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U.S. Marine Corps

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CHANGE 1 to MCRP 3-10A.2
Infantry Company Operations

1. This publication has been edited to ensure gender neutrality of all applicable and appropriate terms, except those terms governed by higher authority. No other content has been affected.

2. File this transmittal sheet in the front of this publication.

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BY DIRECTION OF THE COMMANDANT OF THE MARINE CORPS

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FOREWORD

Marine Corps Warfighting Publication (MCWP) 3-11.1, *Infantry Company Operations*, is a complete rewrite of MCWP 3-11.1, *Marine Rifle Company/Platoon*. This publication contains a new mission statement for the infantry company that better reflects current reality. It also covers the range of military operations that deployed infantry companies deal with today or may deal with tomorrow. Despite this extended coverage, MCWP 3-11.1 is not intended to be all encompassing. There are many aspects of infantry company operations that are not addressed herein because a specific publication already exists for that aspect. To cover it here would be redundant. This publication does serve, however, as the basic warfighting company publication and is to be used in conjunction with appropriate small unit, battalion, and other Marine Corps doctrinal and warfighting publications.

This publication is intended for the infantry company commander and his/her staff. It is a foundational document that assists in the preparation and execution of company level operations in the current operational environment.

This publication supersedes MCWP 3-11.1, *Marine Rifle Company/Platoon*, dated 17 February 1978, and cancels MCIP 3-11.01A, *Infantry Company Operations*, dated 5 December 2013.

Reviewed and approved this date.

BY DIRECTION OF THE COMMANDANT OF THE MARINE CORPS

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INFANTRY COMPANY OPERATIONS
TABLE OF CONTENTS

Chapter 1. General Philosophies

Chapter 2. Planning

Chapter 3. Command and Control

Chapter 4. Intelligence

Chapter 5. Company Level Fire Support

Chapter 6. Offensive Operations

Chapter 7. Defensive Operations

Chapter 8. Patrolling

Chapter 9. Amphibious Operations

Chapter 10. Stability, Crisis Response and Limited Contingency, and Counterinsurgency Operations

Chapter 11. Other Tactical Operations

Chapter 12. Force Protection Planning

Chapter 13. Logistics

Appendices

Glossary

References and Related Publications

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CHAPTER 1
GENERAL PHILOSOPHIES

Warfare

An overview of warfare throughout history would reveal that, while technology influenced the methods and tactics of conflict, the strategies and forms of war remain unchanged. Large scale, formalized warfare occurred between kingdoms and nation states; whereas, insurgencies, guerilla warfare, and asymmetrical techniques have always been a strategy of choice for weaker parties in the face of overwhelming force. The counters used by either the strong or the weak have run the gamut from "winning hearts and minds" to annihilation. Examples of all these types of conflict exist in all environments and weather (see app. A). The problem facing military professionals, therefore, is not confronting a new strategy or a new environment, but determining which strategies, methods, and environments they are most likely to experience and then preparing themselves and their forces accordingly. Victory goes to those who choose and prepare wisely.

Conflict Continuum

Conflict occurs across varying levels of violence and has appropriately varying levels and types of military engagement. On one extreme of the continuum, the military maintains a readiness for conflict, while actively working to preempt potential violence through sustained engagement and relationships with both allies and potential foes. On the other extreme of the continuum, the military devotes all its resources and ability to a general conflict of extreme violence. The Marine Corps now regularly expects to use its training, equipment, and capability to task-organize the Marine air-ground task force (MAGTF) to employ its operating forces fully across a range of military operations. Task organization allows fuller application of Marine Corps warfighting doctrine by providing commanders far greater flexibility and tools when seeking to bend the opponent's will.

Range of Military Operations

The range of military operations refers to the employment of military forces across the conflict continuum. As depicted in figure 1-1, there are three broad categories within which all military operations fall: major operations and campaigns; crisis response and limited contingency operations; and military engagement, security cooperation, and deterrence. The military activities conducted within this range are usually executed through some combination of offense, defense,

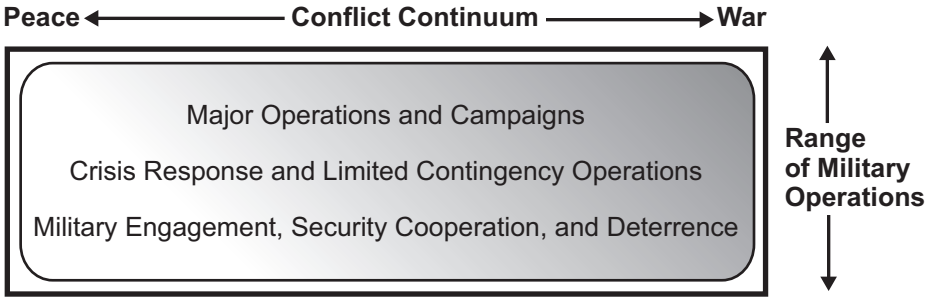


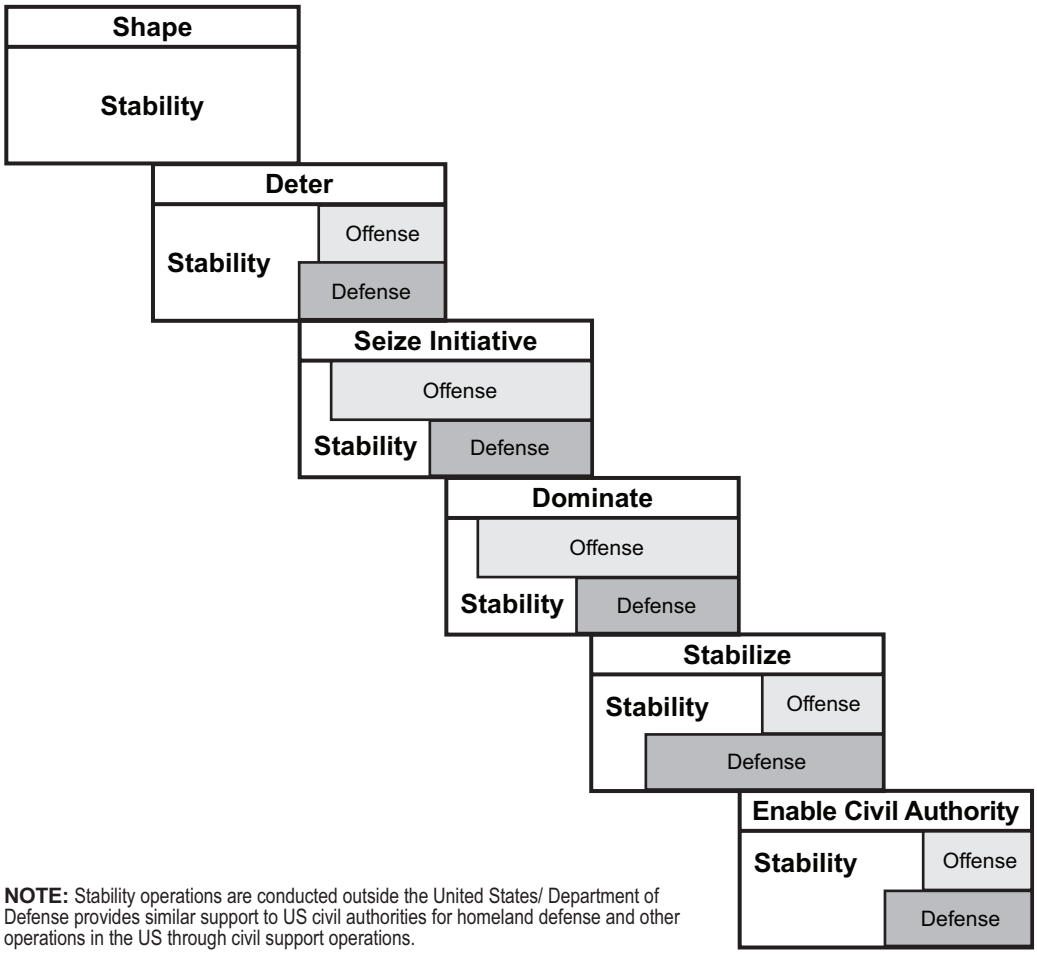
Figure 1-1. The Range of Military Operations.

and stability operations. The joint phasing construct (see fig. 1-2) demonstrates the potential relationships between the three. Sometimes stability operations will be the focus, with offense and defensive activities limited to such actions as strikes, raids, and force protection (FP). At other times, offensive operations may be the focus, with defensive and stability activities limited to screens, guards, and humanitarian assistance (HA). For further information on the range of military operations and the joint phasing construct see Joint Publication (JP) 3-0, *Joint Operations*.

Infantry Company Employment

Marine Corps infantry companies execute stability, offensive, and defensive operations. The concept of employability within a range of military operations model demands greater use of infantry companies as task-organized entities capable of executing semi-independent actions over sustained periods. Often referred to as enhanced company operations, the Marine Corps expects that its infantry companies can disperse across the battlespace as needed, execute operations within all three operational functions, maintain themselves, and rapidly regroup to generate mass and deliver decisive results at the point of decision.

Figure 1-3 illustrates the changes between traditional infantry company employment and what is envisioned through enhanced company operations. The traditional infantry company was staffed and equipped to function only at the highest levels of violence and only within a narrow



NOTE: Stability operations are conducted outside the United States/ Department of Defense provides similar support to US civil authorities for homeland defense and other operations in the US through civil support operations.

Figure 1-2. Notional Balance of Offensive, Defensive, and Stability Operations.

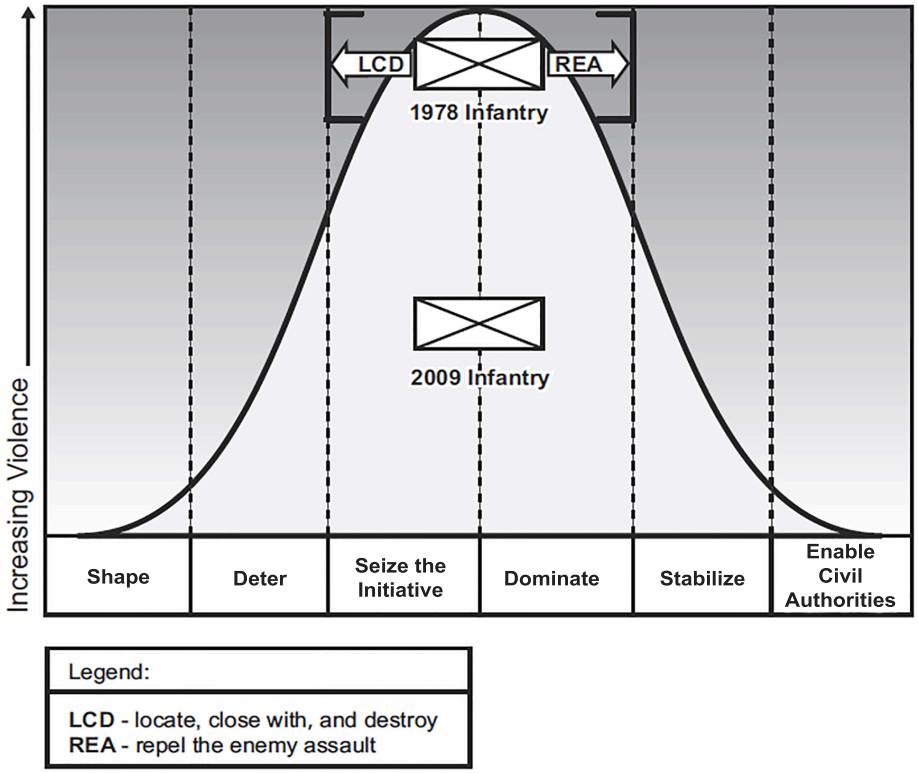


Figure 1-3. Enhanced Company Operations Versus Traditional Infantry Company Employment.

parameter of employment. The infantry company must now be able to operate simultaneously at varying levels of violence across all the phases of joint operations.

Rifle Company Employment

The mission of the Marine infantry company is to defeat the enemy by fire, maneuver, and close combat and to conduct other operations as directed across the range of military operations. The rifle company normally operates as a maneuver element of the infantry battalion; although, when appropriately reinforced and augmented, employment to conduct semi-independent actions for various lengths of time is appropriate. The company is the base unit for creating mission-oriented task elements, which are employable across a range of military operations, through the attachment of command and control (C2), combat support (CS), and logistics combat elements (LCEs).

While variables, such as a rifle company's leadership, morale, state of readiness, and level of training, always carry weight in decisions on how to employ a specific unit at any given time, the following capabilities and special considerations apply to all rifle companies:

- Conduct day and night offensive and defensive operations in all types of environments.
- Conduct combined arms action across a range of military operations.
- Conduct semi-independent, noncontiguous, and distributed actions.
- Conduct small unit operations.
- Operate in conjunction with other Services, agencies, and special operations forces.
- Participate in amphibious operations.

Tactical capabilities of the rifle company are to—

- Seize, secure, occupy, and retain terrain.
- Defeat, destroy, neutralize, suppress, interdict, disrupt, block, canalize, and fix enemy forces.
- Breach enemy obstacles.
- Feint and demonstrate to deceive the enemy.
- Reconnoiter, deny, bypass, clear, contain, and isolate (these tasks may be oriented on both terrain and enemy).
- Screen and guard friendly units.

Rifle companies can also—

- Provide security for stability operations.
- Provide organizational structure, communications capability, and personnel resources for stability operations.
- Execute small unit training and military engagement operations with partnered nation security forces.
- Coordinate with civil authorities.
- Conduct key leadership engagement.

The rifle company is limited in that it often operates with—

- Austere combat logistic assets.
- Austere C2 assets.
- Limited vehicle mobility.
- Vulnerability to armor, artillery, and air threats.
- Vulnerability to enemy chemical, biological, radiological, and nuclear (CBRN) attacks with only limited decontamination capabilities.

Rifle Company Organization

The rifle company serves as one of three rifle companies in each infantry battalion. The company is organized in a triangular design around three maneuver elements and one fire support element. The activities of the subordinate units are controlled and coordinated by a company headquarters (see fig. 1-4).

Within each rifle company are three rifle platoons. The rifle platoon is the basic maneuver element for the rifle company and its characteristics are essentially the same as the company. The platoon has the same triangular structure built around three squads and each squad is built around three fire teams (see fig. 1-5).

Within each rifle company is one weapons platoon. The weapons platoon is the basic fire support element for the rifle company. It provides the company with organic machine gun, mortar, rocket fire, and antiarmor defense. Its organization and equipment permit maximum flexibility, control, and ease of employment in support of the rifle platoons. Each weapons platoon contains one 60-mm mortar section, one medium machine gun section, and one assault section (see fig. 1-6 on page 1-6).

Duties of Key Personnel

Rifle company key personnel include the company commander, executive officer (XO), first sergeant, gunnery sergeant, fire support team (FST) leader, operations chief, logistic noncommissioned officer (NCO), intelligence specialist, and administrative clerk.

The company commander—

- Is responsible for everything the company does or fails to do.
- Is responsible for the employment, training (see app. B), combat efficiency, discipline, morale, administration, welfare, maintenance, and sustainment of the company.
- Understands the capabilities of the company's personnel, weapons, supporting weapons, and their proper employment.
- Seeks to know and understand the capabilities of the enemy, threat level, and operational environment.
- Knows, understands, and develops situational awareness across the company.

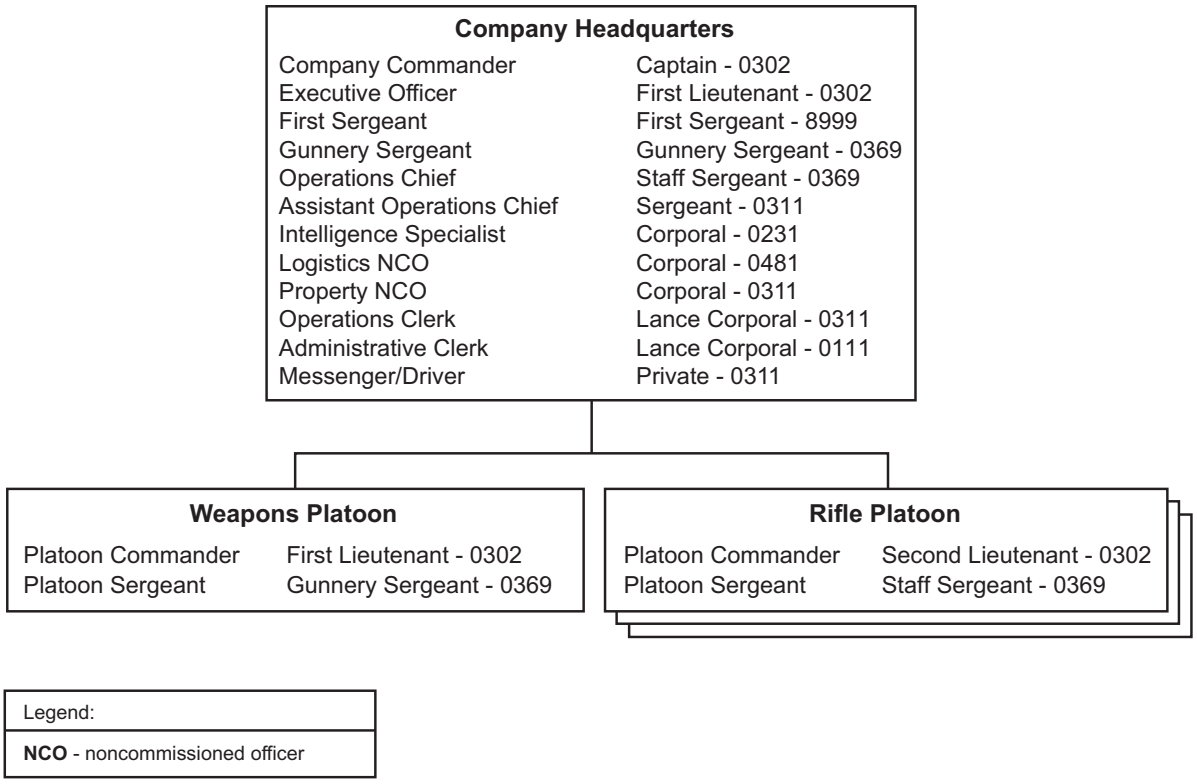


Figure 1-4. Marine Rifle Company.

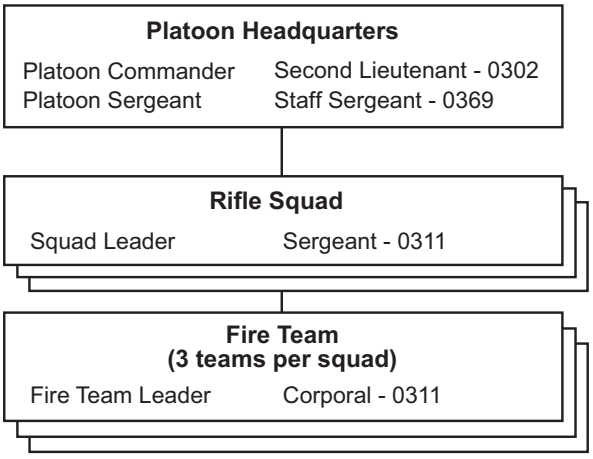


Figure 1-5. Marine Rifle Platoon.

- Coordinates with military and nonmilitary entities across the battlespace and within the area of interest (AOI).
- Is prepared to execute actions across a range of military operations and requests additional support as necessary.

The company XO—

- Serves as the company's second in command and is responsible for maintaining situational awareness of the company's tactical situation during combat.
- Assumes command in the company commander's absence.

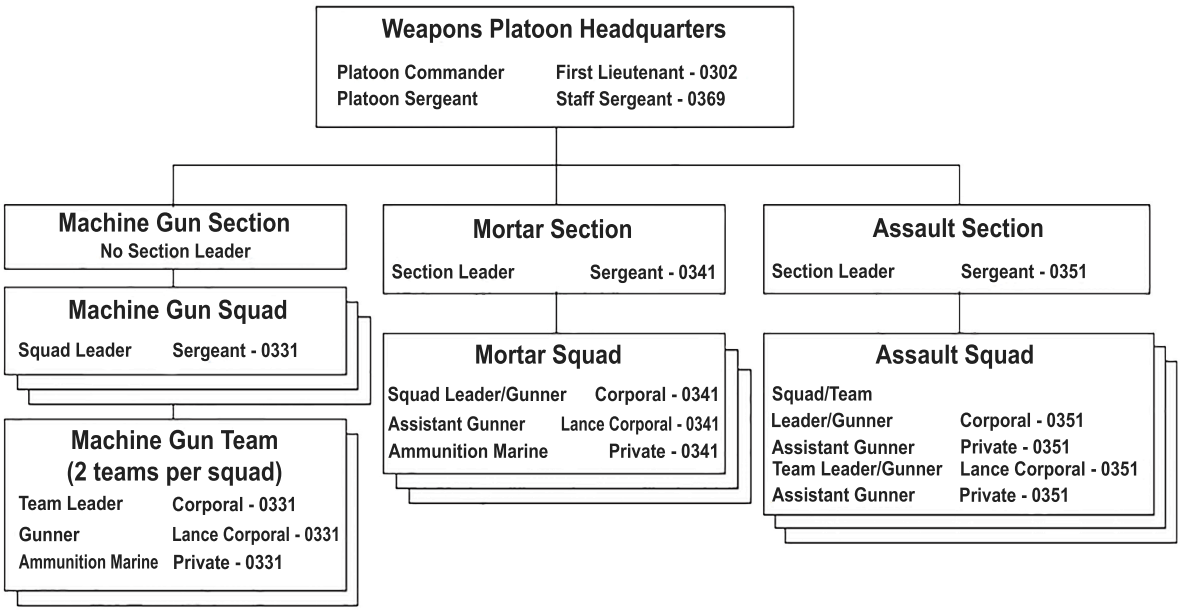


Figure 1-6. Weapons Platoon.

