces to fight and win quickly with minimum casualties

decisive point
a point, usually geographical in nature, that, when retained, provides a commander with a marked advantage over his opponent. Decisive points could also include other physical elements such as enemy formations, command posts, and communications nodes

deep operations
operations designed in depth to secure advantages in later engagements, protect the current close fight, and defeat the enemy more rapidly by denying freedom of action and disrupting or destroying the coherence and tempo of its operations

deliberate attack
fully synchronized operations that employ the effects of every available asset against the enemy's defense

demobilization
the act of returning the force and materiel to a premobilization posture or to some other approved posture; also involves returning the mobilized portion of the industrial base to peacetime conditions

demonstration
a show of force in an area where a decision is not sought, made with the aim of deceiving the enemy as to the true intentions of the attack

deployment
the relocation of forces to desired areas of operations; the movement of forces within areas of operations

distribution system
that complex of facilities, installations, methods, and procedures designed to receive, store, maintain, distribute, and control the flow of military materiel between the point of receipt into the military system and the point of issue to using activities and units

doctrine
fundamental principles by which military forces guide their actions in support of national objectives. Doctrine is authoritative but requires judgement in application

DOD
Department of Defense

dominant user concept
the concept whereby the service that is the principal consumer will have the responsibility for supporting all using services

EAC
echelons above corps

EAD
echelons above division

early reinforcement forces
primarily AC divisions (CONUS- and OCONUS-based) and associated EAD and EAC support elements (both AC and RC); RC round-out and round-up brigades are available to add combat power to AC divisions designated as early reinforcement forces

electronic warfare
military actions including: a. electronic attack—the use of either electromagnetic or directed energy to degrade, neutralize, or destroy an enemy's combat capability; b. electronic protection—those actions taken to protect personnel, facilities, and equipment from any effects of friendly or enemy employment of electronic warfare; c. electronic warfare support those actions tasked by an operational commander to search for, intercept, identify, and locate sources of radiated electromagnetic energy for the purpose of immediate threat recognition

EMP
electromagnetic pulse

engagement
small, tactical conflicts, usually between opposing maneuver forces

envelopment
an offensive maneuver in which the main attacking force passes around or over the enemy's principal defensive positions to secure objectives in the enemy's rear

EPW
enemy prisoner of war

ESAF
El Salvadorian Armed Forces

EW
electronic warfare

exploitation
the attacker's extension of destruction of the defending force by maintaining offensive pressure

FAAD
forward area air defense

feint
a spoiling attack designed to divert the enemy's attention from the main effort

FEMA
Federal Emergency Management Agency

FID
foreign internal defense

field services
logistical soldier sustainment functions such as food preparation, water purification, bakery, clothing and light textile repair, laundry and bath, airdrop and parachute rigging, and mortuary affairs

FM
field manual

FMLN
Farabundo Marti National Liberation Front (El Salvador)

FMSP
Foreign Military Sales Program

follow-on reinforcement units
primarily National Guard divisions, brigades, and associated EAD and EAC support elements that are trained and deployed for protracted operations. These forces include units that replace or augment forward-presence units that have deployed to other regions for protracted operations

force projection
the movement of militry forces from CONUS or a theater in response to requirements of war or operations other than war. Force-projection operations extend from mobilization and deployment of forces, to redeployment to CONUS or home theater, to subsequent demobilization

forward-presence units
those US active component forces and reserve forces assigned or deployed overseas in a specific theater

FORSCOM
United States Forces Command

FRAGPLAN
fragmentary plan

fratricide
the employment of friendly weapons and munitions with the intent to kill the enemy or destroy his equipment or facilities, which results in unforeseen and unintentional death or injury to friendly personnel
friction the accumulation of chance errors, unexpected difficulties, enemy actions, and confusion of battle

FSSG
First Service Support Group (USMC)

full-dimensional operations
the application of all capabilities available to an Army commander to accomplish his mission decisively and at the least cost across the full range of possible operations

GMR
graduated mobilization response

hasty attack
result of a meeting engagement—launched with the forces at hand and with minimum preparation to destroy the enemy before he is able to concentrate or establish a defense

health services
the logistical function of promot-ing, improving, conserving, or restoring the mental or physical well-being of military personnel