- Is prepared to assume the duties of the company FST leader when necessary or as directed.
- May be assigned to aid in control of phases of a battle (such as a passage of lines or counterattack) and is prepared to assume tactical duties (such as landing zone [LZ] control officer or detachment/element leader).
- Plans and supervises the company's combat service support (CSS) planning, requirements, and execution to include coordination with higher or other support agencies.
- Supervises company preparations to execute training or combat missions in support of the company commander's plans and goals.
- Serves as the company training officer and supervises all aspects of unit training and unit training management (UTM) in support of the company commander's training plan and guidance.
- Is prepared to supervise either a permanent or semipermanent company combat operations center (COC) to include the management, collation, and processing of information; receipt and forwarding of tactical reports; and maintenance of communications with higher and adjacent units.

The company first sergeant—

- Serves as the senior enlisted Marine in the company and as the principal enlisted administrative and tactical advisor to the company commander.
- Serves as principal assistant to the company commander in supervising the administration of the company.
- Supervises, inspects, or observes matters designated by the commander.
- Executes and supervises routine operations to include enforcing the tactical standing operating procedures (SOPs); maintaining accountability of all personnel; coordinating and reporting personnel and administrative actions; and supervising discipline, field hygiene, and medical evacuation operations.

The company gunnery sergeant—

- Serves as a technical and tactical advisor to the company commander, platoon commanders, and platoon sergeants.
- Coordinates training, operations, and logistical support requirements for the company.

- Assists the commander in the discipline, appearance, training, control, conduct, and welfare of the company.
- Assists the commander in conducting operational risk management (ORM).
- Directs the supply and resupply of the company.
- Supervises and assists in company training support to include maintaining training records, developing training plans and schedules, publishing letters of instruction, and supervising range and training area requests.
- Assists the commander in ensuring the establishment of a perimeter defense, security/observation posts (OPs), or a FP posture.
- Coordinates and supervises the embarkation and debarkation for the deployment of the company.
- Supervises the setup, function, and displacement of the COC as well as other functional areas as directed.
- Supervises the actions within the COC (e.g., preparation and submission of reports and messages to higher headquarters [HHQ], watch bills, operational journals, journal files).
- Supervises the flow of information provided by available C2 systems and supervises the control, dissemination, and destruction of classified information within the COC.

The FST leader—

- Is generally the weapons platoon commander.
- Serves as the company commander's FST leader and fire support coordinator (FSC) when applicable, and advises the company commander on the capabilities and limitations of fire support assets.
- Plans and executes the company's fire support plan in support of the company commander's concept of operations (CONOPS) and guidance, coordinates the plan with the battalion FSC, and ensures the proper integration of all available fire support assets.
- Ensures all aspects of essential fire support tasks (EFSTs) are applied during planning and execution.
- Is capable of briefing the fire support plan during the operation order (OPORD).
- Integrates platoon targets into the company fire support plan and forwards that plan to the battalion.

The operations chief—

- Coordinates and executes the setup, function, and displacement of the COC as well as other functional areas as directed.
- Manages the flow of information provided by available C2 systems and supervises the control, dissemination, and destruction of classified information within the COC.
- Supervises the company's operations section, logistics NCO, intelligence specialist, and administrative clerk in ensuring all required reports are accurate and submitted in a timely manner.
- Ensures the proficiency of the personnel assigned to the COC and the enforcement of COC standing operating procedures.
- Is capable of participating in the Marine Corps Planning Process (MCPP).
- Executes and supervises routine operations to include enforcing the tactical SOPs; maintaining accountability of all personnel; coordinating and reporting personnel and administrative actions; and supervising discipline, field hygiene, and medical evacuation operations.

The logistic NCO—

- Assists in the development of logistic plans that support the company commander's concept of operations and employment.
- Has direct responsibility for the development of company embarkation and debarkation plans and the supervision of their execution.
- Executes tactical logistics for the company to include the coordination of CSS activities

necessary for mission accomplishment. These activities include supply and maintenance, coordination of transportation resources and employment, embarkation, general engineering support, and general services support.
- Leads and conducts helicopter support team operations and train other Marines as required.
- Is proficient in the use of, and capable of training Marines on, such systems as the automated information systems that support logistic command and control and in-transit visibility, expeditionary energy systems, and water filtration and purification systems.
- Is capable of participating in the MCPP.
- Is capable of performing all physical requirements associated with serving in an infantry company.

The intelligence specialist—

- Supervises company level intelligence cell (CLIC) operations and assigned personnel and serves as the senior intelligence expert in the company COC.
- Supports the creation of the company's intelligence plan, oversees its execution, and supervises the collection management process and the dissemination of battalion priority intelligence requirements (PIR) and company-specific orders or requests.
- Supports the company's intelligence collection plan by seeking organic and nonorganic support, communicating and coordinating with higher, adjacent, and supporting units, and requesting products and support from the battalion intelligence section.
- Produces and supervises the production of various intelligence products to include briefs, maps, targeting information, and imagery.
- Supervises enemy prisoner of war (EPW)/ detainee tracking to process, disseminate, and exploit information gained through tactical questioning, document exploitation, and other means.
- Assists in the enforcement of active and passive operational security measures.
- Is capable of participating in the MCPP.
- Is capable of performing all physical requirements associated with serving in an infantry company.

The administrative clerk—

- In conjunction with the company first sergeant, executes all company-related administrative matters to include naval correspondence, administrative action forms, promotion- and pay-related issues, performance evaluations, and re-enlistments.
- Maintains and updates related unit readiness statistics and databases and executes morning report, personnel management, and casualty tracking.
- Serves as company legal representative, executing necessary duties associated with nonjudicial punishment, unit punishment book, and punitive and nonpunitive correspondence.
- Conducts necessary coordination with battalion and other personnel administration centers as required.
- Is capable of participating in the MCPP.
- As required, is prepared to serve in the company COC, conduct headquarters security, and can perform all physical requirements associated with serving in an infantry company.

Attachments and Enablers

During normal operations, including garrison training, the rifle company requires organic attachments from the battalion's weapons companies and headquarters and service companies in order to accomplish assigned tasks. Beyond this augmentation, the company commander must expect to generate certain skill sets from within his/her own company while certain special enablers from units beyond the battalion may serve as attachments to the company. Finally, the commander must expect to encounter certain elements beyond his/her control, such as battalion snipers operating in the battlespace. Other such expectations (discussed in detail in chap. 3) from

the battalion and from both outside and within the company follow.

Expectations from the battalion include—

- An 81-mm mortar forward observer (FO) from the weapons company.
- A radio operator (RO) from the battalion communications platoon.
- An intelligence specialist from the battalion's intelligence section.
- Eleven corpsmen from the battalion aid station (BAS).
- A tactical air control party from the battalion's operations section.

Expectations from external sources include—

- An artillery observer and scout.
- A naval gunfire liaison team.

Expectations from within the company include—

- Any additional Marines necessary to augment the intelligence specialist in staffing a CLIC.
- Any additional personnel necessary to augment the company headquarters Marines executing operations and communications functions in the company COC.
- Combat logistic support skills, such as ammunition drivers, animal packers, and armory custodians.
- Several Marines per company with appropriate environmental supporting skills, such as mountain or jungle warfare specialists.

Weapons Company Employment

The weapons company provides basic, organic fire support and other capabilities for the infantry battalion. The equipment and structure of the company allows infantry battalions additional heavy weapons and firepower, mobility, and augmented communications. Battalions may use these capabilities to provide support for its maneuver elements, may use the weapons company as a foundation for the creation of task-organized elements to accomplish assigned missions, or may use a combination of these methods.

Traditionally, the mission of a weapons company is to provide medium mortar support, antiarmor support, heavy machine gun (HMG) support, and fire support coordination in order to support the infantry battalion's scheme of maneuver. When employed differently, such as a fourth maneuver element within the battalion, the weapons company (an infantry company by basic definition) defers to the infantry company mission. The weapons company is uniquely equipped with heavy weapons to support the maneuver of the rifle companies and task elements within the battalion. The heavy weapons, fire control capabilities, and communications assets contained in the weapons company include a mix that can be tailored to a particular mission based on mission, enemy, terrain and weather, troops and support available-time available (METT-T) and, when applicable, civilian considerations. Like the rest of the infantry battalion, the weapons company maneuvers in all types of terrain, climates, and visibility conditions.

The inherent versatility of the weapons company as part of the infantry battalion also makes it well suited to employ against asymmetrical threats across a range of military operations. During tactical operations, heavy weapons units can suppress, fix, or destroy the enemy at long ranges, allowing other infantry units or combined arms teams to maneuver to a position of advantage.

While variables, such as a weapons company's leadership, morale, state of readiness, and level of training, always carry weight in decisions on how to employ a specific unit at any given time, the following capabilities and special considerations apply to weapons companies supporting the battalion as designed. Weapons companies employed as maneuver elements or in other combinations should reference rifle company employment, discussed earlier in this chapter, for

additional capabilities. The general capabilities of a weapons company are as follows:

- It is self-mobile, possessing the ability to move rapidly on the battlefield to shift combat power to where it is needed.
- It is task-organized to have the flexibility to provide support for the companies and/or battalion and the ability to change those configurations rapidly.
- It has robust, organic communications assets.
- It can support the assaults of other units with massed supporting fires.
- It can conduct day and night offensive and defensive operations in all types of environments.
- It can conduct combined arms operations across a range of military operations.
- It operates in conjunction with other Services and special operations forces.
- It participates in amphibious operations.
- It can conduct limited self-sustainment and maintenance.

The weapons company's tactical capabilities are as follows:

- It can deliver accurate, long-range, large-caliber direct fires to destroy enemy armored vehicles and fortifications.
- It can deliver massed HMG and automatic grenade launcher fires to engage enemy personnel, destroy light vehicles, and provide area suppression.
- It can deliver indirect fires to limit, disrupt, destroy, and suppress enemy positions, units, and air defense.
- It can coordinate, mass, and shift long-range direct fires.
- It can integrate indirect and aerial fires with the unit's direct fire plan.

The weapons company's limitations include—

- Vulnerability to armor, artillery, and air threats.
- Vulnerability to enemy CBRN attacks.
- Limited decontamination capabilities.
- Increased logistical fuel and maintenance requirements.

Weapons Company Organization

The weapons company (one per infantry battalion) is the basic, organic direct and indirect fire support for the infantry battalion. The company consists of one 81-mm mortar platoon, one antiarmor platoon, and one HMG platoon. This organization allows for maximum flexibility in providing support to the maneuver units of the battalion or task-organizing the company to accomplish assigned tasks. Depending on employment decisions made by the battalion commander, the weapons company may receive the battalion's sniper platoon or may receive the mission to train them. Normally, the weapons company provides support to the infantry companies according to direction and tasks received from the battalion operations officer via guidance from the battalion commander (see fig. 1-7).

Within the weapons company is one 81-mm mortar platoon. The 81-mm mortar platoon provides the basic, organic indirect fire support for the battalion. The platoon can operate mounted or dismounted, as a massed platoon, or as two independent sections. Regardless of its configuration, the battalion generally employs the platoon vice the platoon's attachment to the rifle companies (see fig. 1-8).

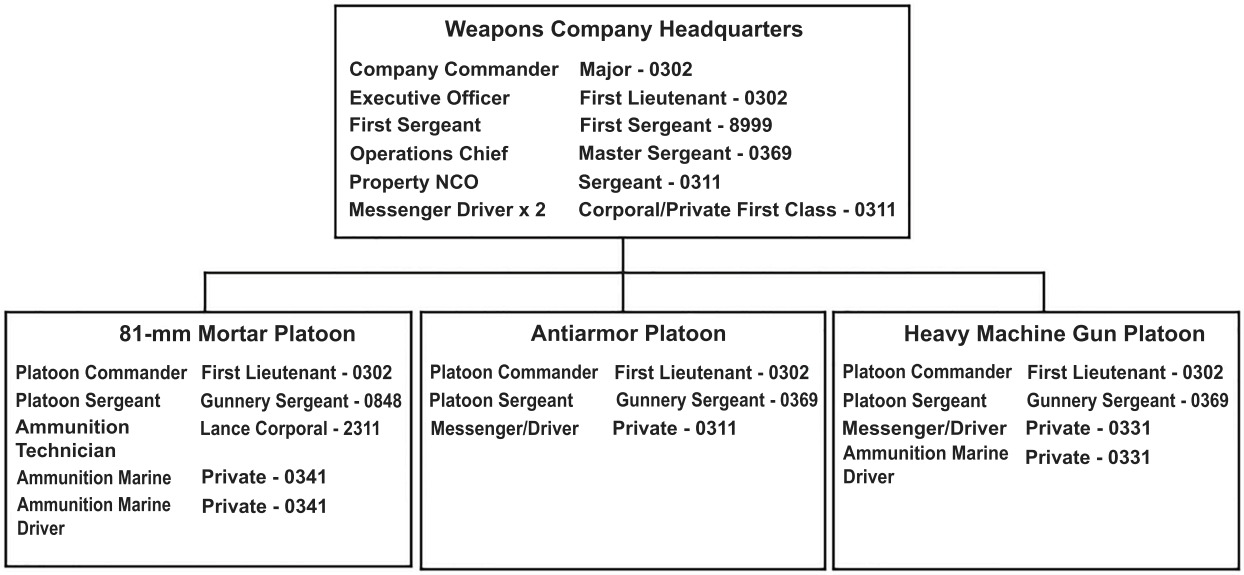


Figure 1-7. Weapons Company Organization.

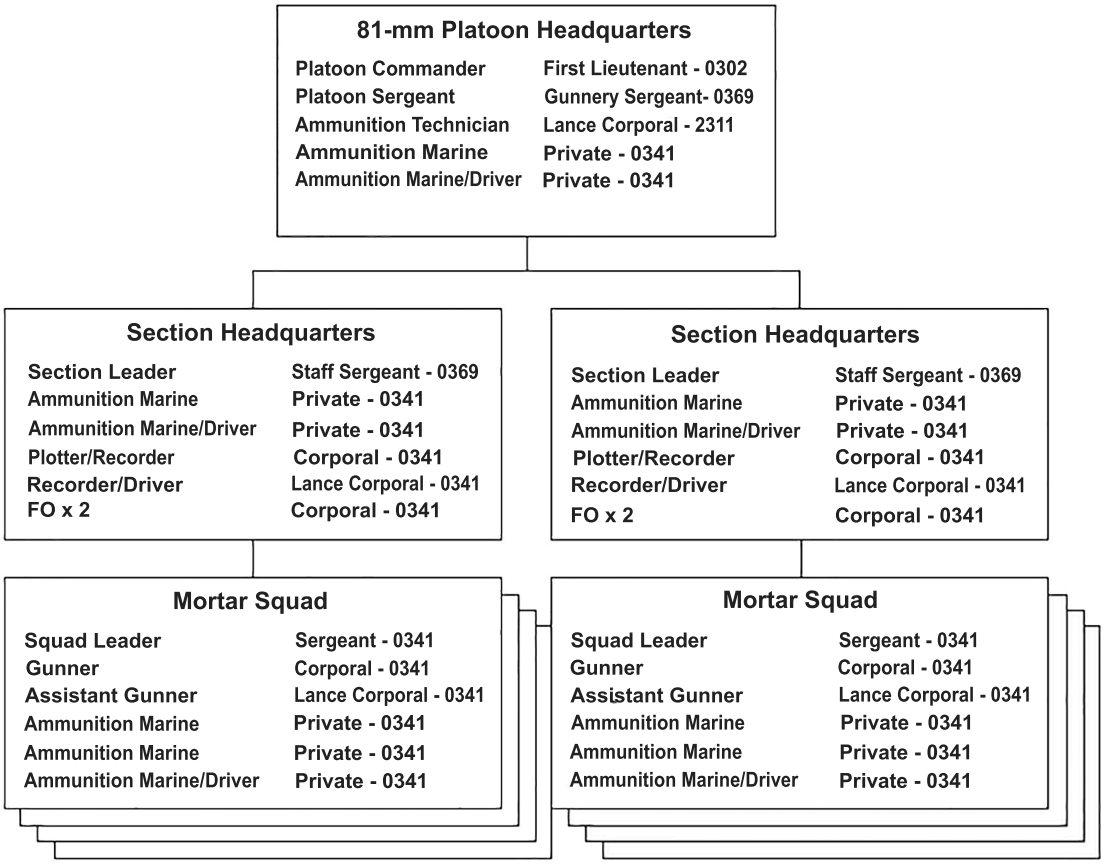


Figure 1-8. 81-mm Mortar Platoon.

Within the weapons company is one HMG platoon. The HMG platoon provides heavy caliber direct and grenade launcher machine gun fire for the battalion. The platoon can operate mounted or dismounted, as a massed platoon, or as independent squads. The battalion's rifle companies may receive portions of the HMG platoon as attachments. The HMG platoon also serves as the base for creating maneuver elements, such as combined antiarmor teams (CAATs) or mobile assault platoons (MAPs) (see fig. 1-9).

Within the weapons company is one antiarmor platoon. The antiarmor platoon provides heavy caliber, long-range, antiarmor fires for the battalion. The platoon can operate mounted or dismounted, as a massed platoon, or as independent sections. The battalion's rifle companies may receive portions of the antiarmor platoon as attachments. The antiarmor platoon may also combine with the HMG platoon to create maneuver elements, such as CAAT or MAP (see fig. 1-10).

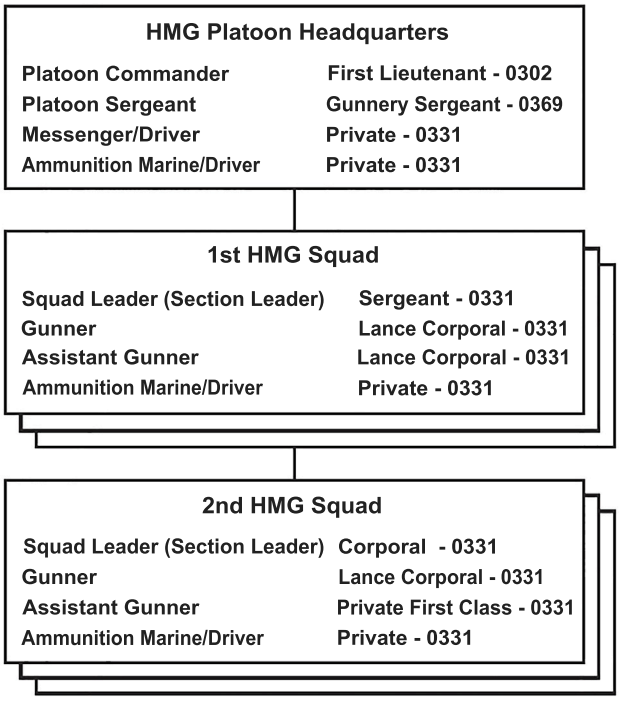


Figure 1-9. Heavy Machine Gun Platoon.

Alternate Weapons Company Organizations

As a result of battalion problem framing, battalion commanders frequently use the versatility of their weapons companies by making semipermanent changes to the company organization that best support the most likely method of employment. In general, these methods either create maneuver platoons that maintain some form of indirect fire capability (CAAT variant) or they create a pure, fourth maneuver company (mobile assault company variant).

Combined Antiarmor Team Variant

One of the most likely modifications to the weapons company organization is the CAAT variant (see fig. 1-11). This variant (or some subset thereof) is most often used when problem framing indicates the need for additional maneuver elements within the battalion. It also requires the maintenance of the battalion's organic indirect fire capability. In this organizational scheme, the HMG and antiarmor platoons combine to create maneuver elements while the 81-mm mortar platoon is retained for its fire support capability. The likelihood of an antiarmor threat determines the actual composition of the resulting CAAT platoons.

The CAAT platoon is created by combining elements and equipment from the HMG and antiarmor platoons. From the threat analysis, these platoons may have a balance of machine guns and antiarmor weapon systems, may be differently weighted in "heavy" and "light" configurations, or may possess no antiarmor systems whatsoever. Another variation is the weapons mix of machine guns and grenade launchers within each platoon. Decisions reached during problem framing should determine the exact structure of the platoons. Figure 1-12, on page 1-14, represents an evenly weighted CAAT platoon.

Mobile Assault Company Variant

When employed as a fourth maneuver element within the battalion, the weapons company will

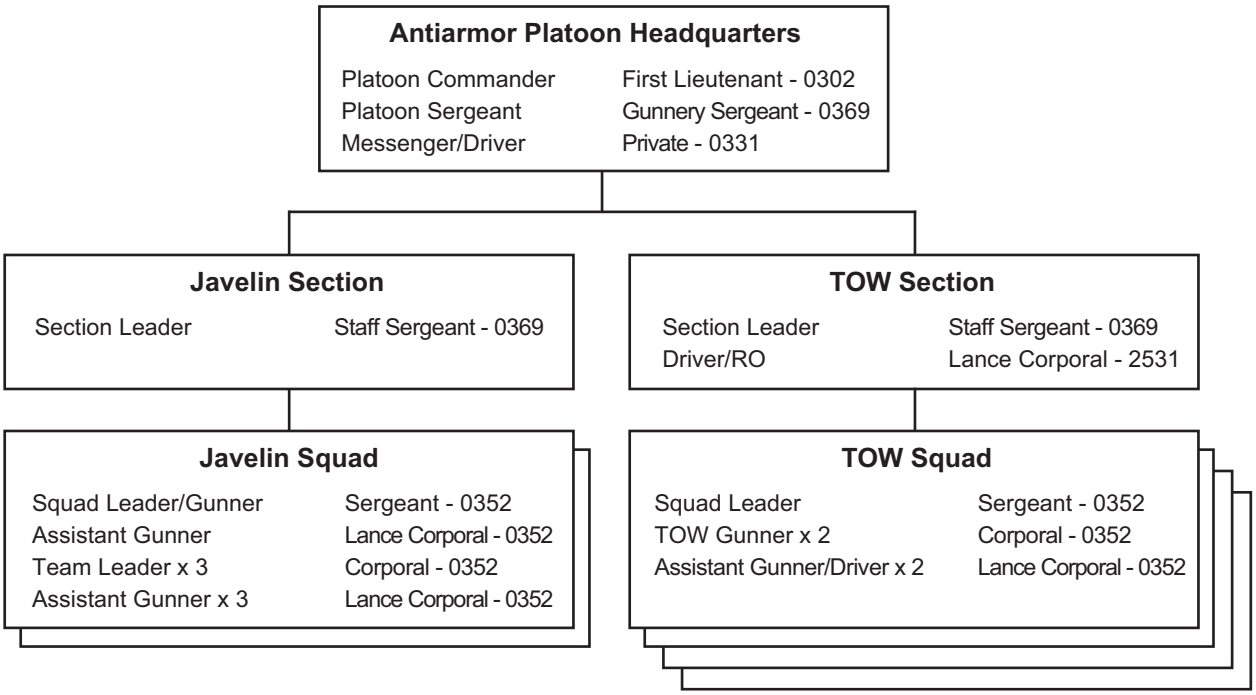


Figure 1-10. Antiarmor Platoon.

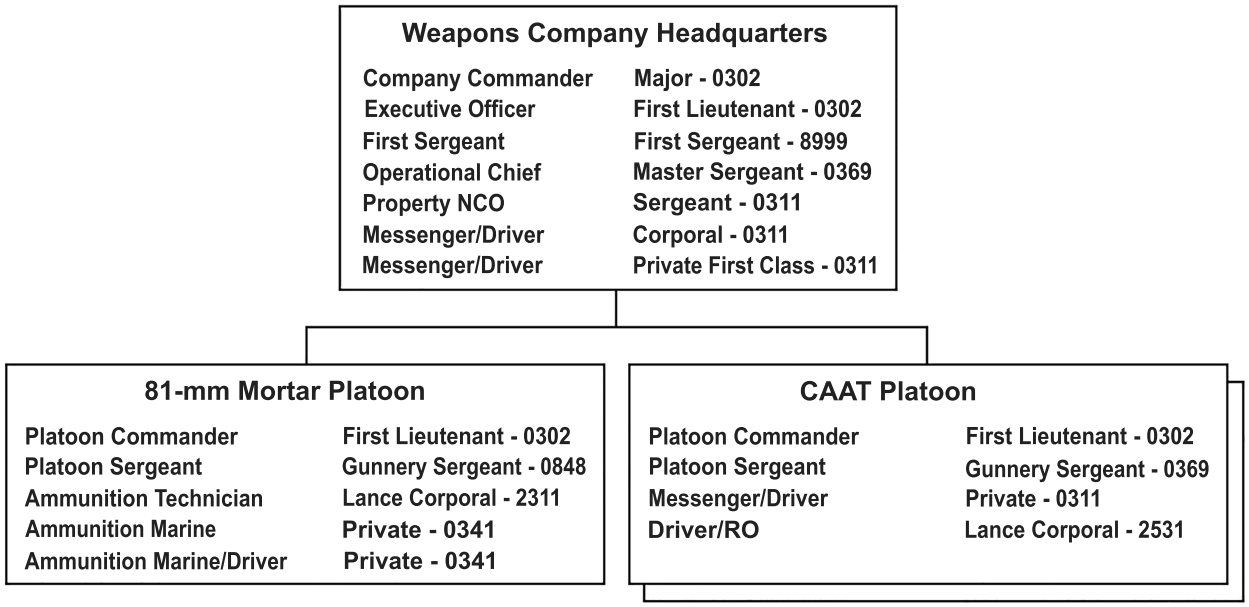


Figure 1-11. Combined Antiarmor Team Variant.

likely reorganize into a mobile assault company variant as seen in figure 1-13 on page 1-14. In this organizational scheme, the HMG and antiarmor platoons combine to create maneuver elements: one 81-mm mortar section becomes a "platoon," while the other is retained for its fire support capability. A critical limitation to the number of maneuver elements is the number of qualified officers and staff noncommissioned officers (SNCOs) available to serve as MAP leadership.

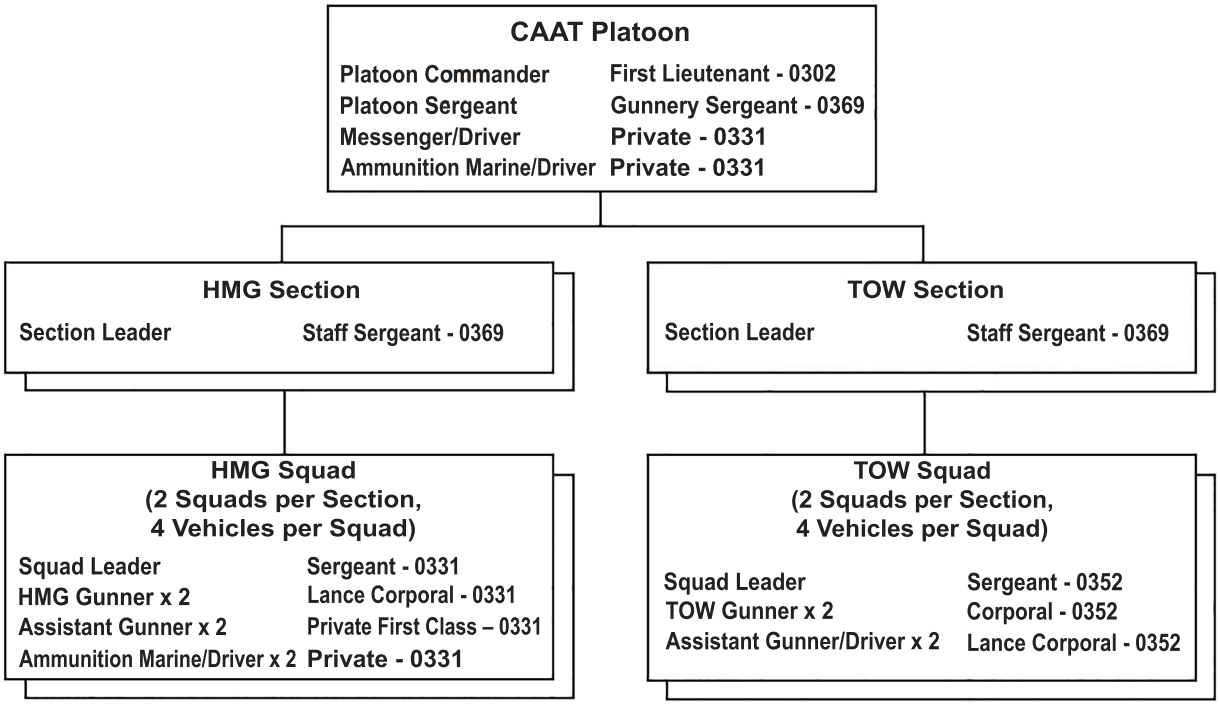


Figure 1-12. Evenly Weighted Combined Antiarmor Team Platoon.

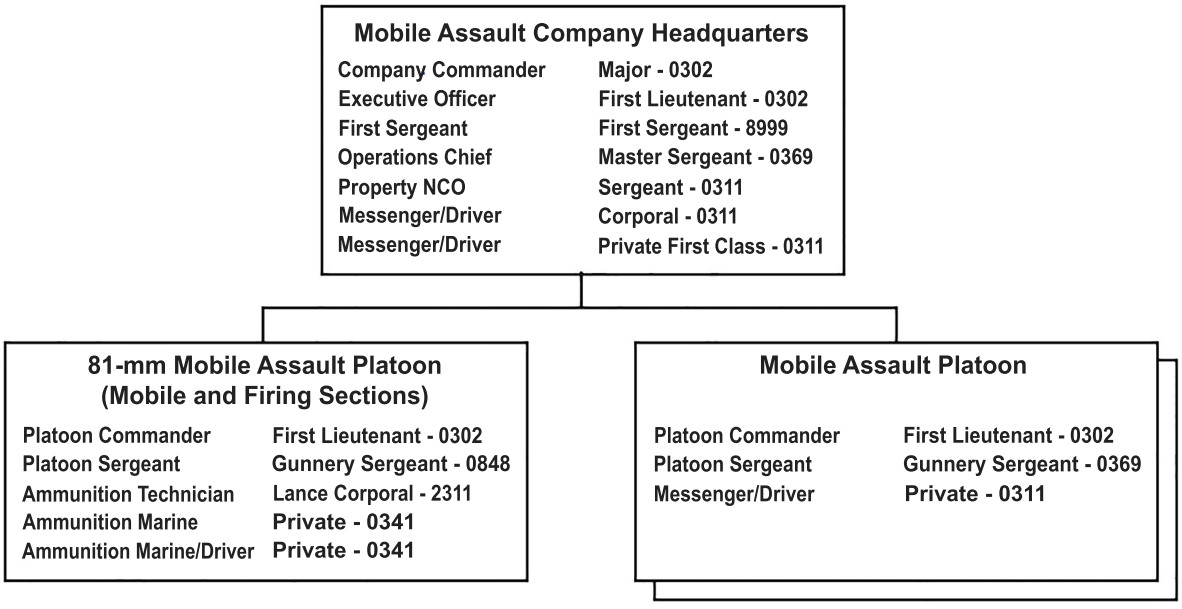


Figure 1-13. Mobile Assault Company Variant.

The MAP is created by combining elements and equipment from the HMG and antiarmor platoons. In a manner similar to the creation of CAAT elements, the actual composition of MAPs can range from pure uniformity to specific functions through the weighting and mix of personnel, vehicles, and weapons. For example, if an 81-mm mortar platoon was split between a maneuver

element and a section retaining its 81-mm mortar capability, the maneuver element would generally be tailored after a MAP section as represented in figure 1-14.

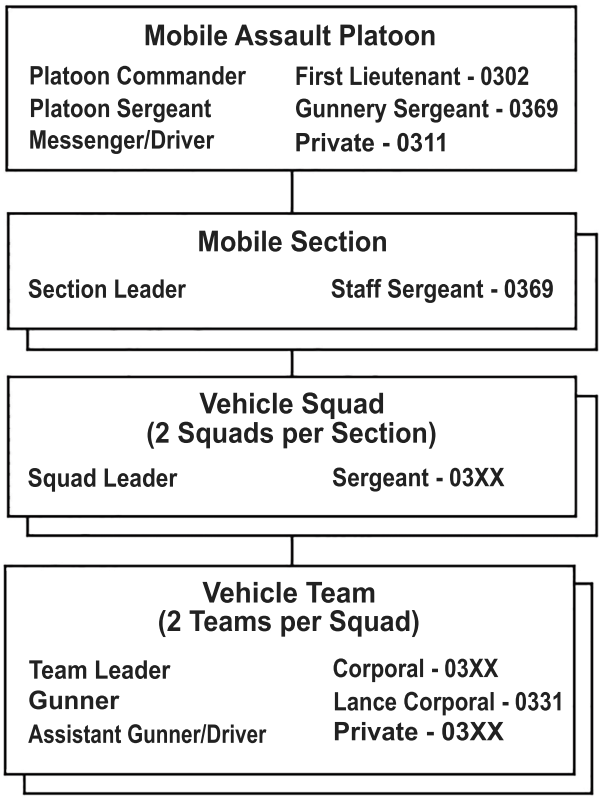


Figure 1-14. Evenly Weighted Mobile Assault Platoon.

Weapons Company Key Personnel

Weapons company key personnel include the company commander, XO, first sergeant, and operations chief.

The company commander—

- Is responsible for everything the company does or fails to do.
- Serves as the battalion FSC and is responsible for the planning, coordination, and deconfliction of fires in support of the battalion's scheme of maneuver.
- Is responsible for the tactical employment, training, administration, morale, personnel management, maintenance, and sustainment of the company.
- Knows the capabilities of the company's personnel, weapons, and equipment, and how to employ them.
- Knows the capabilities of the MAGTF's fire support systems and platforms, and how to employ them.
- Seeks to know and understand the capabilities of the enemy, level of threat, and operational environment.
- Knows, understands, and develops situational awareness across the company.
- Coordinates with military and nonmilitary entities across the battlespace and within the AOI.
- Is prepared to execute actions across a range of operations and requests additional support as necessary.
- Is responsible for the training of company FSTs and their proper integration into battalion fire support SOPs.

The XO—

- Serves as the company's second in command and is responsible for maintaining situational awareness of the company's tactical situation during combat.
- Assumes command in the company commander's absence.
- Plans and supervises the company's CSS planning, requirements, and execution, including coordination with higher or other support agencies.
- Supervises company preparations to execute training or combat missions in support of the company commander's plans and goals.
- Serves as the company training officer and supervises all aspects of unit training and UTM in support of the company commander's training plan and guidance.
- Knows the capabilities of the company's personnel, weapons, and equipment, and how to employ them.

- Knows the capabilities of the MAGTF's fire support systems and platforms, and how to employ them.
- Serves as the battalion assistant FSC responsible for the planning, coordination, and deconfliction of supporting arms in support of the battalion's scheme of maneuver.

The first sergeant—

- Serves as the senior enlisted Marine in the company and as the principal enlisted administrative and tactical advisor to the company commander.
- Serves as principal assistant to the company commander in supervising the administration of the company.
- Supervises, inspects, or observes matters designated by the commander.
- Executes and supervises routine operations to include enforcing the tactical SOP; coordinating and reporting personnel and administrative actions; and supervising discipline, field hygiene, and medical evacuation operations.

The operations chief—

- Serves as a technical and tactical advisor to the company commander, platoon commanders, and platoon sergeants.
- Coordinates training, operations, and logistical support requirements for the company.
- Assists the commander in the discipline, appearance, training, control, conduct, and welfare of the company.
- Assists the commander in conducting ORM.
- Directs the supply and resupply of the company.
- Coordinates and supervises the setup, function, and displacement of the battalion fire support coordination center (FSCC) as well as other functional areas as directed.
- Supervises and assists in company training support to include maintaining training records, developing training plans and schedules, publishing letters of instruction, and supervising range and training area requests.
- Assists the commander in ensuring the establishment of a perimeter defense, security/OPs, or a FP posture.
- Coordinates and supervises the embarkation and debarkation of the deploying company.
- Supervises and assists with FSCC actions.
- Manages the flow of information provided through available C2 systems.
- Supervises the control, dissemination, and destruction of classified information within the FSCC.
- Supervises preparation of the operations journal and journal file.
- Establishes the watch bill for the FSCC.
- Supervises the preparation and submission of messages and reports to the regimental FSCC.

CHAPTER 2
PLANNING

Planning Fundamentals

"Planning involves projecting our thoughts forward in time and space to influence events *before* they occur rather than merely responding to events as they occur. This means contemplating and evaluating potential decisions and actions in advance."(Marine Corps Doctrinal Publication [MCDP] 5, *Planning*)

The key component of company leadership is the ability to make a decision and guide subordinates through the execution of that decision. Planning is simply anticipatory decisionmaking and occurs whether a decision needs to be made in 30 seconds or if considering a unit's actions 6 months from now. The planning horizon is how far ahead the planning begins. Different types of problems and different planning horizons often require different planning tools.

Planning is a tool possessed by the user, not a user possessed by the tool. With this understanding, company commanders must have the maturity and discipline to modify the planning tool appropriately. Planning processes should neither be abbreviated when thoughtful detail is required, nor rigidly adhered to when expediency is more appropriate.

Decisionmaking Methods

There are two main decisionmaking methods—intuitive and analytical. Racing to out-cycle the enemy, reacting to a developing situation, or being lazy often leads decisionmakers to favor the intuitive solution. Such solutions can lead to victory or can spiral into disaster, depending on a company commander's level of understanding of the environment and the nature of the problem. Intuitive and analytical decisionmaking are necessary and complementary.

> **EXAMPLE**: As a person drives, he/she intuitively decides to change lanes when someone pulls out in front (because he/she have experience driving). However, intuitive decisionmaking is not sufficient to help plan a trip across the state. Analytical tools would aid in determining such things as route, obstacles to traffic, or the limitations of the vehicle. Once on the road, however, the driver could intuitively change the route to bypass slow traffic because studying the map provided the experience needed to aid that decision.

Intuitive Decisionmaking

Since intuitive decisionmaking involves the use of experience and instinct to solve a problem, there are few intuitive planning tools. Success with this method relies upon extensive user experience with the problem at hand and the environment in which it occurs. Preparation includes actual experience with the conditions and issues as well as training, practice, reading, and discussion. A solid foundation, robust mental model, and intellectual frame of reference are the basics for intuitive decisionmaking.

Analytical Decisionmaking

Most planning tools are associated with the other method of decisionmaking—the analytical model. These tools artificially design a mental model that leads a decisionmaker to a solution by creating the necessary understanding of the problem and environment. The analytical model helps

manage and organize information when the decisionmaker faces overwhelming data, is not familiar with the problem, or is trying to synchronize multiple actions and groups.

The Value of Planning

The value of planning occurs within the context of two important considerations: first, planning keeps infantry companies oriented on the future instead of remaining reactive; second, by planning in the present, infantry companies can shape a better future. While it is true that extremes exist, such as good planning resulting in failure or no planning at all resulting in success, these extremes are exceptions. Analytical planning today can enable intuitive planning tomorrow. All activities, from the execution of combat operations to the assessment of training, benefit from some planning. Determining the amount of planning necessary—given mission, time, and resources—constitutes the value and art of the planning process.

Planning is often the essential element in seizing the initiative. Planning helps maneuver and supporting elements properly identify opportunity within the context of the overall mission. It does not produce a script that commanders must follow; rather, the process helps commanders anticipate the range of possibilities, prepare for them, and facilitate execution.

Planning decreases the time between decision and action, especially at higher levels of command—the further removed the decisionmaker is from the battlefield, the longer it takes a decision to result in action. By starting with a shared vision of future actions, possible reactions, and likely risks, the wait time for action is shorter, which keeps friendly tempo faster than that of the enemy.

Planning becomes increasingly critical as situations increase in complexity. The planning required to administratively land a company on a dock for further actions ashore is radically different from the planning required to land that same company ashore by amphibious assault. Planning builds shared situational awareness among the company's leaders. By synchronizing everyone's view of the problem and the environment, subordinates can take greater initiative with an assurance that they are in line with the commander's vision and end state.

Planning also becomes increasingly critical as experience decreases. For example, a company, having spent 3 months executing counterinsurgency (COIN) operations, suddenly tasked with an assault upon a known enemy strong point in complex terrain will require significant planning preparation. Moreover, as the company begins to deal with this new environment, a solid plan will help commanders assess where they are succeeding and where they are falling short.

Planning and Command and Control

Planning is a part of command and control. Both planning and command and control focus on determining what needs to occur and ensuring that the necessary actions happen to achieve the end state. Further, both begin with a central figure, the commander, with whom the functions of planning and control are inherent responsibilities of command. Through his/her planning guidance and intent, the commander guides the planning process and supervises the execution.

A fundamental challenge to command and control is coping with time and uncertainty. Given enough time to plan and gather information, commanders can reduce, though never eliminate, uncertainty. Conversely, given enough certainty, commanders can more efficiently use time during execution. However, rare is the situation in which commanders possess the time and certainty they would like. For company commanders, waiting for certainty results in loss of tempo and initiative. They can never achieve certainty because the enemy is already doing something else. Planning must be the means to balance time and uncertainty by anticipating decisions and actions. Planning allows commanders to decide and act effectively in the midst of uncertainty.

Since planning orients on the future, it enables command and control to gain and retain the initiative. The planning process does so by creating understanding across the company, lessening the amount of control necessary to operate, and enabling mission tactics to occur and succeed.

Marine Corps Planning Process and Other Planning Tools

To support the decisionmaking of commanders, the Marine Corps created the MCPP. This flexible process enables units and commands at every level to realize the inherent value of planning, use uniformly understood terms and procedures across the force, convey decisions to subordinates in recognizable and usable formats, and complement joint and crisis action planning. The MCPP enables commanders to execute maneuver warfare doctrine, gain and maintain the initiative, compress the time between decision and execution, and balance time and uncertainty. Applicable across a range of military operations, the MCPP recognizes the commander's central role as decisionmaker.

The process begins with problem framing and ends with a transition of the plan from planning to execution. It is a planning process, an approach to decisionmaking. At its most basic level, the MCPP determines what must occur to achieve success, why it must occur, and what resources are available; develops potential options; weighs the pros and cons of those options; makes a choice; and enables execution.

While figure 2-1 indicates a process that commanders and planners can follow sequentially, many of the steps can and should occur simultaneously. For example, although the actual written order for an operation begins with problem framing, it develops continuously throughout the MCPP.

Modification of the Marine Corps Planning Process

Company commanders must understand the operational environment and the planning process and have the maturity to make proper decisions about how to use the process. Time is often the most precious resource available to a company commander and he/she must adjust his/her use of the MCPP to

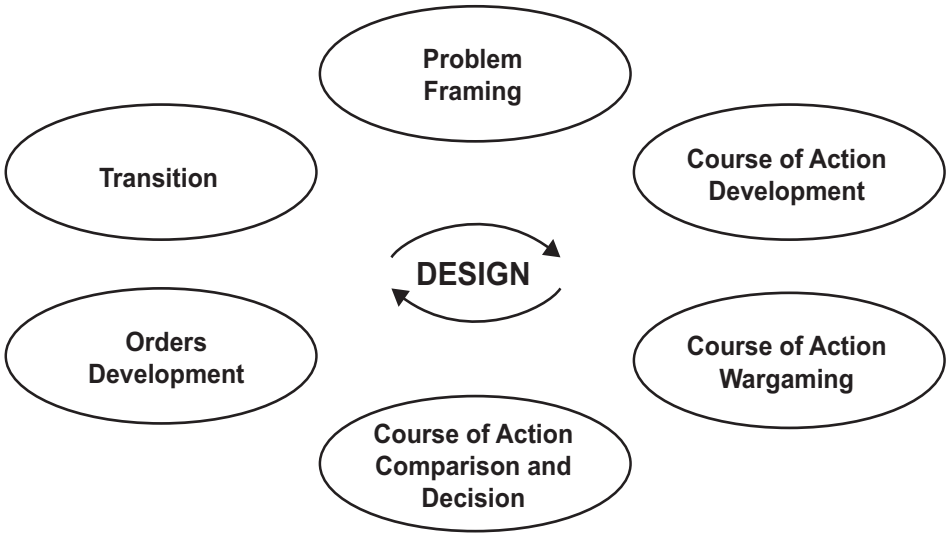


Figure 2-1. Marine Corps Planning Process.

protect that resource. The MCPP can be detailed or abbreviated as necessary, based upon resources, time, experience, and the situation. It complements both deliberate and crisis action planning. Company commanders must know and understand the basics of the MCPP before omitting, skipping, or otherwise modifying the process.