HIMAD
high-to-medium altitude air defense

host nation support
civil and/or military assistance rendered by a nation to foreign forces within its territory during peacetime, times of crisis, emergencies, or war; assistance provided during war is based upon agreements mutually concluded between nations

humanitarian assistance
assistance provided by DOD forces, as directed by appropriate authority, in the aftermath of natural or man-made disasters to help reduce conditions that present a serious threat to life and property; assistance provided by US forces is limited in scope and duration and is designed to supplement efforts of civilian authorities who have primary responsibility for providing such assistance

HUMINT
human intelligence

IMETP
International Military Education and Training Program

infrastructure
all fixed and permanent installations, fabrications, or facilities for the support or control of military forces

initiative
the ability to set or change the terms of battle; implies an offensive spirit

intelligence
the product resulting from collection, processing, integration, analysis, evaluation, and interpretation of available information concerning foreign countries or areas

intelligence-preparation-of-the-battlefield
a systematic and continuous process that describes the tactical environment and the effects of that environment on operations and what the enemy can accomplish

interdiction
actions to divert, disrupt, delay, or destroy the enemy before it can affect friendly forces

in-transit visibility
the immediate availability of data pertaining to the location of materiel in-transit from the provider to the requester

IPB
intelligence-preparation-of-the-battlefield

ITEP
intelligence and tactical exploitation processor

JFC
joint force commander
JCS
Joint Chiefs of Staff
JFLCC
joint force land component commander
JFSOCC
joint force special operations component commander
JOA
joint operations area
joint task force a force composed of assigned or attached elements of two or more services and constituted by appropriate authority for a specific or limited purpose or missions of short duration
JOPES
Joint Operations Planning and Execution System
JSCP
Joint Strategic Capabilities Plan
JSOA
joint special operations area
J-STARS
joint surveillance and target attack radar system
JTF
joint task force
JZ
joint zone; an area established for the purpose of permitting friendly surface, air, and subsurface forces to operate simultaneously

LA
Los Angeles
LC
line of contact
LD
line of departure
liaison
that contact or intercommunication maintained between elements of military forces to ensure mutual understanding and unity of purpose and action
line of operation
a directional orientation that connects the force with its base of operations and its objective
lines of communication
all the routes (land, water, and air) that connect an operating military force with a base of operations and along which supplies and military forces move
LOC
lines of communication
LOGCAP
Logistics Civil Augmentation Program
logistics
the process of planning and executing the movement and sustainment of forces in the execution of military operations. Logistics includes the design, development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; the acquisition, preparation, maintenance, equipping, movement, and health service support of personnel; the acquisition or furnishing of services; and the acquisition, construction, maintenance, operation, and disposition of facilities. Logistics is an overarching function that must encompass the range of military operations. At the tactical level, logistics focuses on the traditional CSS functions of arming, fixing, fueling, manning, moving, and sustaining soldiers
logistics bases a principal or supplementary base of support; a locality containing installations that provide logistics or other support
logistics-over-the-shore
operations the loading and unloading of ships without the benefit of fixed port facilities
logistics preparation of the theater
actions taken to optimize the means (force structure, resources, and strategic lift) of logistically supporting the commander's plan
LOTS
logistics-over-the-shore
LZ
landing zone

major operation
the coordinated actions of large forces in a single phase of a campaign. A major operation could contain a number of battles or could be a single, critical battle
MARFOR
Marine Corps forces
materiel management
the supervision of supplies and equipment throughout strategic-, operational-, and tactical-level areas of operation
METL
mission-essential task list
METT-T
mission, enemy, troops, terrain and weather, and time available

MI
military intelligence

MLRS
multiple-launch rocket system

MMC
materiel management center

mobile defense
employing a combination of fire and maneuver, offense, defense, and delay to destroy the enemy and defeat his attack

mobilization
the process by which the Armed Forces or a portion thereof is brought to a state of readiness for war or other national emergency; includes activating all or part of the RC, as well as assembling and organizing personnel, supplies, and materiel

modular units
units comprised of multiple capabilities; depending on the requirement, modules can be added or subtracted from the unit or force package

movement control
the planning, routing, scheduling, and control of personnel and freight movements over LOCs