Other Planning Tools

There are a host of other planning tools available, but some common ones discussed in the Marine Corps are the rapid response planning process, recognitional primed decisionmaking, systemic operational design, and the Army's military decisionmaking process. Each has strengths and weaknesses, as does the MCPP, but the MCPP provides a good balance between two elements that often compete—mental creativity and planning efficiency. Company commanders must decide where to focus planning time and effort, and should consider the following:

- Task assigned.
- Time available.
- Experience level with this type of problem.
- The need for creativity.
- Efficiency needed to keep planners and executors on track as the plan is developed, disseminated, and executed.
- Access to resources for planning and execution.
- Familiarity of leaders with the planning tools.

The Marine Corps has other tools that support decisionmaking which are linked to MCPP. Table 2-1, on pages 2-6 and 2-7, shows how these various planning tools link and support one another.

Operational Planning Team

As company commanders work to understand and find solutions to a problem, they can enlist the aid of other members of the company grouped into an operational planning team (OPT). An OPT can consist of a quick, small huddle of the company's XO, first sergeant, company gunnery sergeant, and the commander, or a more deliberate meeting of all of the company's leadership. Much like the other tools used in planning, the commander's determination of the size of the OPT depends on his/her experience and the time available.

Planning Execution

Problem Framing

The purpose of problem framing is to enhance understanding of the environment and the nature of the problem while identifying what the company must accomplish and when, where, and why it must be done. These basics are required in order to proceed with planning. Problem framing is the most important step of the MCPP because no amount of effort or energy later on will help the infantry company solve a problem improperly understood. Using a design framework established by a company commander's planning guidance, intent, and concept, the company seeks to analyze and answer the following questions:

- What must the company accomplish? When? Where? Why?
- What resources does the company need?
- What resources does the company lack?
- What information does the company need to disseminate?

Inputs

The primary input for the company is the HHQ order. When the infantry company is using a staff planning construct, the next most important input is the company commander's initial intent and planning guidance. Other inputs into problem framing include an initial understanding of the situation as informed by time available, intelligence preparation of the battlespace (IPB), status checks of company resources, capabilities and limitations, and any changes to command relationships.

Process

After receiving initial inputs, company commanders and the staff begin design activities that are focused on understanding the environment and the nature of the problem. These activities include—

- Completing the IPB process (see chap. 4).
- Developing intelligence requirements (IRs): What bridges can I use? Who is the local leader in the objective area?
- Compiling facts (such as the status of units and enablers available) and requests for information.
- Clarifying assumptions; for example, the river is fordable.
- Understanding limitations, such as the rules of engagement (ROE), no-fire areas, and the requirement to coordinate with locals.
- Understanding risk to force and risk to mission, such as enemy indirect fire capability, inability to clear a support by fire (SBF) position prior to the assault, and potential for the enemy to negatively "spin" the company's information operations (IO).
- Using red and green cells as able and if appropriate.
- Understanding shortfalls, such as the lack of sufficient amphibious assault vehicles (AAVs) to lift the whole company or the lack of translators.
- Analyzing specified, implied, and essential tasks.
- Analyzing centers of gravity and critical vulnerabilities.

Outputs

The following five decisions, guidance, and products come from problem framing and they allow planning to continue, subunit planning to commence, and mission preparations to begin:

- *Problem framing brief*. Company planners present a framing brief to the company commander to ensure shared situational awareness among the staff and to receive the commander's approval of completed products, such as IPB, staff estimates, assumptions, and limitations.
- *Restated company mission statement*. A restated company mission statement is based on task and center of gravity/critical vulnerability analysis. This statement also serves as the baseline for development of the warning order (WARNORD), OPORD, and FRAGOs.
- *Commander's intent and further planning guidance*. Commander's intent is the commander's personal vision of the problem. It must be clear, concise, and easily understood two levels down. It should include an end state or commentary on conditions that, when satisfied, accomplish the purpose. Proper commander's intent enables subordinates to understand the larger context of the commander's actions and guides the subordinates in the absence of orders. It allows company personnel to exercise judgment and initiative in a way that remains consistent with and furthers their commander's mission when the unforeseen occurs. This freedom of action, within the framework of commander's intent, creates tempo during planning and execution. Company commanders approve and disseminate their refined intent for the mission and provide course of action (COA) development and other guidance to the staff for planning. When possible, commanders personally provide this intent and guidance to the entire staff in order to focus planning efforts.
- *Company WARNORD*. Information regarding planning orders can be found in Marine Corps Warfighting Publication (MCWP) 5-1, *Marine Corps Planning Process*.
- *Intelligence collection plan*. The intelligence collection plan seeks to meet the IRs determined during problem framing. A rough collection matrix helps organize this effort, as does prioritization of IRs into commander's critical information requirements (CCIRs) and PIRs. The reconnaissance plan is a subset of the overall intelligence collection plan that can involve many different sensor platforms and information sources.

Table 2-1. Marine Corps Planning Tools.

OODA	Planning Progression	Troop-Leading Procedure (BAMCIS)	MCPP	Tools
Observe Orient	Define or redefine the problem	B—Begin planning A—Arrange for recon	Problem framing	METT-T IPB DRAW-D MCOO Adversary/situation templates Weather matrix ASCOPE DSF
		M—Make recon (visual, virtual, map)		Reports (SALT, SALUTE, SPOT) PACE Discussions with HASS leaders Postcombat checks and inspections Unit debriefs COC status boards Collections plan (draft) or matrix
Decide	Find a workable solution(s)		COA development	MOOSEMUSS (principles of war) Warfighting functions Task/purpose Task organization chart TCMs/FSCMs Coordinating instruction list Synchronization matrix/fires matrix
		C—Complete the plan		
	Improve the solution		COA wargaming	DSM/DST Synchronization matrix/fires matrix
	Decide on a solution			Execution checklist
			COA comparison and decision (not usually applicable at company level)	

Table 2-1. Marine Corps Planning Tools. (Cont'd)

Act	Disseminate the solution	I—Issue the order	Orders development	SMEAC
				CCIRs/IRs
				Synchronization matrix/fires matrix
				Execution checklist
				Decision support matrix/template
				Collections matrix
				CONOPS graphics
				MOP and MOE
				Rehearsal and backbrief plan
	Ensure understanding	S—Supervise	Transition	Rehearsals including ROC and CAR
				Backbriefs
				PCCs and PCIs
	Execute the decision			Execution checklist
				CCIRs
				DST/DSM
				Reports matrix
				Assessment matrix

Legend

DRAW-D	defend, reinforce, attack, withdraw, delay
DSM	decision support matrix
DST	decision support template
HASS	higher adjacent supporting subordinate
MCOO	modified combined obstacle overlay
MOOSEMUSS	mass, objective, offensive, security, economy of force, maneuver, unity of command, surprise, simplicity
OODA	observe, orient, decide, act
PACE	primary, alternate, contingency, and emergency plan
PCC	precombat check
recon	reconnaissance
ROC	rehearsal of concept
SALT	size, activity, location, time
SALUTE	size, activity, location, unit, time, and equipment
SMEAC	situation, mission, execution, administration and logistics, and command and signal
SPOT	situation, position, observation, time
TCM	tactical control measure

Course of Action Development

Problem framing answers the questions regarding what must be done, why it must be done, what is the environment in which it must be done, and what is available with which to do it; COA development answers questions regarding *how* to do it. The centerpiece of making a decision, COA development occurs when the company commander transitions from understanding the problem to solving the problem. While HHQ often develops more than one COA, the company commander usually has neither the time nor the assets to develop more than one.

Inputs

Inputs for COA development consist of the outputs of problem framing, products that contribute to the enhanced understanding of the environment and the nature of the problem, the restated company mission statement, and the initial array of forces and resources.

Process

Company commanders rely upon their understanding of the environment and problem, their training, and their knowledge of the company and the level of threat to develop an idea about how to accomplish the mission. They build the idea into an actual COA that is feasible (can be accomplished by the resources available), complete (makes use of all resources available across all warfighting functions), and acceptable (accomplishes assigned tasks within acceptable risk and minimum expenditure of resources). As they do so, they develop—

- Objectives.
- Task organization, including command relationships.
- Schemes of maneuver, including form of maneuver.
- Tasks and purposes for subordinates and supporting organizations.
- Tactical and fire support coordination measures (FSCMs).
- Timelines.
- Coordinating instructions that synchronize but do not unnecessarily restrict initiative.

Outputs

Upon completing COA development, company planners generate products that narrow the focus of the planning effort, continue to build the OPORD and associated products, allow for resolution of resource shortfalls to begin, and refine the simultaneous preparation and work of subunits and company leadership. These products include—

- Concept of operation, which includes—
  - Updated mission statement.
  - Assigned objectives.
  - COA graphic.
  - COA narrative (translates into the CONOPS portion of the execution paragraph in the OPORD).
  - Task organization (including command relationships).
  - Tasks to subordinates and supporting organizations.
  - Tactical coordination measures and FSCMs.
  - Coordinating instructions list, including a timeline or events list.
- Concepts of support, which includes—
  - Command and control (translates into command and signal paragraph in the OPORD).
  - Fires (translates into the fire support portion of the execution paragraph in the OPORD).
  - Administration (translates into a portion of the administration and logistics paragraph in the OPORD).
  - Logistics, including medical plans (translates into a portion of the administration and logistics paragraph in the OPORD).
  - Intelligence collections plan (translates into tasks to subordinates and requests to HHQ).
- Synchronization matrix, which is a tool used to capture all of the concepts of support and operations items in an easily understandable format. The matrix helps to ensure that all work is completed in unison.

- Fire support execution matrix, which is a tool that accomplishes the same purpose as the synchronization matrix but focuses on the details of the fire support plan. When possible, fire support tasks are integrated into the synchronization matrix.

Course of Action Wargaming

After deciding on a COA, the company's leaders need to take a critical look at their understanding of the environment and solution to the problem in order to identify gaps in the plan, discover potentially missed opportunities, and fix synchronization issues among warfighting functions and units involved in the operation. The overall purpose is to remain externally focused, that is, focused on the problem. Additionally, wargaming improves common understanding of the problem and assigned tasks through an interactive refinement process. While battalions and HHQs conduct formal processes to accomplish wargaming, available time and resources make such processes rarely used at the company level. Normally, wargaming at the company level includes asking "what if" or asking other company and platoon leaders to review and backbrief their understanding of the plan. The COA is updated and improved by resolving identified discrepancies and issues.

Inputs

The COA wargaming process begins with the concepts of operations and support, the synchronization matrix, and a graphical depiction of the area of operations (AO).

Process

The wargaming process at the company level is informal and focuses on ensuring that the COA is understandable and effective, accomplishes the mission, and makes sense. The enemy, mission, branch plans, sequel plans, and friendly ability should be considered.

In COA wargaming, the key consideration is the enemy's actions and reactions to the friendly plan. This methodology applies to stability operations as well, during which the actions and reactions of nongovernmental organizations (NGOs), host nation (HN) partners, human environment, weather, and other factors will affect the friendly plan.

Critically, wargaming verifies whether the COA solves the problem and accomplishes the mission within HHQ intent and specified limitations. It also verifies that the COA makes tactical sense within the principles of war and warfighting functions. Wargaming should also highlight possible impacts of the COA on HHQ and on adjacent friendly, coalition, and host nation security forces (HNSF). If enough time is available, wargaming should also provide the foundation for development of branch and sequel plans.

Branch plans refer to possibilities or contingencies that change the mission, scheme of maneuver, or orientation of the company based on events. Since they are preplanned, the company possesses a better chance of success when encountering difficulty executing the CONOPS. For example, if time is available, company planners might fully plan the actions required to use the secondary or even tertiary avenues of approach.

Sequel plans refer to actions that follow the end of the current operation. If time is available, company planners may preplan exploitation and pursuit, or a hasty defense on the objective area.

Wargaming should reveal weaknesses in the internal understanding or the ability to execute the COA. It should ensure that subordinate units and leadership receive the greatest latitude possible to accomplish their mission. The following questions should be answered:

- Did the company use all elements of available combat power to its best advantage?
- Did the company plan for redundancy of capability or does the success of the plan rest on a single point of failure?

- Is the scheme of maneuver understandable?
- What are likely mistakes that the company might make? Are mitigation measures in place?

Outputs

At the end of the wargaming process, COA wargaming produces an execution checklist, a decision support matrix, revisions to the CONOPS and support, and revisions to the synchronization and fire support matrices.

Course of Action Comparison and Decision

Infantry company commanders rarely have the time to develop more than one COA, making the COA comparison and decision step unnecessary.

Orders Development

The orders development step involves articulating and disseminating the plan so that all units understand the commander's vision and how to achieve it. Using the tools and processes listed previously should result in the order being 80 percent complete as the company leadership reaches this step. Instructions must be communicated in a standard, recognizable, clear, and simple format. Orders production is not for those who *write* them; rather, those who *produce* the orders must condense everything done in planning and convert it into plain language for all to understand. The order is the most widely distributed document in the planning process, so it must be simple and clear. There are many ways to package and distribute a plan, such as through a verbal or written OPORD, a FRAGO, a CONOPS briefing, or matrix orders. The format and dissemination means are determined by—

- Time available.
- Personalities of the company's leaders.
- Experience, training, and knowledge levels of the company's leaders.
- Available resources.
- Complexity of the operation.
- Numbers and types of organizations/units that are being coordinated.

Inputs

The orders development process uses the COA wargaming results by incorporating the execution checklist, revised concepts of operations and support, and the revised synchronization and fire support execution matrices into the OPORD.

Process

Company commanders determine the format and method they will use to produce, brief, and disseminate the OPORD. They refine the situational awareness products from problem framing and COA development, ensuring that products and narrative supporting concepts, tasks, and coordination measures are easily understood. They reconcile and crosswalk the order.

Orders reconciliation is a detailed editing process that ensures the validity of information and guidance across the order. If company commanders discover discrepancies between enclosures and the order, gaps in information, directed actions that do not support the mission, and other similar issues, then they make the appropriate changes. In a constrained time environment, commanders ensure that the CONOPS and other supporting concepts (such as maneuver, fires, and support) support the commander's intent, mission, and CCIRs. They also ensure that the intelligence collection plan supports PIRs and IRs.

During the orders crosswalk, the commander compares the order with the orders of higher and adjacent commanders to achieve unity of effort and ensure that the superior commander's intent is met. The crosswalk identifies discrepancies or gaps in planning. If discrepancies or gaps are found, the company staff takes corrective action.

Outputs

The output of the orders development process is an OPORD or FRAGO complete with the following:

- Task organization with command relationships.
- Mission statement.
- CONOPS, including the scheme of maneuver, fire support, IO, and civil-military operations (CMO) plans.

- Tasks to subordinates and supporting organizations.
- Tactical control measures and FSCMs.
- Coordinating instructions, including a timeline or events list.
- Intelligence collection plan.
- Administrative support plan.
- Logistical support plan.
- C2 plan, including the communications plan.
- Synchronization matrix if used.
- Fire support execution matrix.
- Execution checklist, which may include a decision support matrix.
- Rehearsal and backbrief or confirmation brief plan.

Transition (Preparation for Operations)

At the company level, the company commander and company leadership are responsible for both planning and overseeing the execution of the plan although HHQ often transitions a plan from those elements of the staff that developed the plan to those elements of the staff that will oversee its execution. Preparation for operations begins with issuing WARNORDs. After the OPORD reaches subordinates and supporting organizations, the company commander begins a supervisory process. This supervisory process consists of two parts—the intellectual and the physical. When supervising and inspecting, company commanders must ensure that enough time is allowed for correction of noted discrepancies.

When performing intellectual supervision, company commanders need to ensure that the members of the company properly understand the OPORD and associated products. After subordinates have the opportunity to understand the order, prepare their own orders, and continue preparations for the operation, "understanding checks" can be accomplished through—

- *Rehearsals*. Rehearsals can be very informal radio backbriefs or formal combined arms rehearsals (CARs) conducted on a large terrain model. Whatever the method, there are few excuses for not conducting a form of rehearsal.
- *Backbriefs/confirmation briefs*. Backbriefs occur informally and may be more topical, focusing on major movements and tasks. They may take place with the company commander individually or in a small group of essential leadership. Confirmation briefs are more formal, occur with all leadership or even the entire company present, and cover all the details.
- *Precombat inspections*. During precombat inspections (PCIs), company commanders can question individuals on various aspects of the order and plan in order to ensure that proper dissemination, orders processes, and understanding occurred across the company.

When performing physical supervision, company commanders supervise the processes related to equipment accountability, radio and communication checks, weapons functioning, maintenance, fueling, ammunition issue, and similar logistic functions to ensure units are equipped to accomplish assigned tasks and deal with contingencies. They perform precombat checks (PCCs), during which company commanders check key weapon systems, spot check equipment to determine readiness, and inspect other gear and material to ensure adherence to orders and adequate preparation for operations.

Inputs

Issuing the FRAGO or OPORD marks the beginning of transition and preparation for operations. All portions of the order directly support the company's preparation to conduct operations.

Process

The transition phase consists of the company commander and company leadership conducting and supervising rehearsals, briefs, PCIs, and PCCs.

Outputs

The output of the transition phase is the company's ability to execute assigned tasks.

Assessment and Reorientation

An assessment is the continuous monitoring and evaluation of the current situation and progress of an operation. Put another way, assessments allow company commanders to compare their visions with reality and make informed decisions accordingly—to ask and answer the question, "Are we on the right path?" Assessments can be such occurrences as formal and informal conversations and reports from higher, adjacent, supporting, and subordinate headquarters; discussions with company leadership; radio traffic; battlefield circulation; or analysis of collected intelligence.

There are three vital components to assessing the situation: goals, feedback, and process. Company commanders must clearly understand the goals they are trying to reach in order to have a benchmark against which to compare their progress. Goals can consist of such things as tasks, objectives, and mission end states.

Feedback presents company commanders with the information they need to establish performance against the stated goals. In passing guidance on what information to gather, how to gather it, and how to present it, company commanders ensure that they do not protect themselves from unpleasant news. Feedback—

- *Is continuous*. Feedback must flow as it develops to provide the latest information of value.
- *Occurs at all echelons*. Vital information from subordinate units down to the fire team level needs to reach the right command echelon to allow for proper assessment and decisionmaking.
- *Is focused on objectives*. Unrestricted feedback can overwhelm an information management (IM) system unless it is filtered to what is relevant. The primary guidance on relevance comes from the company commander and focuses on the information that best supports determining whether the company makes progress toward its objectives.
- *Is focused on decisionmakers*. In the same way filtering of information is important to maintaining focus, presenting the filtered information in an understandable format is equally important for decisionmakers to make informed and timely decisions.

Company commanders establish a methodology to measure feedback input against the goals of the company, understand what it means, and make decisions accordingly. This methodology is the process of assessment and should consist of basis of comparison, feedback mechanisms, analysis mechanisms, and decision recommendations.

Basis for comparison is integral to the effectiveness of the assessment process. It is the requirement to understand "what right looks like" and to compare what the feedback says about what the situation "looks like now." If the company commander feels that the defensive security force must destroy at least five vehicles in the enemy's lead element and the security element has destroyed only three, then that comparison serves as a basis for a decision about whether to accept risk to the security force to meet the destruction criteria.

Feedback mechanisms, per the criteria of good feedback (focus on objectives), include effective and relevant collection and IM plans, which consist of external and internal mechanisms. External mechanisms of generating feedback consist of reports (such as situation reports or contact reports), discussions with external leadership (such as local, adjacent, and higher leaders), and operational debriefs (such as patrol, raid, or security debriefs [see chap. 8]). Internal mechanisms of generating feedback consist of reports (such as casualty, vehicle, maintenance, or supply), discussions with internal company leadership, precombat and postcombat checks and inspections, and critiques and after action reviews (AARs) (see chap. 8).

Analysis mechanisms are necessary since commanders must often assess far more complex situations than those just discussed. Such complex

situations especially occur in stability operations, during which the human environment, infrastructure maintenance and development, threat activity over time, and a host of other possible criteria require assessment. As seen in figure 2-2, on page 2-14, assessment processes use measures of performance (MOPs) and measures of effectiveness (MOEs). A MOP assesses the actions of the company against the company's stated goals and objectives, while MOEs consist of detailed criteria that assess the nuances of how efficiently the company is reaching stated goals and objectives.

The company commander uses assessment methodology to make in-stride decisions about the actions the company is taking to achieve its objectives. Similar to decision points in COA development, the commander can establish predetermined performance and effectiveness triggers regarding how well any particular operation or effort is proceeding. Equally, the commander can take action on unexpected situations that arise as the mission progresses.

> **EXAMPLE**: A company receives the mission to seize a hill. The MOE relates directly to the following questions: Did the company take the hill, did it fail to take the hill, or is it still in the progress of trying to take the hill? The MOP pertains to how efficiently the company is taking the hill. If company commanders are using casualties as a MOP, then light casualties signal the commander to continue the current assault. Heavy casualties indicate that the company "is doing the wrong things" and leads the company commander to make a decision as to whether to change the main effort of the assault, to change the form of maneuver, to use additional supporting arms, or to call off the assault altogether.