MSR
main supply route

nation assistance
diplomatic, economic, informational, and military cooperation between the US and the government of another nation, with the objective of promoting internal development and the growth of sustainable institutions within that nation. This corrects conditions that cause human suffering and improves the quality of life of the nation's people

national industrial base
the private and government production and maintenance capacity that could be used to manufacture and repair items required by the military services

NATO
North Atlantic Treaty Organization

NAVFOR
Naval forces

NBC
nuclear, biological, chemical

NCA
National Command Authorities

NEO
noncombatant evacuation operations

noncombatant evacuation operations
operations that relocate threatened civilian noncombatants from locations in a foreign country or host nation. These operations normally involve US citizens whose lives are in danger. They may also include selected host nation natives and third country nationals

NSW
Naval Special Warfare

obj
objective

OCONUS
outside the continental United States

operational art
the employment of military forces to attain strategic goals through the design, organization, integration, and execution of battles and engagements into campaigns and major operations. In war, operational art determines when, where, and for what purpose major forces will fight over time

operations in depth
the totality of the commander's operations against the enemy—composed of deep, close, and rear operations which are usually conducted simultaneously in a manner that appears as one continuous operation against the enemy

operations other than war
military activities during peacetime and conflict that do not necessarily involve armed clashes between two organized forces

operational operating systems
the major functions performed by joint and combined operations forces to successfully execute campaigns and major operations in a theater or area of operations; these systems include movement and maneuver, fires, intelligence, protection, command and control and support

OPCON
operational control

OPSEC
operations security

overwhelming combat power
the ability to bring together, in combination, sufficient force to ensure success and deny the enemy any chance of escape or effective retaliation

PDF
Panamanian Defense Force

peace building
postconflict diplomatic and military action to identify and support structures that tend to strengthen and solidify peace in order to avoid a relapse into combat

peace enforcement
military intervention to forcefully restore peace between belligerents who may be engaged in combat

peacekeeping
operations using military forces and/or civilian personnel, at the request of the parties to a dispute, to help supervise a cease-fire agreement and/or separate the parties

peacemaking
the diplomatic process or military actions to gain an end to disputes

peacetime
the period when the United States influences world events through actions that routinely occur between nations

PL
phase line

POD
port of debarkation

POE
port of embarkation

POL
petroleum, oils, and lubricants

port of debarkation
an aerial or seaport within the theater of operations where the strategic transportation of forces is completed; it may not be the force's final destination

port of embarkation
an air or sea terminal at which troops, units, military-sponsored personnel, unit equipment, and materiel are boarded or loaded

postconflict activities
those operations other than war that are conducted in the period following conflict and the cessation of active combat; activities focused on restoring order and minimizing confusion following the operation, reestablishing the host nation infrastructure, preparing forces for redeployment, and continuing presence to allow other elements of national power to achieve overall strategic aims

power projection
the ability of the nation to apply all or some of the instruments of national power—diplomatic, economic, informational, or military—to respond to crisis, to contribute to deterrence, and to enhance regional stability

principles of war
the enduring bedrock of Army doctrine that provides general guidance for the conduct of war at the strategic, operational, and tactical levels

PSRC
presidential selected reserve call-up

PSYOP
psychological operations

pursuit
an attack with the purpose of annihilating the enemy once his resistance has broken down completely and he is fleeing the battlefield

PZ
pickup zone

r a i d
a limited-objective attack into enemy territory for the specific purpose of gaining and holding ground

RC
reserve components

rear operations
operations that assist in providing freedom of action and continuity of operations, logistics, and battle command. Their primary purposes are to sustain the current close and deep fights and to posture the force for further operations

reconstitution
at the strategic level, those functions and activities required to restore the Army's capability to respond to any mission across the full range of possible operations. At the operational and tactical levels, reconstitution consists of extraordinary actions that commanders plan and implement to restore units to a desired level of combat effectiveness commensurate with mission requirements and available resources

reconstitution units
forces in addition to those in the active and reserve component base force; these forces are created to deter an emerging global threat from competing militarily with the United States and, should such deterrence fail, to provide a global warfighting capability. Reconstitution forces may be composed of regeneration assets, assets, industrial/technology base assets, and manpower assets

requirements determination
the process of deciding what is essential to support a strategy, campaign, or operation

restraint
limitations placed on the command that prohibit a command from doing something

retrograde operation
a maneuver to the rear or away from the enemy to improve a situation or prevent a worse situation from occurring