Assessment Planning

Just as decision points, destruction criteria, and event triggers are determined and planned during COA development in support of decisionmaking, so are assessments planned to support achievement of the overall purpose of the operation. As seen in figure 2-3, on page 2-14, the development and planning of assessment tools and requirements occur alongside tactical planning and as part of the concept for command and control. Assessment planning consists of receiving the required goals (such as tactical tasks, objectives, and effects), determining the conditions necessary to indicate that goals have been met, and deciding who or what will observe and report the MOPs and MOEs related to condition and goal accomplishment.

Input Goals and Establish Criteria

The company commander turns goals into measurable criteria. If the goal of the company was to destroy an enemy motorized unit, the company commander establishes the measurable criteria that indicate when the company meets the goal. In this case, the company commander determines that the satisfaction of the company's mission occurs with the incapacitation of 30 percent of the enemy unit's personnel, mobility kills on 10 of the enemy's 20 vehicles, and the surrender or withdrawal of the enemy's leadership.

Establish Measurable Conditions

Continuing with the previous example, once the company commander establishes what "right" looks like, he/she then ask what feedback information must be received in order to know if the company is meeting or has met the criteria and goals of the mission. In this case, burning hulks, blown tires, or abandoned vehicles may serve as the conditions that indicate a mobility kill on an enemy vehicle. Therefore, the company commander will use the destruction criteria as the MOP and battlefield reporting on the type and amount of damage inflicted upon the enemy as the MOE.

Establish Feedback Capability

One method of feedback is basic combat reporting. If the company commander sought to destroy the enemy motorized unit over a defense in depth

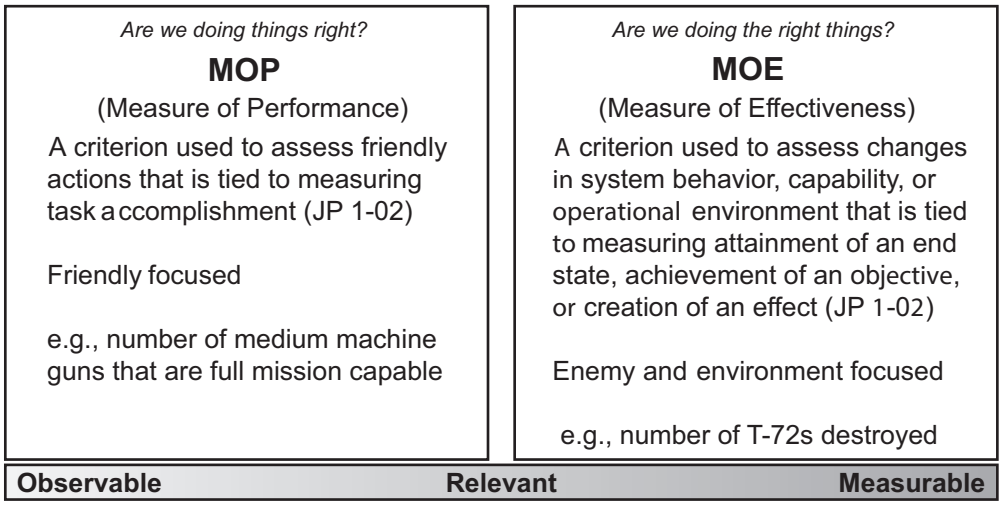


Figure 2-2. Measures of Performance and Measures of Effectiveness.

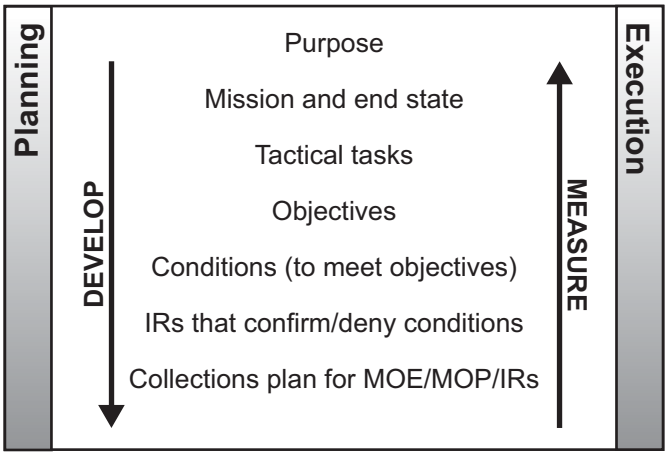


Figure 2-3.

using not only the assets available to the company but also supporting arms and close air support (CAS) in the security zone, then the company must determine how to observe and gather feedback criteria on enemy destruction beyond the main battle area (MBA). A small security team forward in the security zone could serve multiple purposes, such as ensuring security, controlling supporting arms, and providing feedback to the company commander on enemy destruction criteria as the operation unfolds. The important thing for assessment planning is that some method exists to collect the feedback for the company commander. Questions company commanders need to ask during assessment planning include the following:

- What will be assessed and to what detail?
- By what criteria will the company assess a particular task or objective?
- How will the company gather feedback information to assess conditions?
- Are the conditions, IRs, MOE, and MOP tied to a decision? Who is making that decision once conditions have been met?

Analysis Tools

Any tool that collects information regarding MOE and MOP, conditions, objectives, and, most importantly, decision criteria helps manage the assessment plan. Both the synchronization matrix and the decision support matrix can support management of this information. Table 2-2, on page 2-16, is an example of a modified decision support matrix. The following external and internal assessment tools can all be used informally or may become formal reporting requirements that are used to feed higher and adjacent units' assessment cycles:

- External—
  - MOE/MOP.
  - Decision support matrix/decision support template.
  - Collections plan.
  - Synchronization matrix.
  - Intelligence assessments from reports and debriefs.
- Internal—
  - AARs.
  - Inspection reports with analysis of the results.

Assessments are a vital component of effective decisionmaking, but assessments are usually the most neglected aspect of planning. For decisionmaking to be effective, company commanders must determine where they want to be, where they actually are, and how they want to get to their objectives.

Table 2-2. Assessment Decision Support Matrix.

Event Number	Decision Point Number	Event/ Condition	Indicators MOE/MOP	Commander's Options	Sensor		Decisionmaker	
					NAI/NPI	Collector	Trigger	Authority
1	1	Enemy fixed	MOP 1: Plts in blocking positions MOE 1: Enemy is still in town at H+3 MOE 2: Enemy is strengthening defenses	A: Commence the attack B: Commit the reserve to a blocking position	NAI 1-3 NPI 1 and 2	Plts Raven UA	MOE 1 or 2	Co cmdr
2	2	Enemy unit destroyed	MOE 3: 30 EKIA discovered MOE 4: Enemy signals surrender MOE 5: 10 enemy vehicles are on fire or have blown tires	C: Continue the attack D: Commit the reserve E: Transition to consolidate	Co obj 1 Plt block Persons	Plts	MOE 3 and 4	Co cmdr
3	3	Local leaders identified	MOP 2: Plts have canvassed every street MOE 6: Locals agree with company's list of leaders (developed by 1stSgt) MOE 7: Bn verifies with governor that list of leaders is correct	F: Continue recon patrols with IR for identifying local leaders G: Transition the patrolling focus to security of the population	Co obj 1 NPIs 5-15	Plts Co 1stSgt		
4	4	Initial atmospherics identified	MOP 3: Squad reports are all submitted MOE 8: Number of tips received by D+2 Rapid rise=positive Small rise=neutral No tips=negative	H: Convene an IO working group I: Begin CMO projects	Plt obj B and C	Plts Co XO		

Legend

bn	battalion
cmdr	commander
co	company
EKIA	enemy killed in action
1stSgt	first sergeant
obj	objective
plt(s)	platoon(s)
recon	reconnaissance
UA	unmanned aircraft

CHAPTER 3
COMMAND AND CONTROL

As stated in MCDP 6, *Command and Control*, "command and control encompasses all military functions and operations, giving them meaning and harmonizing them into a meaningful whole." Command and control is the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. (JP 1-02) The nature of war and the C2 elements are immutable and have remained consistent from antiquity to the modern era. Authority, leadership, decisionmaking, information, communication, and structure are all elements that Alexander the Great would have understood as essential to command and control in war. Likewise, modern commanders must understand the nature of war and master the enduring C2 elements if they are to succeed. However, the forms of war are evolving and the infantry company commander is now facing new challenges and responsibilities that previously had been under the purview of higher echelons of command. Technological innovations in the warfighting function of command and control can aid company commanders, but can also divert attention from the fundamental C2 processes that are time tested and enduring.

Command is the lawful exercise of a commander's authority over subordinates. Commanders command by exercising the three separate elements of command—

- Authority.
- Leadership.
- Decisionmaking.

The authority that a company commander lawfully exercises is conferred by virtue of rank or assignment. Command includes the authority and responsibility to effectively use available resources and plan the employment, organization, direction, coordination, and control of military forces for the accomplishment of assigned missions. It also includes responsibility for the health, welfare, morale, and discipline of assigned personnel. The legal authority of the company commander is a powerful tool, but that authority is never sufficient to maximize the performance of a unit in the accomplishment of assigned missions.

All commanders must master the art of leadership; however, the infantry company commander faces leadership challenges unique to the company level. Routinely, company commanders must exercise both direct and indirect leadership. Company commanders must be able to effectively and directly inspire and motivate individual members of their commands as well as be able to effectively lead through their subordinate leaders to increase their span of control and to achieve broader aims. At no other echelon of command is this intersection of direct and indirect leadership requirements as prominent as it is at the company level. Skilled company commanders balance the need for exact and easily understood orders with the imperative to maintain the highest degree of initiative and flexibility for their subordinates as dictated by the tenets of maneuver warfare. This balancing act is the acumen of leadership and tactical art as exercised by the company commander.

It is in the realm of decisionmaking that commanders set their commands up for success or failure. Decisionmaking and command and control exist much as a supported and supporting

relationship, with command and control supporting decisionmaking. Effective command and control supports decisionmaking by increasing a commander's situational awareness and enabling a faster decision-to-execution cycle, which generates the speed and tempo advantages necessary for dominating adversaries in the temporal realm. While the quality and timeliness of decisions are usually a direct consequence of command and control, the tremendous advantages of modern C2 systems are lost to a commander who has not mastered decisionmaking. Commanders must master both the art and science of decisionmaking before they master the intricacies of modern C2 systems.

Control is the iterative process of adjusting the guidance and directions given subordinate and supporting units based on situational awareness and feedback. Situational awareness is knowledge of the present environment, including knowledge of METT-T factors. Situational awareness permits the commander to make decisions with incomplete information—a less than perfect understanding—and is a personal perspective or ability to determine the relevance of unfolding events.

Information and skill are the two elements of situational awareness. Higher, adjacent, supporting, and subordinate elements provide analytical information in the form of feedback to help build the commander's understanding of the situation. The commander must provide the intuitive aspect of situational awareness in order to understand the situation in the absence of complete information. Skill is a personal element of situational awareness that is based on the commander's experience, education, judgment, and intuition.

For a commander to exercise control in the dynamic environment of military operations, he/she must have more than a fixed appreciation of the situation. He/She must have a timely flow of relevant information concerning the situation—feedback. Feedback is the information that allows commanders to adjust their perceptions of the situation and modify command actions as needed. Feedback allows the commander to determine status by comparing established goals with the current situation. Information in the form of feedback may come from anywhere in any form (such as intelligence about enemy actions, reactions, and counteractions; information about the status of subordinate or adjacent units; or revised guidance from HHQ based on developments, battle damage assessments [BDAs], psychological surveys, source operations, tribal engagements, or something as subtle as the inflection in a subordinate's voice during a contact report). Feedback is the mechanism that allows commanders to adapt to changing circumstances, exploit fleeting opportunities, respond to developing problems, modify schemes, or redirect efforts. In this way, feedback is what allows a commander the situational awareness to control (see chap. 2 for more information on assessment and feedback mechanisms).

The remainder of this chapter focuses on the three elements that comprise control:

- People.
- Information.
- C2 support structures.

People

The personnel within a C2 support structure, such as the watch officer (WO), operations chief, clerks, runners, ROs, and analysts within a company COC, are the single most important element of a C2 structure. Therefore, commanders must make the training of those personnel their top C2 priority.

Task Organization

Infantry company commanders shape the fight and establish command and control primarily through their organization of forces. Proper task organization aids in determining the level of initiative available to subordinates and maintaining flexibility at each echelon (e.g., a reserve). It establishes the basis for feedback. The company

task organization should account for such considerations as the warfighting functions, assigned tasks, and the capabilities/limitations of leaders. Company commanders should consider—

- Command and control: organization of the COC/command post (CP) (e.g., personnel, roles, responsibilities, and layout).
- Maneuver: organization of platoons, attachments, and enablers (e.g., a MAP versus a weapons platoon configuration).
- Fires: organization of a weapons platoon and the FST (e.g., to attach or retain sections at company level).
- Intelligence: organization of patrols and the functioning of the CLIC.
- Logistics: organization of the company trains.
- Force protection: organization of such units as the weapons platoon or engineer attachments.

Relationships

A significant portion of organizing for combat is determining the relationships between individuals and units. There are two types of relationships for consideration: command relationships and support relationships. Table 3-1 reflects the types of command relationships as they pertain to military units. While the only command relationships recognized within the Marine Corps are organic and attached, it is important that company commanders understand the types of command relationships used within the joint community and by other Services.

External units can support the company without having a command relationship. Tables 3-2 and 3-3, both on page 3-4, reflect these types of support relationships.

Transitions in Command and Control Structure

As situations change, company leadership transitions the C2 structure to ensure that relevant information continues to be gathered, analyzed, and disseminated. Command and control organizations, processes, and systems will all adjust as the company transitions from dynamic to steady

Table 3-1. Command Relationships.

Type	Definition
Organic	Those parts of a unit listed in its table of organization.
Attached	A unit that is bound temporarily to a command other than its organic command.
OPCON	The command authority that may be exercised by commanders at any echelon at or below the level of combatant command and may be delegated within the command.
TACON	The command authority over assigned or attached forces or commands or the military capability or forces made available for tasking that is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish assigned missions or tasks.
ADCON	The direction or exercise of authority over subordinate or other organizations with respect to administration and support, including organization of Service forces, control of resources and equipment, personnel management, unit logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations.
Supporting	Support is a command authority—a support relationship is established by a superior commander between subordinate commanders when one organization should aid, protect, complement, or sustain another force.
DIRLAUTH	That authority granted by a commander (any level) to a subordinate to directly consult, or coordinate an action with, a command or agency within or outside of the granting command.
NATO OPCON	The authority delegated to a commander to direct forces assigned and accomplish specific missions or tasks usually limited by function, time, or location. It further includes the deployment of units concerned and the retention or delegation of TACON to those units. It does not include administrative or logistic control.
NATO TACON	The authority normally limited to the detailed and specified local direction of movement and maneuver of the tactical force to accomplish an assigned task. It does not provide organizational authority or administrative and support responsibilities.

Legend
ADCON administrative control
DIRLAUTH direct liaison authority
OPCON operational control
TACON tactical control

Table 3-2. Support Relationships.

Type	Definition
DS	A mission requiring a force to support another specific force and authorizing it to answer directly the supported force's request for assistance.
GS	That support given to the supported force as a whole and not to any particular subdivision thereof.
GS-R	A mission requiring the supporting unit to furnish support for the force as a whole while augmenting the capabilities of another similar unit as a second priority; GS-R is assigned only to indirect fire support agencies, principally artillery units.
Reinforcing	A support mission in which the supporting unit assists the supported unit's mission. Only like units, such as artillery to artillery, intelligence to intelligence, or armor to armor, can be given a reinforcing/reinforced mission.

Legend
GS general support
GS-R general support-reinforcing

Table 3-3. Support Relationship Responsibilities.

	Commanded by	Tasked by	Positioned by	Logistics from	Liaison to	Communication with	Priorities Established by
DS	Parent unit	Parent unit	Parent unit	Supported unit	Parent unit	Parent and reinforced unit	Parent unit
GS	Parent unit	Parent unit	Parent unit	Parent unit	As required by parent unit	Parent unit	Parent unit
GS-R	Parent unit	Parent unit	Parent unit	Parent unit	As required by parent unit	Parent and reinforced unit	Parent unit
Rein	Parent unit	Parent unit	Parent unit	Reinforced unit	Parent unit	Parent and reinforced unit	Parent unit

Legend
GS general support
GS-R general support-reinforcing
rein reinforcing

state operations (and back) and shifts focus among offense, defense, and stability. Indicators that a change to the company's C2 structure is necessary include the following:

- *Change to mission*. A change in the company's mission requires evaluation of what C2 functions are necessary to enable the company to change tasks, to move back and forth between static and dynamic operations, and to transition between operational areas (e.g., defense to stability).
- *Changes in enemy tactics, techniques, and procedures*. An enemy who is changing the manner in which he/she fights dictates changes to the information that is critical to company commanders, the decisions that are required of them and when they are needed, and the corresponding changes to the ways in which information is gathered and processed.
- *Additional functions*. The addition or modification of functions required to operate in the battlespace, such as CMO or fire support structure, changes command relationships and information and decision flow paths. Such modifications necessitate changes to C2 structure.
- *Changes in environment*. A change in the company's operational environment (such as a transition to urban, mountain, winter, or summer climates) requires a change in the way the company conducts operations and the manner in which those operations are commanded and controlled.

- *Change of location*. A new AO requires company commanders to conduct significant problem framing with corresponding changes to C2 structure.
- *Change to task organization*. Any significant change to task organization (such as losses or gains, combat power, enablers, collections, and analysis capability) requires corresponding reevaluation of C2 structure.

Command and Control Transition Plans

Responsibility for adjusting C2 structure resides with the company commander, but is often delegated to the XO. As the situation changes, a transition plan is developed and can include—

- New functions the C2 system must manage.
- New information requirements and decision points.
- Changes to task organization.
- Changes to command and support relationships.
- Changes to C2 processes, such as battle rhythm, reports, or meetings.
- Changes to C2 systems, such as to increase/reduce use of various systems.
- Timeline for changes.
- Roles and responsibilities for changes.
- Decision points during the transition.
- COC displacement plan (if required).
- Rehearsal or briefs on changes to relevant organizations/personnel.

Company Leadership Roles and Responsibilities in Command and Control

All members of the company's leadership and headquarters operating the COC and maintaining the common operational picture have general roles and responsibilities to assist the company commander when determining CP and COC configurations in light of the company's mission and resources. The company commander has the following responsibilities:

- Approve company COC SOP.
- Provide training guidance to subordinate commanders.
- Develop and implement the company's long-range plan.
- Convene and lead OPTs.
- Provide operational planning recommendations to the battalion operations officer.
- Develop OPORDs.
- Develop company CCIRs, PIRs, essential elements of friendly information, and friendly force information requirements (FFIRs).
- Direct company targeting process.
- Assess operational readiness (personnel, equipment, logistics).
- Develop fire support plan (lethal and nonlethal fires).
- Coordinate with higher, adjacent, and supporting units.

The XO has the following responsibilities:

- Perform the duties of the company commander in his/her absence.
- Establish and supervise the company COC.
- Serve as the company COC's senior WO.
- Draft company COC SOPs.
- Develop and enforce battle drills.
- Integrate supporting fires.
- Develop company level attack guidance matrix (lethal and nonlethal).
- Participate in OPTs.
- Administer and supervise training of company COC personnel.
- Develop and oversee execution of local security plan.
- Establish and supervise quartering parties.

The company first sergeant has the following responsibilities:

- Participate in the supervision and conduct of IO.
- Track casualties and oversee maintenance of the casualty tracking board in the company COC.
- Maintain personnel status board.
- Direct preparation of the morning report.
- Assist in the development of a missing Marine plan.

- Supervise company administration.
- Participate in OPTs.
- Participate in targeting board.
- Track enlisted training proficiencies.

The company gunnery sergeant has the following responsibilities:

- Assist the XO in establishing and supervising the operation of the company COC.
- Supervise the management of company communications assets.
- Supervise local security.
- Establish and maintain supervision of the company armory.
- Direct supply and resupply for the company.
- Supervise the WO in tracking logistic operations and reporting.
- Assist XO in establishing and supervising quartering parties.
- Participate in OPTs.
- Coordinate support requirements for the reserve.
- Plan and supervise the casualty evacuation (CASEVAC).
- Maintain accountability of company equipment.
- Plan and supervise EPW/detainee handling.

The WO has the following responsibilities:

- Supervise all personnel in the company COC.
- Supervise current operations and initiate appropriate action as the commander's senior representative.
- Ensure all missions are briefed and debriefed.
- Conduct cross-boundary coordination.
- Provide situational updates and briefings for key personnel.
- Control entry and exit of friendly lines.
- Obtain situational updates from company COC personnel.
- Maintain situational awareness on all friendly and enemy activity.
- Obtain information from the appropriate subordinate and supporting units.
- Disseminate information to the appropriate subordinate and supporting units.
- Notify the commander of any CCIR event.
- Ensure all status boards in the company COC are current.
- Commit the company reserve in accordance with unit SOP.
- Coordinate and clear supporting arms in accordance with appropriate documentation.
- Adjust and disseminate FSCMs based on the tactical situation.
- Coordinate the movement of ground-based fire support.
- Conduct turnover with oncoming WO.

The operations chief/assistant operations chief (watch chief) have the following responsibilities:

- Assist WOs in the performance of their duties and the general operation of the company COC.
- Supervise the company COC watchstanders and ROs.
- Maintain the company's common tactical picture (CTP) by operating battle tracking and location systems to include units entering and exiting the company's battlespace.
- Monitor and operate digital communications and electronic warfare (EW) systems.
- Coordinate with higher, adjacent, and supporting units on operations and intelligence-related matters.
- Manage the status and receipts of CCIRs.
- Maintain a digital and hard copy logbook.
- Assist in the enforcement of active and passive counterintelligence (CI) measures.
- Publish daily primary and alternate challenge words and passwords, signs, and countersigns.
- Display current FSCMs on company situation board.
- Maintain the status of remaining air sorties allocated, aircraft on call, and all preplanned air missions for the next 24 hours.