ROE
rules of engagement

RPV
remotely piloted vehicle

RISTA
reconnaissance, intelligence, surveillance, and target acquisition

rules of engagement
directives issued by competent military authority that delineate the circumstances and limitations under which US forces will initiate and/or continue combat engagement with other encountered forces

SACEUR
Supreme Allied Commander, Europe

SARF
Saudi Arabia Redistribution Facility

SATP
Security Assistance Training Program

SEAD
suppression of enemy air defenses

SEAL
sea-air-land

security assistance
groups of programs authorized by the *Foreign Assistance Act of 1961*, as amended, and the *Arms Export Control Act of 1976*, as amended, or other related statutes by which the United States provides defense articles, military training, and other defense-related services, by grant, loan, credit, or cash sales in furtherance of national policies and objectives

sequel
major operations that follow an initial major operation. Plans for sequels are based on the possible outcome—victory, stalemate, or defeat—of the current operation

simultaneous operations
two or more campaigns and complementary operations or activities within those campaigns occurring concurrently within the same theater

SOF
special operations forces

specified command
a command with a broad, continuing mission under a single commander and normally composed of forces from only one service

spoiling attack
an attack from a defensive posture to disrupt an expected enemy attack. A spoiling attack attempts to strike the enemy while he is most vulnerable—during his preparations for attack in assembly areas and attack positions—or while he is on the move prior to crossing the line of departure

split-based logistics
dividing logistics management functions so that only those functions absolutely necessary are deployed, allowing some management functions to be accomplished from CONUS or another theater

spt
support

strategic mobility
transportation actions using national assets, both military and civilian, in support of a force-projection mission

strategy
the art and science of employing the armed forces and other elements of national power during peace, conflict, and war to secure national security objectives

supply discipline
command responsibility to identify and redistribute excess materiel, observe senior commander's priorities, and ensure subordinates operate within the legal boundaries of the logistics system

supporting attack
an attack designed to hold the enemy in position, to conceal the location of the main attack, to prevent him from reinforcing the elements opposing the main effort, and/or to cause him to commit his reserves prematurely at an indecisive location

synchronization
the ability to focus resources and activities in time and space to produce maximum relative combat power at the decisive point

TACON
tactical control

tactics
the art and science of employing available means to win battles and engagements

TAV
total asset visibility
tempo
the rate of military action; controlling or altering that rate is a necessary means to initiative; all military operations alternate between action and pauses as opposing forces battle one another and fight friction to mount and execute operations at the time and place of their choosing
tenets
a basic truth held by an organization; the fundamental tenets of Army operations doctrine describe the characteristics of successful operations
TEWT
tactical exercise without troops
TPFDD
time-phased force and deployment data
TPFDL
time-phased force deployment list
total asset visibility
the immediate availability of data pertaining to the location of materiel in storage or in transit from the provider to the requester
total mission awareness
the ability of commanders at all levels to consider everything that affects their operation¡applies to operations other than war and war

UAV
unmanned aerial vehicle
UK
United Kingdom
UN
United Nations
UNAAF
Unified Action Armed Forces
unity of effort
coordination and cooperation among all forces, not necessarily part of the same command structure toward a commonly recognized objective
unified command
a command with a broad, continuing mission under a single commander and composed of significant assigned components of two or more services
US
United States
USCENTCOM
United States Central Command
USCINCCENT
commander-in-chief, United States Central Command
USCINCPAC
commander-in-chief, United States Pacific Command
USCINCSO
commander-in-chief, United States Southern Command
USEUCOM
United States European Command
USFK
United States Forces Korea
USMC
United States Marine Corps
USSOCOM
United States Special Operations Command
USSOUTHCOM
United States Southern Command
USSPACECOM
United States Space Command

versatility
the ability of units to meet diverse challenges, shift focus, tailor forces, and move from one role or mission to another rapidly and efficiently

war
a state of open and declared armed hostile conflict between political units such as states or nations; may be limited or general in nature
weapons of mass destruction
weapons that through use or the threat of use can cause large-scale shifts in objectives, phases, and courses of action

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