The company's intelligence specialist has the following responsibilities:

- Link between the company COC and the battalion intelligence section as well as nonorganic intelligence assets being employed in the company AO.
- Conduct IPB, submit daily intelligence reports, and develop the company commander's intelligence briefs.
- Coordinate intelligence activities in the AO with nonorganic intelligence assets and HN forces.
- Recommend PIRs and develop a company intelligence collection plan.
- Operate COC systems.
- Analyze enemy tactics, techniques, and procedures.
- Provide indications and warnings of enemy attacks in the AO.
- Support the targeting process through intelligence support and production of unit targeting packages.
- Conduct friendly pattern analysis.
- Process unit geospatial intelligence support requests and other intelligence requests for information to HHQ.
- Monitor enemy activity throughout the AO and the AOI.
- Provide guidance and supervision on intelligence-related matters to the infantry Marines serving in the company COC.
- Produce local area maps and imagery.

If using a CLIC, Marines assigned to support the intelligence specialist by assisting in analysis, briefing, and debrief functions have the following responsibilities:

- Focus on the current enemy threat, conduct appropriate mission briefs, and provide indications and warning of enemy attacks in the AO.
- Brief all outgoing patrols.
- Assist the intelligence specialist and operations NCO in the production of the company commander's intelligence briefs and daily intelligence reports for submission to supported and supporting units.
- Provide updates to the intelligence specialist and operations NCO for the CTP.
- Update specific information requirements, high-value target (HVT) lists, and BOLO [be on the lookout] lists.
- Produce and maintain company storyboards.
- Alert the company COC upon receipt of CCIRs and PIRs.
- Operate COC systems.
- Monitor intelligence-related digital systems.
- Track detainees for further exploitation.
- Assist collections Marine in BDA.

If utilizing a CLIC, Marines assigned to support the intelligence specialist by assisting in data collections have the following responsibilities:

- Provide input to the company intelligence collection plan.
- Conduct mission debriefs to support the collection effort.
- Input collected intelligence information into the appropriate system for analysis, production, and dissemination.
- Assist in the production of daily intelligence reports for submission to higher, adjacent, and supporting units.
- Alert the company COC upon receipt of any CCIR.
- Give situation briefings/updates to key personnel.
- Process information gathered from tactical site exploitation, tactical questioning, document exploitation, detainee interrogations, and other sources.
- Monitor any company organic or assigned intelligence, surveillance, and reconnaissance (ISR) assets, such as ground sensors or unmanned aircraft (UA).
- Operate, process, and conduct training on digital camera and video assets.
- Operate COC, biometric collections, and similar systems.

- Maintain and disseminate a record of targets fired on, BDA, and targets not engaged.
- Forward the SHELREPs [shelling reports] and enemy order of battle overlays to counterfire headquarters to develop counterbattery and countermortar fire data.

The MOS 06XX communications Marine has the following responsibilities:

- Provide guidance on communications, install and maintain voice and data communications, and maintain communications equipment.
- Maintain all required communication records, such as accountability, circuit logs, and record jackets.
- Conduct over-the-air rekey.
- Employ communications security measures.
- Coordinate communications operations with the battalion communications section.

The RO has the following responsibilities:

- Assist the communications Marine with installing and maintaining voice and data communications nets and equipment.
- Operate voice and data communications nets within the company COC.
- Maintain communications and position report status boards.
- Record and disseminate all message traffic.
- Employ communications security measures.
- Maintain situational awareness of the CTP.
- Alert the company COC upon receipt of any CCIR.

Additionally, the following company members have specific functions:

- The ISR representative operates company level ISR platforms, such as unmanned ground vehicles, remote cameras, and UA.
- The fires representative plans fire support and conducts fire support coordination in conjunction with the FST and HHQ FSCC.
- The IO representative plans and coordinates with public affairs (PA), military information support operations (MISO), and other IO elements.

Information

Information allows commanders to make decisions beyond those that are purely intuitive. In a situation when a commander must make an instant decision, intuition and information previously received will form that decision. In a situation when a commander has the advantage of time between present demands and the need for a decision, the C2 architecture should provide relevant and timely information. Modern C2 systems can overload company commanders with information, which creates an environment in which the most relevant information is difficult to identify. Therefore, information must also be prioritized and organized so that the most important information is not overlooked or lost.

Awareness and understanding of the operational environment allow the company commander to anticipate future conditions, formulate CONOPSs, analyze the COA, and accurately assess risks. This awareness and understanding can be obtained only through collecting, processing, analyzing, and assessing information. Information is, in a sense, the raw material that fuels the entire C2 process. The ability of commanders to exercise command and control depends on their ability and that of their subordinates to manage that information.

Classes of Information

Information is the facts, data, or instructions in any medium or form and the meaning that a human assigns to data by means of the known conventions used in their representation. Information is what allows a commander to make decisions; however, it typically exists as a form of data before it is usable in decisionmaking. Data can lead to information, but the two are very different. Data normally passes through four classes of development before commanders use it to make decisions—raw data, processed data, knowledge, and understanding. As information moves through the information hierarchy, it becomes more valuable to the decisionmaker.

Raw data are the facts and individual pieces of information (data) that are the building blocks of processed information. Processed data come from organizing, correlating, comparing, processing, and filtering raw data and making it readily understandable to the potential user. Knowledge is the result of analyzing, integrating, and interpreting processed data, which brings meaning and value to a situation or event. Simply put, knowledge is a representation of *what* is happening. Finally, understanding is the highest level of information and the most valuable; it is an appreciation for *why* things are happening. Understanding results when personnel synthesize bodies of knowledge and then apply their experience, judgment, and intuition to reduce gaps generated by uncertainty in order to arrive at a complete mental image of the situation.

Information Characteristics

Commanders must consider the quality of the information upon which they are acting. Information is susceptible to distortion, both by the enemy (intended) and by friendly sources (unintended). All information must be evaluated to determine the quality of the data: unevaluated information from an unknown or potentially unreliable source can lead to unforeseen consequences, while quality information adds value to the decisionmaking process. Commanders may use the memory aid ARTCUBS when considering all of the attributes of quality information:

- Accuracy: information must be as accurate as possible.
- Relevance: information must apply to the mission, task, or situation; superfluous data only add friction and steal valuable time.
- Timeliness: information must be available at the appropriate place and time to be useful.
- Completeness: reports should paint as full a picture as time permits.
- Usability: the display or presentation of information to the user must be understandable and formatted to support decisionmaking.
- Brevity: information is distilled to match time constraints.
- Security: adequate protections must be in place to guard the integrity of information; however, the level of information safeguards employed must balance with the need to share information in a timely manner with those who require it.

Managing Information

Information management is the function of managing an organization's information resources for the handling of data and information acquired by one or many different systems, individuals, and organizations in a way that optimizes access by all who have a share in that data or a right to that information. Information that promotes understanding of the battlespace enables commanders to better formulate and analyze COAs, make decisions, execute those decisions with adjustments to the plan as necessary, and accurately understand results from previously made decisions.

The goal of IM is to get the right information to the right person at the right time to make the right decision faster than the enemy can. Infantry company commanders require quality information to understand situations and events and to quickly control the challenges that confront them. Management of this information is critical. The contemporary operational environment and the emerging concepts of tomorrow require force mobility, unit dispersion, and tactical agility. In the 21st century, the infantry company must be able to simultaneously share useful information with personnel at distant locations as well as support C2 processes that satisfy decisions made throughout the force. These requirements contribute to the growing information challenge facing the infantry company. Fortunately, effective IM can deliver critical information in a timely manner to those who need it in a form they quickly understand.

Information Management Actions

Information management actions—collecting, sorting, storing, analyzing, fusing, and sharing—

are those steps that increase the value and availability of information. They are the methods by which information matures from raw data to understanding (see fig. 3-1).

Information Management Techniques and Procedures

The goal of IM is to facilitate a rapid, unconstrained flow of useful information throughout an organization. As with any tactical process, IM requires codified and rehearsed techniques and procedures to achieve efficiency and effectiveness. Some common items that need to be tracked and managed include—

- Tactical and FSCMs, such as boundaries, checkpoints, and restrictive fire areas (RFAs).
- Command and support relationships.
- Troop to task, including purposes.
- Unit positions/actions, including nonorganic units with which the company may interact or from which the company may request support.
- Event tracking (friendly, enemy, other).
- Intelligence analysis.
- Unit status information, such as logistics, administration, training, or skills.
- Battle rhythm (meetings and reports).
- IRs and FFIRs.

The following important techniques and procedures help deal with the flow of this information:

- CCIRs.
- Information flow.
- Information display.
- Information reporting.
- Briefings.

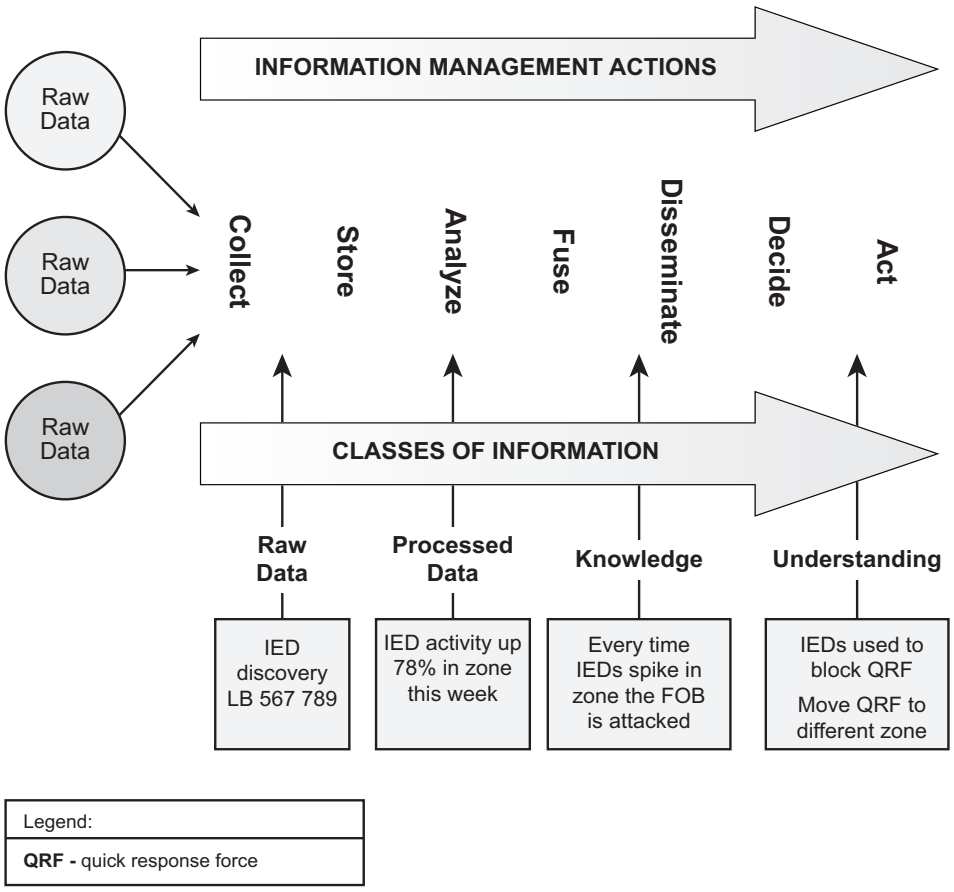


Figure 3-1. Information Management Actions and Achieving Understanding.

Commander's Critical Information Requirements

The CCIRs are information regarding the enemy and friendly activities and the environment identified by the commander as critical to maintaining situational awareness, planning future activities, and facilitating timely decisionmaking. The two subcategories are PIRs and FFIRs. (Marine Corps Reference Publication [MCRP] 5-12C, *Marine Corps Supplement to the Department of Defense Dictionary of Military and Associated Terms*) Only a fraction of the information that is theoretically available can be collected and processed rapidly enough to support combat decisionmaking. The commander, therefore, identifies CCIRs to focus and direct the collection and processing of information. Commander's critical information requirements are always associated with key decisions the commander expects to make to achieve desired results. Clearly defining these information requirements is one of the most difficult and important tasks of command. They not only influence the quantity and quality of information, but also have a direct impact on the workload of the staff and subordinate units (see fig. 3-2).

Examples of PIRs include the following:

- Indications and warning (I&W) that enemy forces reinforce.
- I&W that enemy commits reserve; identification of enemy counterattack routes.
- I&W of enemy indirect fire positions.
- Composition/disposition of enemy forces.
- Location of C2 nodes.
- I&W of employment of weapons of mass destruction (chemical/biological) within the AO.
- Location, composition, and size of enemy obstacles.
- Intention/indication of asymmetric threat to rear area.
- EPW size that is greater than a squad.
- Severe weather warning or significant weather change that poses a threat to personnel or could have high impact on operations.
- Any damage caused to civilian property.
- Any unfavorable incidents with the local populace.
- Location of CBRN delivery systems, munitions, and facilities.

Examples of FFIRs include the following:

- Significant loss in friendly combat power (squad size or greater).
- Loss of a piece of artillery; tank; aircraft; light armored vehicle; tube-launched, optically-tracked, wire-guided (TOW) missile; or breaching asset.
- Total loss of communications for 30 minutes to any unit.
- Loss of a sensitive item (such as a weapon or a pair of night vision goggles).

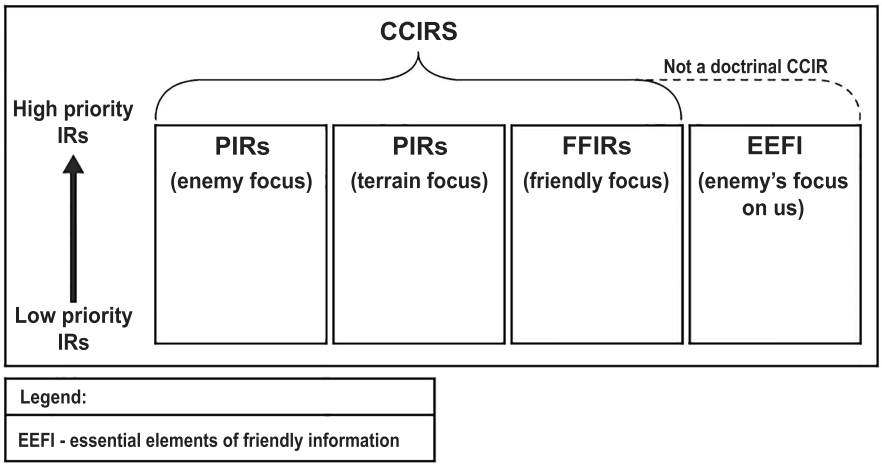


Figure 3-2. Commander's Critical Information Requirements and Information Requirements Relationships.

- Logistics/personnel problem that significantly affects operations.
- Serious injury/illness of Marine/Sailor or other attached Service members.
- Critical Red Cross message that requires immediate extraction of personnel from peacetime exercise/combat operation.
- Any spillage of petroleum, oils, and lubricants (POL) or other hazardous materials.

The compromise or loss of an ISR asset could be either a PIR or FFIR.

Information Flow

Command relationships, task organization, and information needs influence the flow of information. Company leadership must decide what it needs to know and how information must flow as a precursor to developing the proper mix of personnel, equipment, training, procedures, and infrastructure. The following principles can aid the commander in mapping the flow of information:

- Tailor information for the commander.
- Locate information in predictable locations.
- Disseminate accurate and relevant information.
- Determine what information needs to be "pushed" and what information should be "pulled."
- Balance the use of multiple sources of information.
- Ensure information flow protocols function in dynamic and steady-state operational environments.
- Create flexible and redundant procedures and plans.

Information Display

Information must be tailored and displayed so that it fits the personality of the commander. Since people retain information learned in graphic presentations at a rate four times greater than verbal presentations, information should be provided in the form of maps, overlays, and charts whenever possible (see fig. 3-3). Color-coded charts may reflect the status of a unit or system. Such displays may be generated by using either automated or manual means and should employ standard formats, terminology, and symbology in accordance with Department of Defense Military Standard 2525, *Common Warfighting Symbology*, and MCRP 5-12C. Additionally, operations maps and overlays should contain only the minimum information required for the commander to visualize the battlespace. Detail is time consuming and often hinders vice helps decisionmaking. Whether generated manually or with automated assistance, visual displays should do the following:

- Display essential information.
- Display information clearly and understandably.
- Display information accurately, reliably, and in a timely manner.
- Be designed for ease of update.

Information Reporting

Collection of information occurs in a variety of ways; however, most information comes in reports from subordinate units. One of the best techniques to track reporting requirements is the reports matrix (see table 3-4 on page 3-14). The matrix organizes required information needed by commanders and the reports that fulfill those requirements. It also helps manage reporting requirements by identifying reports not linked to commander-designated needs. Reporting requirements should—

- Focus on collecting information identified as critical—the CCIRs.
- Ensure that information collected is not redundant and that information of marginal utility is not collected.
- Appreciate the impact of reporting requirements on subordinate units.
- Report on a "by exception" basis (subordinate units only send reports forward when certain events occur or thresholds are reached, ensuring that routine information does not obscure critical information).
- Simplify and streamline reporting procedures.

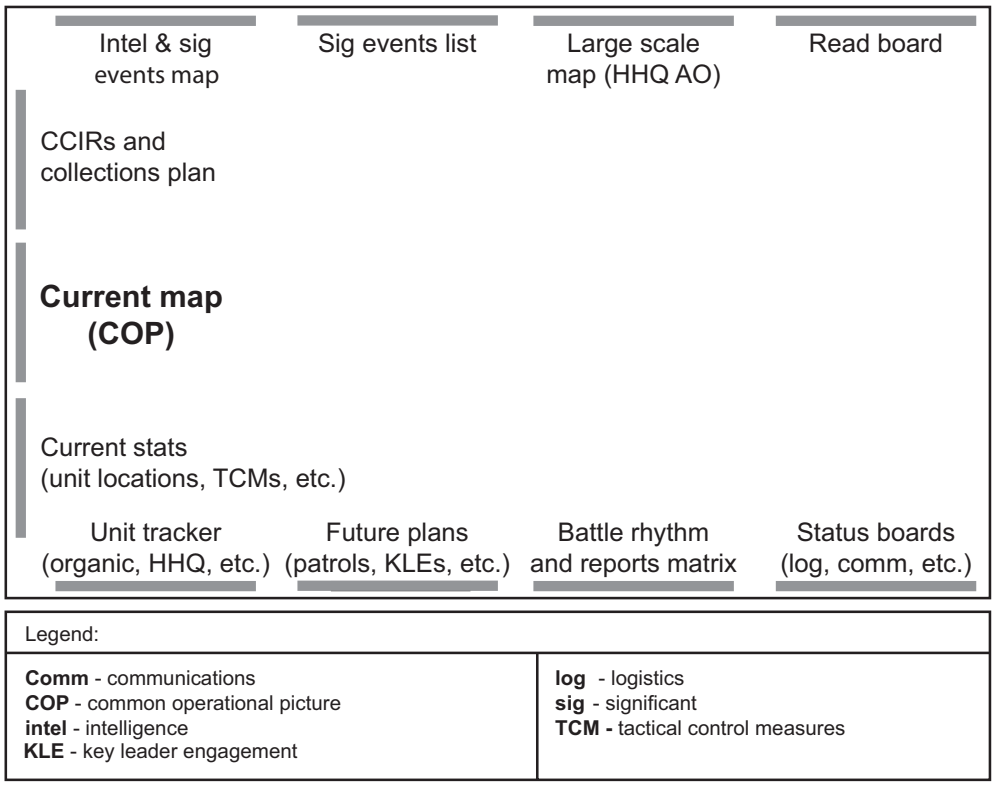


Figure 3-3. Displaying Information Example.

- Establish realistic deadlines and minimize the number and frequency of reports.
- Ensure a two-way flow of information and establish procedures for reconciliation and validation of information content.

Briefings

Briefings are designed for the rapid dissemination of information to a group of people. In garrison, briefings usually occur regularly—often weekly. In combat, briefings occur as frequently as required by the situation. Briefings should follow a formal script or format to avoid omitting important information and/or including irrelevant information. Company tactical SOPs should include formats of the common briefs (see MCWP 3-40.2, *Information Management*, for further information). Common briefs are—

- Situational update briefs, such as battle update briefs or operations/intelligence briefs.
- Transition of control brief, such as watch change over briefs or COC transition briefs.
- OPORD issuance.
- Backbriefs/CARs/rehearsal of concept briefs.
- Patrol/event debriefs, which are focused on identifying information on the enemy and the environment.
- After action briefs, which are focused on identifying friendly actions that need improvement.

Command and Control Support Structures

Command and control support structures refer to the C2 facilities, organizations, processes, and systems used to exercise command and control. The structure a command establishes to exercise control over its subordinate and supporting units and to interface with its HHQ will, to a large degree, determine the speed and tempo a command is capable of generating. Command and control support structures facilitate the rapid dissemination of relevant information up, down, and across the chain of command.

Table 3-4. Reports Matrix Example.

Information Needed	Originator	Recipient	Means of Dissemination	Report Format (text, imagery, voice, visual, data, etc.)	Time Required	Remarks
Readiness Status	Platoons	Co Cmdr	Co TAC 1	Voice	H-30	Ready to cross LD?
SALT Report	Unit in contact	Co WO	Any	Any	within 5 minutes of contact	
PERSTAT	Platoon	1stSgt	mIRC	Text	1700	Per bn format
LOGSTAT	Platoon	Co GySgt	mIRC	Text	2000	Per bn format
Debrief	Patrols	CLIC	E-mail	Text/imagery	1800	Focused on enemy and terrain
Unit AAR	Patrols	XO	E-mail	Text/imagery	1900	Focused on improving friendly actions

Legend

bn	battalion
Cmdr	commander
Co	company
1stSgt	first sergeant
GySgt	gunnery sergeant
LD	line of departure
LOGSTAT	logistics status report
mIRC	multiuser Internet relay chat
PERSTAT	personnel status report
SALT	size, activity, location, time
TAC 1	primary tactical control net

Command and control support structure is more than advanced technology and equipment; it is the integrated use of capabilities, procedures, and infrastructure to support the command and control and decisionmaking processes. Command and control support structures aid the people who create, disseminate, and use information in order to achieve effective decisions. An effective C2 support structure provides labor/time savings, dissemination, and graphic support: it is able to perform C2 processes, such as sorting information, more quickly than manual methods; it allows the simultaneous transfer of information and knowledge to many users even if they are not in the same geographic location; and an effective C2 support structure can take volumes of tabular data and transform it into a format that enables personnel to quickly gain meaningful and comprehensive understanding of the situation or event.

Command Posts

To exercise command and control in combat, units establish CPs. Command posts provide the headquarters from which commanders and their staffs operate. Mission, resources, and operational environments will dictate the form of CP a company establishes, but the enduring requirement is that commanders must have access to the information they need to make decisions and the communications necessary to disseminate those decisions. Company CP configuration must balance capability requirements with the need for tactical mobility and the desire to directly/indirectly influence subordinates. Although designing a CP should be a function-centric activity, mobility and resource constraints will often dictate the final composition/design of a CP (see fig. 3-4).

A subset of the CP is the COC. The heart of a CP, the COC is where the current fight is managed and through which most information flows. As an IM tool for the commander, the COC serves as a one-stop shop to gain situational awareness and to disseminate orders.

Company Forward Command Post/Combat Operations Center

In its most basic form, the company CP can consist of the company commander, the RO, and the FST.

A forward CP sacrifices some capabilities, such as robust communications pathways and the ability to conduct detailed planning, to gain the advantages of mobility, proximity to the fight, and proximity to subordinate leadership. Common forward CP configurations include foot mobile, vehicle mobile, and semifixed. Figures 3-5 and 3-6, on page 3-16, and figure 3-7, on page 3-17, offer examples of each type of CP configuration.

Company Main Command Post

As an operational environment matures or as the mission and factors of METT-T dictate, the infantry company commander can choose to establish a robust CP that leverages the full availability of C2 systems. While the size and capabilities of the CP change depending on C2 requirements, a CP is typically considered a main CP when detailed planning can occur and all warfighting functions can be fully integrated. An example of a main COC is depicted in figure 3-8 on page 3-18.

Company commanders consider the following factors and principles when establishing a CP:

- Mission.
- Operational environment.
- Space and facilities available.
- Lines of communications (LOCs) and LZs.
- Functions to be controlled in the COC, such as the common operational picture, intelligence and targeting, fires, logistics, planning, and FP.
- Security.
- Power.
- Sanitation.
- Communications.
- Logistical supportability.
- Proximity to higher, adjacent, and supporting units.
- Cultural and population factors.

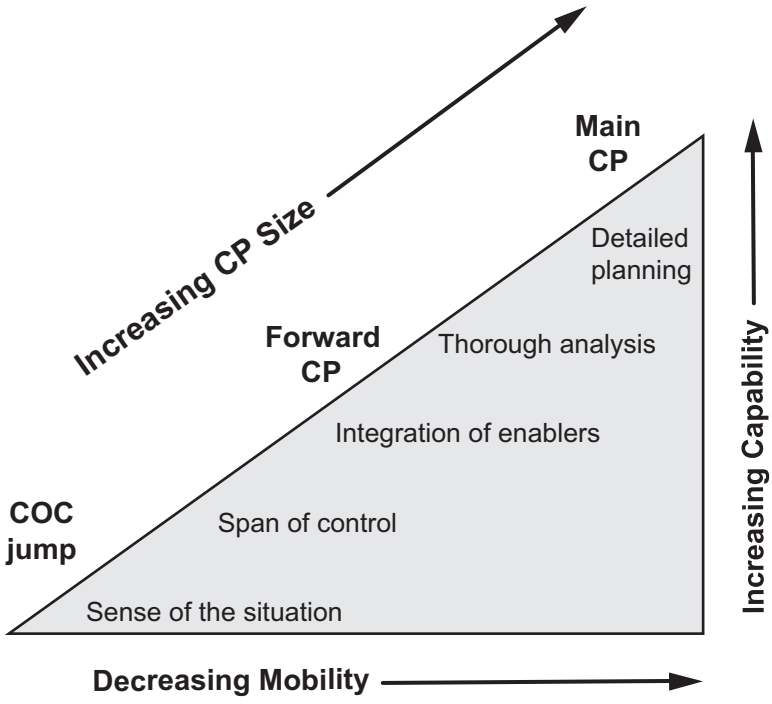
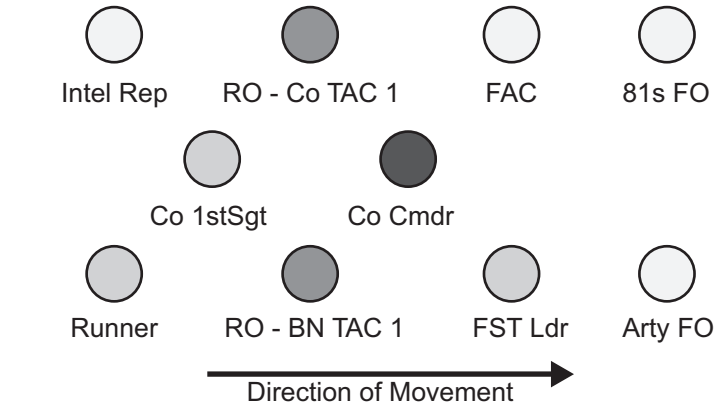
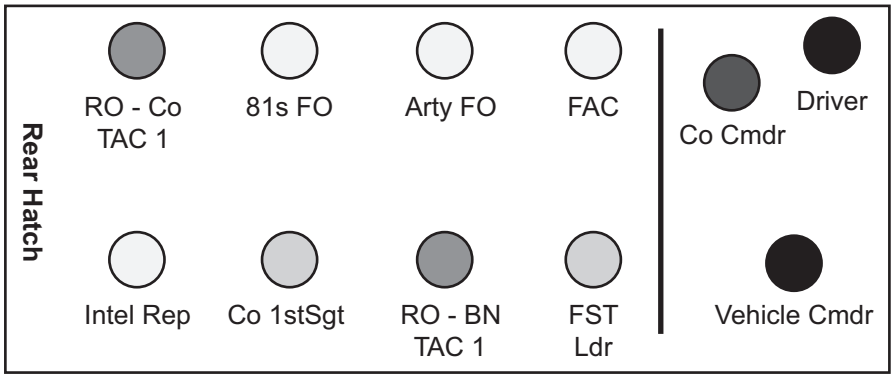


Figure 3-4. Effects of Requirements on Command Post Configuration.



Legend:
arty - artillery
bn - battalion
cmdr- commander
co - company
FAC - forward air controller
intel - intelligence
ldr - leader
rep - representative
sgt - sergeant
TAC 1 - primary tactical control net

Figure 3-5. Foot Mobile Combat Operations Center.



Legend:
arty - artillery
bn - battalion
cmdr - commander
co - company
FAC - forward air controller
intel - intelligence
ldr - leader
rep - representative
sgt - sergeant
TAC 1 - primary tactical control net

Figure 3-6. Amphibious Assault Vehicle Combat Operations Center.

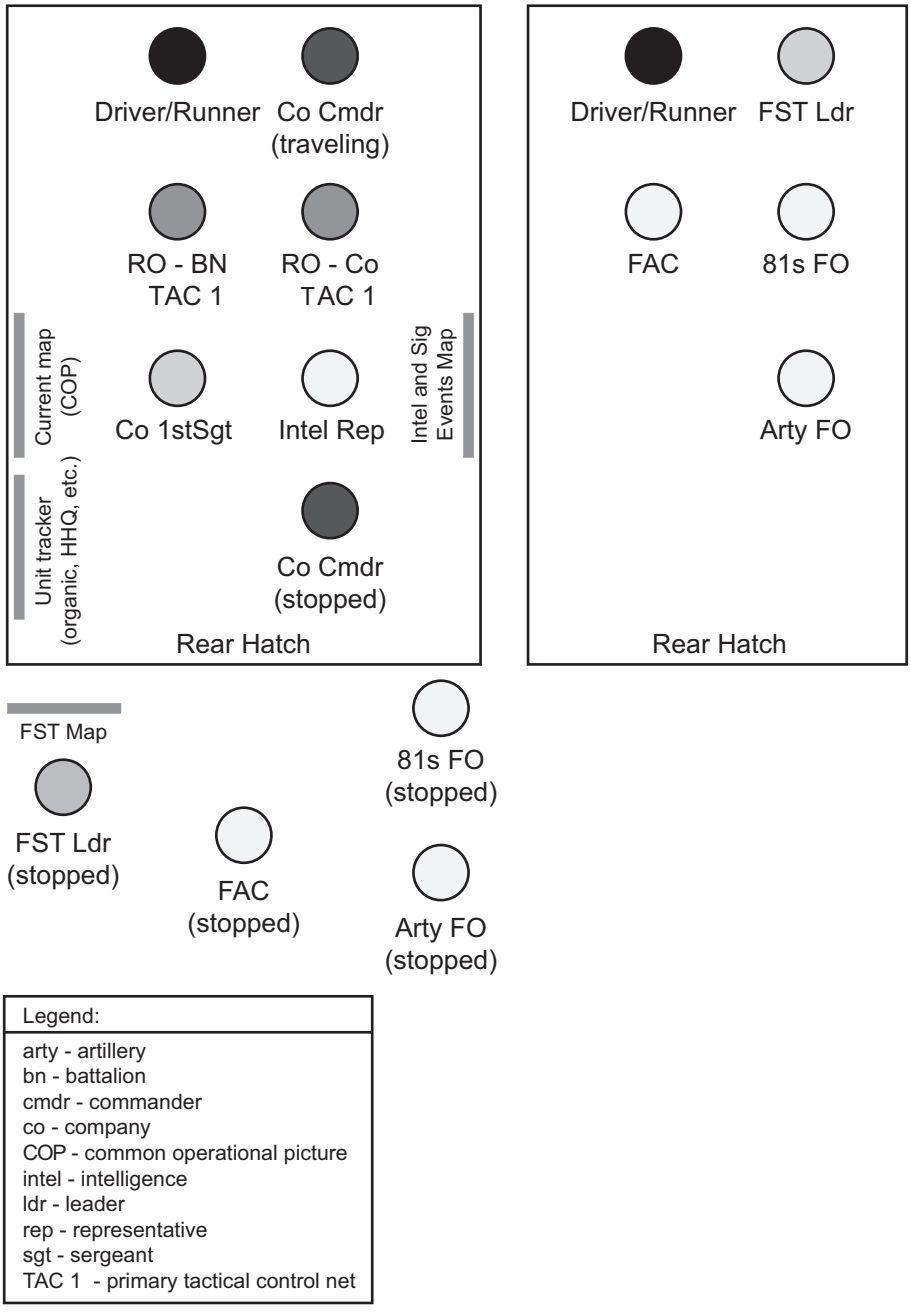


Figure 3-7. Vehicle Based Forward Combat Operations Center.

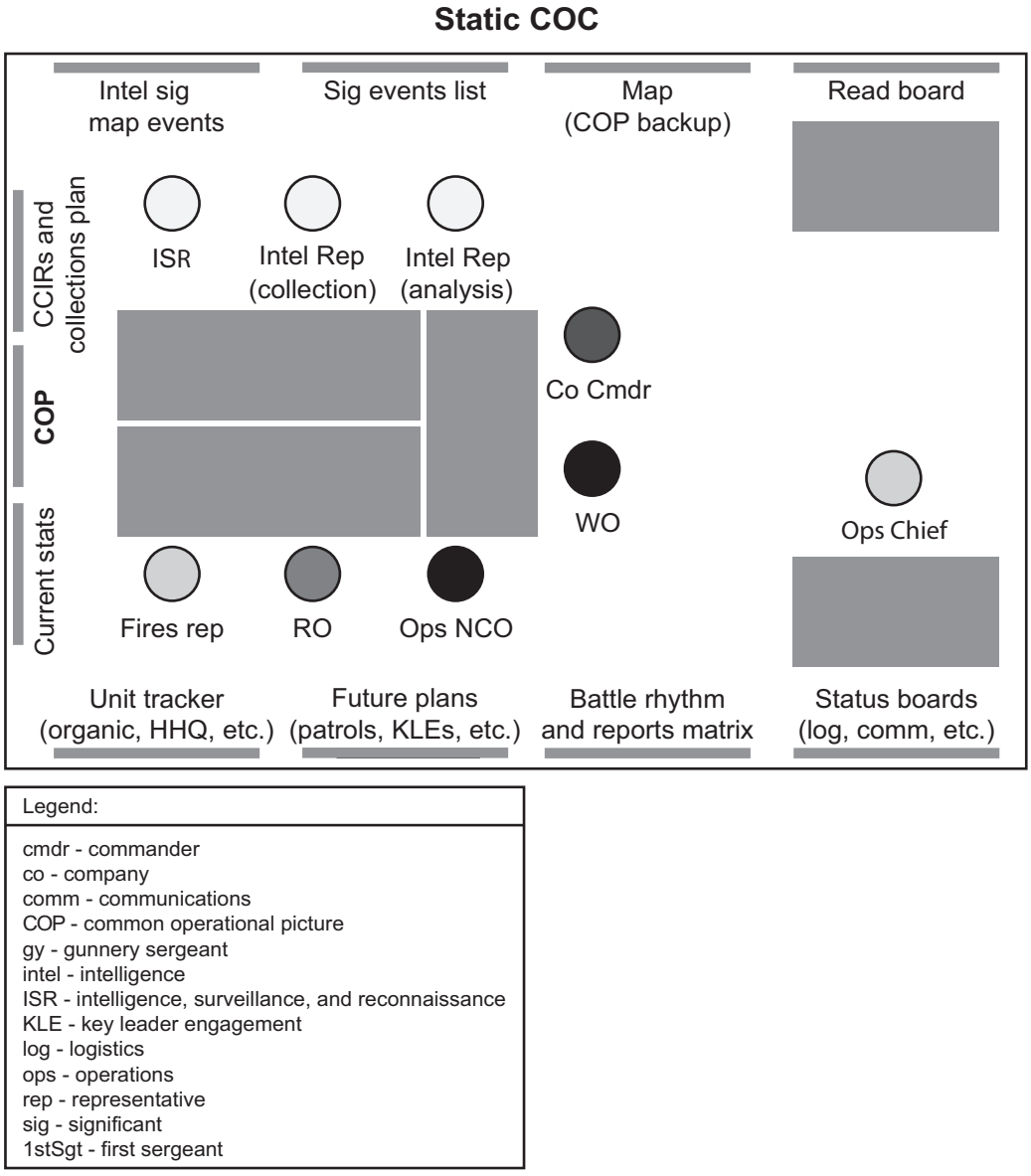


Figure 3-8. Main Command Post.

Jump Command Post

Typically, infantry companies cannot divide the command group or the CP into two elements due to resource constraints; however, company commanders often desire to project their presence forward of the company CP, forming a jump CP. The composition of the jump CP must facilitate command for a limited period but not necessarily full control. Company commanders must consider the effect that forming a jump CP will have on the ability of the CP to exercise control. In those circumstances when the mission requires the company to establish the capability to form main and/or forward command posts, or alpha and bravo command groups, the company will require personnel and equipment augmentation. Table 3-5 addresses the advantages and disadvantages of different COC configurations.

Command and Control Processes

Command and control processes are the "rules" that govern command and control. Properly designed C2 processes ensure the accuracy, speed, and thoroughness of repetitive or anticipated C2 events. One of the most important C2 processes, IM, was discussed earlier in this chapter; other key C2 processes that facilitate accurate, speedy, and thorough command and control are the battle rhythm and battle drills.

Battle Rhythm

There is too much information flowing—in both peace and war—to process it all at once. To enable an orderly information flow that supports decisionmaking, the IM plan must determine when and how company leadership receives information and disseminates decisions. This management of information flow is a battle rhythm. It is a collection of recurring or singular command and staff actions. These actions include reports, meetings, inspections, rehearsals, planning events, and briefings. Command and staff actions requiring input, output, or participation by HHQ and those of specified interest to the company leadership

Table 3-5. Capabilities and Limitations of Combat Operations Center Configurations.

COC Type	Capabilities	Limitations
Jump	Commander can DIRECTLY influence events or gain personal situational awareness and can readily guard/communicate on tactical nets Commander places himself/herself at the point of greatest friction in order to influence the situation Small, light, fast Reactive Indirectly control fire support coordination Inherent security with tactical unit	Loss of greater situational awareness both in scope (higher, adjacent, subordinate, support) and scale (depth of understanding) Cannot readily guard secondary nets Cannot make informed decision beyond the immediate fight Cannot directly supervise fire support coordination Requires adjusting unit's normal security procedures
Forward	Can communicate with higher and adjacent commands, all subordinate commanders, and fire support assets Can be mobile Can use limited digital assets to assist in the control of the tactical situation Can conduct limited planning in context of coordinating consolidation and immediate follow-on actions	Limited communication with higher, adjacent, and support Limited access to data Limited ability to conduct planning beyond immediate fight Number of key personnel limited by size/space of facility/vehicle Requires external security Increased power requirements
Main	Can communicate with higher and adjacent commands, all subordinate commanders, and fire support assets Can directly supervise fire support coordination and all aspects of command and control Can conduct detailed planning	Time intensive displacement Requires intense FP Increased power requirements

become part of the battle rhythm. The intended objectives of the battle rhythm are to—

- Provide an opportunity for the company staff to synchronize its efforts.
- Enforce standardized information reporting, briefing, and orders formats.
- Enable timely communication.
- Generate tempo and unity of effort.
- Lower friction through shared situational awareness.
- Facilitate the flow of information.
- Facilitate effective time management in a chaotic environment.

While the company commander is responsible for an effective company battle rhythm, the company XO normally supervises its functioning and continually evaluates it for efficiency. Battle rhythms exist across several time horizons, such as daily, weekly, monthly, quarterly, and annually; events occurring in one can have a cascading effect on subsequent events across all. Figure 3-9, on page 3-22, is an example of a daily company battle rhythm.

Battle Drills

Battle drills assist with IM and decisionmaking in COCs. Done correctly, battle drills accomplish the following:

- Accelerate information flow.
- Ensure thorough coordination.
- Enforce proper sequencing of actions.
- Raise situational awareness.
- Preclude actions from being skipped or overlooked.
- Allow less experienced personnel to deal with complex or simultaneous events.
- Maintain and improve COC proficiency.

Three significant battle drills are resynchronization, transition of control, and critical events. Resynchronization must be part of a daily battle rhythm and an immediate action drill when company commanders determine they and the company staff have lost situational awareness. Within the normal battle rhythm, the battle update or operations and intelligence brief accomplishes the resynchronization function. The transition of control battle drill occurs when control of the current fight shifts from one person to another or from one CP to another; examples include the watch section change over and the CP transition checklist.

Resynchronization. The commander should adjust the format and content as the phases or demands of the mission shift; however, the following items are typically briefed:

- Unit locations and actions (past/present/future).
- Current company mission and assigned tasks.
- Enemy status.
- Environmental status, such as weather, terrain, and LOCs.
- Human environment status, such as changes to leadership.
- Significant events.
- Tactical and FSCMs.
- Synopsis of past actions.
- Synopsis of planned future actions.

Transition of Control Brief. A proper transition change requires a period of overlap between the oncoming and offgoing watchstander and COC in order to ensure continuity of situational awareness. An example of a transition brief can be found in figure 3-10 on page 3-23.

Critical Events Drills. Critical events drills (see fig. 3-11 on page 3-24) are immediate actions taken by the staff upon enemy, friendly, or environmental actions or changes. They include—

- Unit in contact.
- Missing Marine.

- Attacks by the enemy.
- Cross-boundary coordination, such as fires and maneuver.
- Improvised explosive device (IED) discoveries.
- Cache discoveries.
- CASEVACs.
- Intelligence alerts.
- Downed aircraft or vehicle.
- Chemical attack.
- Loss of communications with a unit.
- Fratricide incidents.

Command and Control Systems

The success of the infantry company in today's operational environment depends heavily on the effective employment of communications systems. Communications systems speed and/or automate routine functions, freeing company commanders to focus on those aspects of command and control that require experience, judgment, and intuition. Therefore, C2 systems and the personnel who operate and maintain them play a critical role in command and control. It is important to emphasize that C2 systems do not replace a commander's knowledge and proficiency, but are tools to enhance rapid exchange of reliable information. Command and control systems facilitate—

- Rapid dissemination of information and decisions.
- Generation of relevant information.
- Identification and prioritization of time-constricted information.
- Efficient information flow up, down, and across the chain of command.

While individual C2-related systems change quickly, all fall into one of three basic categories—voice-, text-, or graphics-based. Each category has advantages and disadvantages that are subject to change as new systems enter and leave the Marine Corps C2 architecture. Company leaders must understand systems well enough to make decisions on use (such as timing, volume, or priorities) but must not become reliant on any specific system(s). Changes to operations and environments will increase or decrease the value of individual C2 systems and the value of these individual systems must be considered within the context of the whole C2 plan. For example, e-mail is a good method of disseminating information in a static environment, but it is often unavailable or too slow in a dynamic fight.

Time Activity
2345 - WO changeover
2345 - RO changeover
0000 - CONOPS report due to HHQ
0000 - Operations and intelligence NCO prints digital watch log and places in binder
0530 - Platoon position reports due to company
0545 - Operations and intelligence NCO changeover
0600 - Platoon personnel updates due to company
0630 - Platoon logistic status due to company
0630 - Company position reports to HHQ
0645 - Company entry control point status reports due to HHQ
0730 - Collections element changeover
0745 - WO changeover
0745 - RO changeover
0745 - Analysis element changeover
0800 - Concept of operations report due to HHQ
0900 - Company targeting board
1130 - Platoon position reports due to company
1200 - Intentions message due to HHQ
1230 - Company position reports due to HHQ
1345 - Operations and intelligence NCO changeover
1400 - Company personnel updates due to HHQ
1430 - Company logistic status due to HHQ
1530 - Collections element changeover
1545 - WO changeover
1545 - RO changeover
1545 - Analysis element changeover
1700 - Situation update brief
1930 - Platoon position reports due to company
2000 - Intentions message due to HHQ
2030 - Company position reports due to HHQ
2345 - WO changeover

Figure 3-9. Daily Company Battle Rhythm Example.

Location of friendly units
Location of enemy units (CTP, map)
Current SALUTE

CCIRs:

Company commander alerted IMMEDIATELY upon being reported

Aviation:
- Status of A/C in support
- Information on friendly and enemy air defense

Plans of units (anticipated movement times, etc.):
- Scheme of maneuver
- Designation of main/supporting units

Fires:
- Ammunition situation:
  - Current 60-mm round count
  - Any unit ammunition shortages
- Location of 81-mm sections/platoon
- Location of artillery battery in the company AO
- Location of artillery units in range of the company AO
- Routes, times, destinations of displacing artillery units
- Location of 60-mm section
- FSCMs:
  - All FSCMs in effect
  - Planned FSCMs
- Target updates
- Communications:
  - Check status of all nets in CLOC
  - Immediately report to the bn S-6 loss of comm with units
- Logistics by class and status
- Personnel:
  - PERSTAT
  - Casualty status
  - Locations:
    CO, XO, 1stSgt, Gunnery Sergeant, Operations Chief, intelligence representative, and FSC
- CASEVAC plan
- CP in good state of police

Legend:	
A/C - aircraft	1stSgt - first sergeant
bn - battalion	mm - millimeter
CLOC - company level operations cell	PERSTAT - personnel status report
comm - communications	SALUTE - size, activity, location, unit, time, and equipment

Figure 3-10. Sample Watch Shift Brief (Transition of Control).

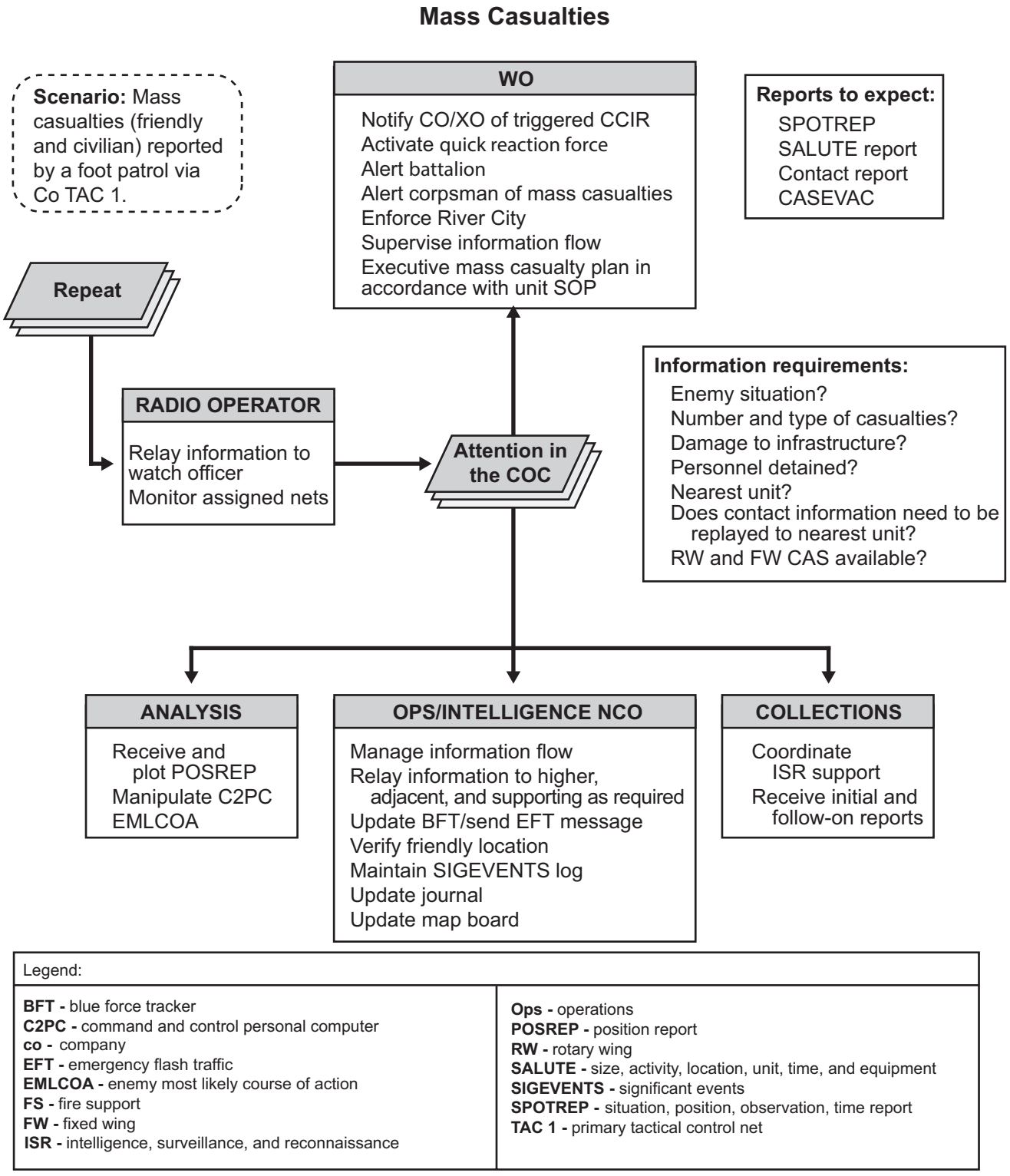


Figure 3-11. Critical Event Battle Drill.

CHAPTER 4
INTELLIGENCE

The company's intelligence specialist executes appropriate intelligence functions with the assistance of the Marines that form the company COC. These functions do not necessarily require a separate cell or group of Marines within the COC; however, when appropriate to the mission, the company commander may choose to augment the intelligence specialist with additional Marines to form a CLIC.

The requirement for intelligence does not go away in a lethal fight or in situations when the mission dictates a rudimentary COC. Even in the most conventional methods of company employment, there are often other intelligence assets operating in the company commander's battlespace. The company commander should never assume that because the company does not control these assets that these other assets could not assist in the company's mission. Rather, the company commander should ensure that he/she plans for and coordinates the use of these assets. Often, when an opportunity to use a nonorganic asset occurs, the individual who possesses a ready plan will be able to seize that opportunity; whereas, the commander who does not loses the opportunity.

Company Commander's Role

Intelligence is an inherent responsibility of command, and the commander must remain closely involved in the daily activities of the COC. While the company's intelligence specialist supports this command function, he/she does not take responsibility for it and is supervised by the commander and company leadership.

Evaluating Intelligence

The commander should evaluate intelligence from both the COC and HHQ. A unit should not act on intelligence from HHQ without determining if it makes sense based on the commander's assessment of the battlespace. To improve the quality of intelligence that commanders receive, they need to regularly coordinate with and provide feedback to the intelligence specialist, COC Marines, and the battalion intelligence officer.

Establishing Priority Intelligence Requirements

In addition to those received from HHQ, company commanders need to designate their own PIRs. Company commanders should not simply restate HHQ PIRs; rather, they should determine what local PIRs best enable them to support their portion of the mission—both horizontally with adjacent units and vertically with senior and subordinate commands.

A company's PIRs are specific to its AO, aid the commander in making decisions, and should be adjusted and updated as the situation changes. Priority intelligence requirements allow the company commander to provide focus and direction to the company's limited collection assets. In the same manner that specified and implied tasks in problem framing are not automatically essential tasks, PIRs are not automatically CCIRs, though it is highly likely that CCIRs will be drawn from select PIRs.

While there is not a limit to the number of PIRs a company commander can designate, it is not possible for everything to be a priority. Company commanders should designate any number of

information requirements, and then ruthlessly determine and aggressively evaluate the PIRs. This methodology, coupled with associating locations and times with PIRs, will enable the COC and subordinate elements to focus their efforts.

Integrating Intelligence Assets

Company commanders need to integrate and coordinate the activities of all of the intelligence assets operating in their battlespace. Many of these will not work directly for the company; however, these assets still need to be aware of the company's scheme of maneuver. The commander needs to develop an appreciation for the capabilities and limitations of these assets to employ them properly. The battalion intelligence officer or an intelligence specialist, if assigned to the company, can assist with the commander's understanding.

Staffing the Combat Operations Center

One of the most important decisions a commander will make is the selection of Marines needed to augment the COC when necessary. The company commander should not plan on external personnel augmentation, but will most likely pick these Marines from within the company. The value the company gets out of the COC depends upon the Marines who serve there. As discussed in chapter 3, types and configurations of C2 support structure will vary with the mission. Infantry company commanders assume the need for a robust configuration and begin forming and training the COC staff early in a unit's training cycle. Once deployed, commanders may tailor the size according to the need.

Intelligence Preparation of the Battlespace

Intelligence preparation of the battlespace begins during problem framing and is a systematic and continuous process throughout operations. By assisting the infantry company commander in understanding the nature of the problem, the environment, and the threat, IPB provides a starting point for further functional and detailed planning. The company's intelligence specialist assists in developing and updating IPB products. Company commanders may choose to use such tools as key terrain, observation and fields of fire, cover and concealment, obstacles, and avenues of approach (KOCOA) to express the results of the company IPB process to subordinate units. Before beginning the IPB process, company commanders determine the time available for planning and tailor their IPB priorities and guidance accordingly. In extreme cases, IPB may consist of mental and verbal processes only (see chap. 3 for further discussion of the use of intuitive decision-making). There are four steps of IPB:

- Define the battlespace environment.
- Describe the battlespace effects.
- Evaluate the adversary.
- Determine adversary COAs.

Step 1: Define the Battlespace Environment

The company commander normally receives an assigned AO from HHQ, which normally forms the basis for the company's battlespace. As seen in figure 4-1, the battlespace may be contiguous or noncontiguous. How company commanders further define and refine their battlespace is crucial to focusing the IPB efforts on those areas where activity will occur. Part of this definition is the identification of significant characteristics of the physical terrain and human environment.

Area of Influence

Company commanders must then determine their area of influence (AI). The AI is the geographical area that the commander can affect with maneuver and fire support systems normally organic to the company. This area can be determined simply by overlaying range rings for all organic weapon systems. It is possible that the AI and AO are the same. Conversely, the AI may geographically extend beyond the commander's defined AO. The AI is important to company commanders, as what occurs in areas around

them will usually influence the manner in which they execute their missions.

> **EXAMPLE**: A company commander is defending a battle position as the battalion's main effort. Within the range of the company commander's 60-mm mortars is an adjacent company's battle position. The nearby company is a supporting effort assigned to protect the main effort's flank. During planning, the commander should consider the ability to influence this fight through disruptive or delaying fire from the company's 60-mm mortars if the supporting effort was to fail. During execution of operations, the company commander should be interested in the success of this supporting effort and should have assigned, event-driven decision points regarding when and if to shift mortar fires outside of the company's battlespace to a portion of the AI.

Area of Interest

To focus intelligence support on threats that can influence the AO, the AOI is determined. As demonstrated in figure 4-2, on page 4-4, this area includes the AO, the AI, and all other areas from which threats may originate that would affect current or planned operations. Geography, time, event, or various combinations of these may orient potential threats. Determining the appropriate size for the AOI is critical; too small of an AOI results in missed reporting on threats outside of the AO and too large of an AOI results in information overload due to excess reporting.

> **EXAMPLE**: A company commander receives a mission to move into an area to conduct a cordon and search. While the assigned boundaries support the commander's conduct of the operation on the ground, the threat's ability to mass and move people to conduct civil disturbances that would stress the company's cordon will likely originate from a nearby village that lies in another battalion's AO. This village lies outside the company commander's AO and AI, but will form part of the AOI, since what occurs there will affect the cordon and search. During planning, the company commander should identify this portion of the AOI and develop PIRs and IRs that give early indications of a threat to the company's cordon.

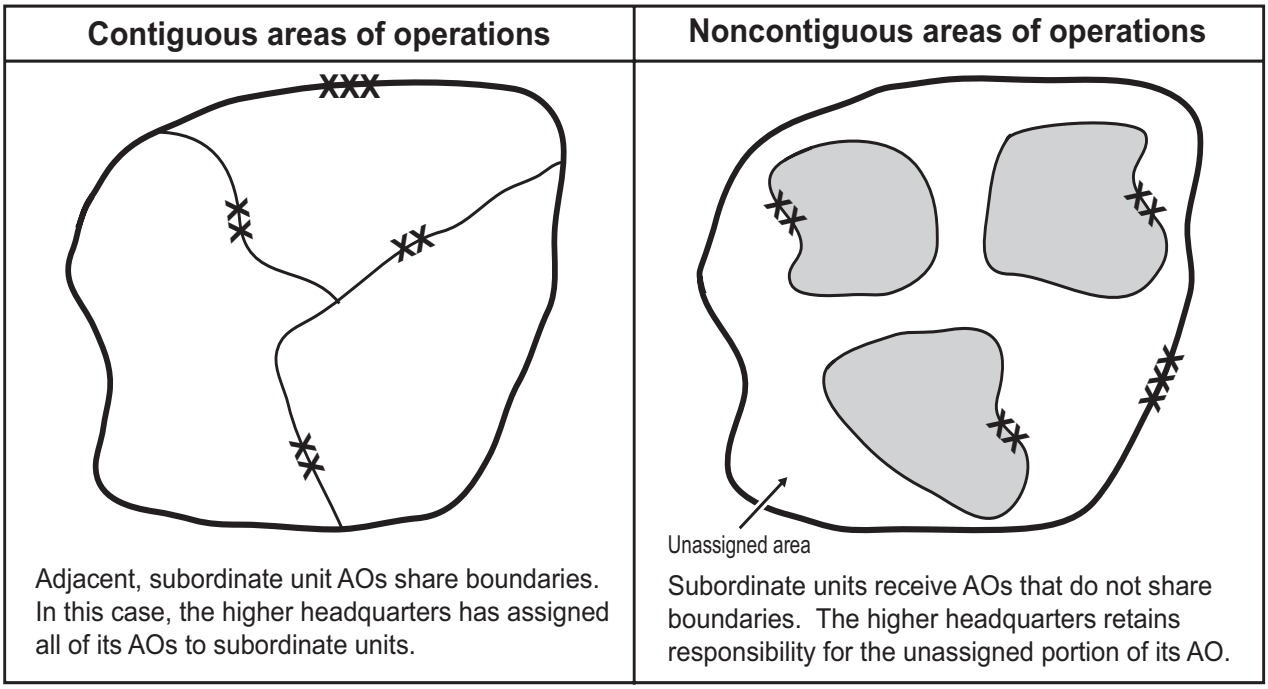


Figure 4-1. Areas of Operations.

Step 2: Describe the Battlespace Effects

Collecting and analyzing information on the environment determines its effects on friendly and enemy operations as well as the local populace. The environment consists of two distinct components—weather and terrain.

Weather

While HHQ provides weather forecasts, companies are responsible for determining their own assessments of how weather impacts friendly and enemy operations. Tables 4-1 and 4-2 provide examples of graphical depictions of weather effects on operations.

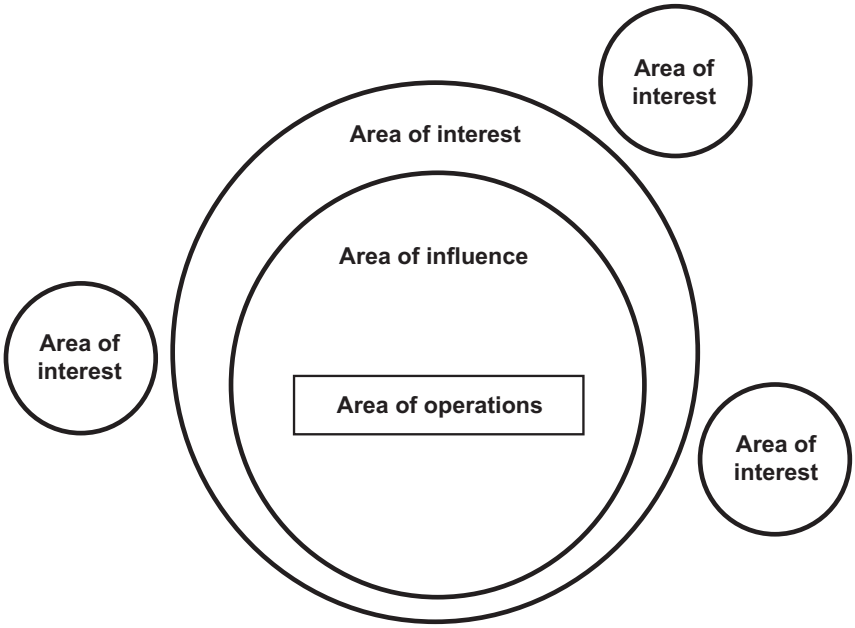


Figure 4-2. Relationship Between Area of Operations, Area of Influence, and Area of Interest.

Table 4-1. Weather Effects on Operations Over Time.

	16 Apr 08	17 Apr 08	18 Apr 08	19 Apr 08	20 Apr 08
Intelligence					
Maneuver					
Logistics					
C2					
FP					
Fire support					
Air support					
Local populace					

Legend:
No impact
Marginal impact
Adverse impact

Table 4-2. Weather Effects on Friendly and Enemy Forces.

Weather Impact: Friendly Forces

Operation	Valid as of:			
	24 h	48 h	72 h	96 h
Deep air support				
Close air support				
Assault support				
AAW/SEAD				
Ground operations				
Airborne operations				
Communications				
CBRN/smoke				
UAVs				

Weather Impact: Enemy Forces

Operation	Valid as of:			
	24 h	48 h	72 h	96 h
Deep air support				
Close air support				
Assault support				
AAW/SEAD				
Ground operations				
Airborne operations				
Communications				
CBRN/smoke				
Special forces				

Legend:	
Unfavorable Marginal Favorable	**AAW** - anti-aircraft warfare **h** - hours **SEAD** - suppression of enemy air defense

Terrain

The terrain evaluation conducted by HHQ directly affects the placement and assigned mission of the company. The company commander is responsible for continuing terrain evaluation at the company level, to include human environment and culture as appropriate. General considerations of physical terrain (such as slope, surface configuration, vegetation, hydrology, soil types, LOCs, and urban areas) help define avenues of approach and obstacles in all types of operations—offense, defense,

and stability. Analysis of the human environment and culture begins with information available from the HHQ IPB process and is refined by the company through turnover products, patrols, and other local intelligence-gathering efforts. Figure 4-3 shows the flow of weather and terrain analysis and the products generated by that analysis.

Step 3: Evaluate the Adversary

Proper evaluation of the enemy allows the company commander to begin predicting likely enemy actions. Following the IPB process automatically produces adversary threat models with greater and greater detail, which is important to company commanders because planning time is always at a premium and it is impossible to plan for every contingency. If done correctly, company commanders can walk away from the planning process at a moment's notice with one or more predictions of enemy action around which they can plan. These models depict who, where, when, why, and how the adversary is likely to fight.

Over time, adversaries develop patterns that can be studied through their written doctrine and publications and observed in their military exercises and battlefield actions. Graphical depictions of these operational patterns are adversary templates. These baseline enemy threat models depict enemy actions without the constraints of terrain and weather. As its name implies, the adversary template is a depiction of what the enemy would do if they followed their doctrine perfectly, such as where they would place artillery, where they would place logistic trains, and how they would organize the forward battlespace. Higher headquarters usually disseminates adversary templates to infantry companies (see fig. 4-4). When the enemy does not consist of conventional military forces, observed enemy actions generate adversary templates that usually originate at the company level.

The company's intelligence specialist and CLIC collect data from enemy activities, assesses trends and patterns, and creates a common profile (see fig. 4-5 on page 4-8). The profile serves as the adversary template for these types of threats while identifying any gaps in current information that need to be satisfied through collection efforts.

Step 4: Determine Adversary Courses of Action

Combining adversary templates with the effects of terrain and weather produces situation templates.

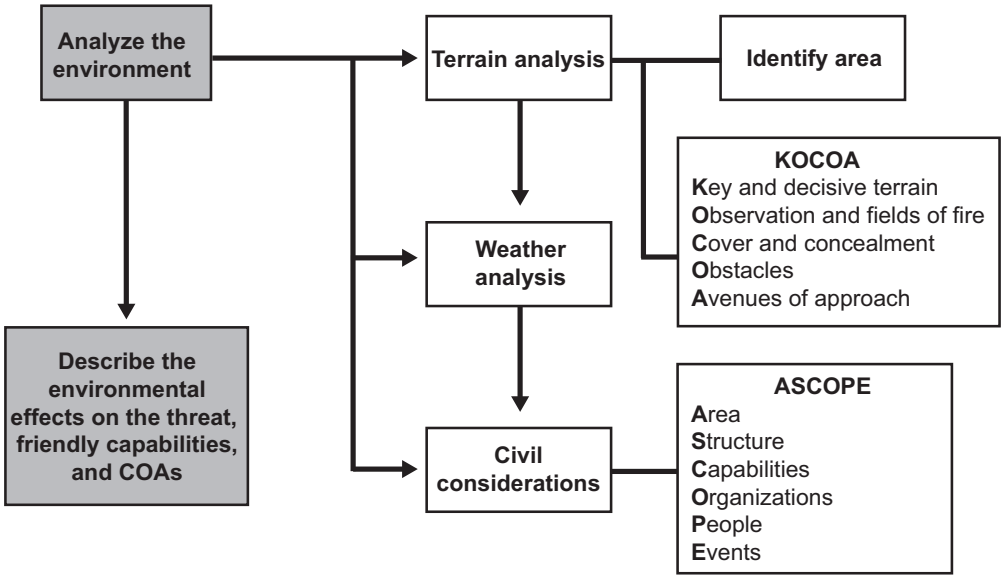


Figure 4-3. Weather and Terrain Analysis Flowchart.

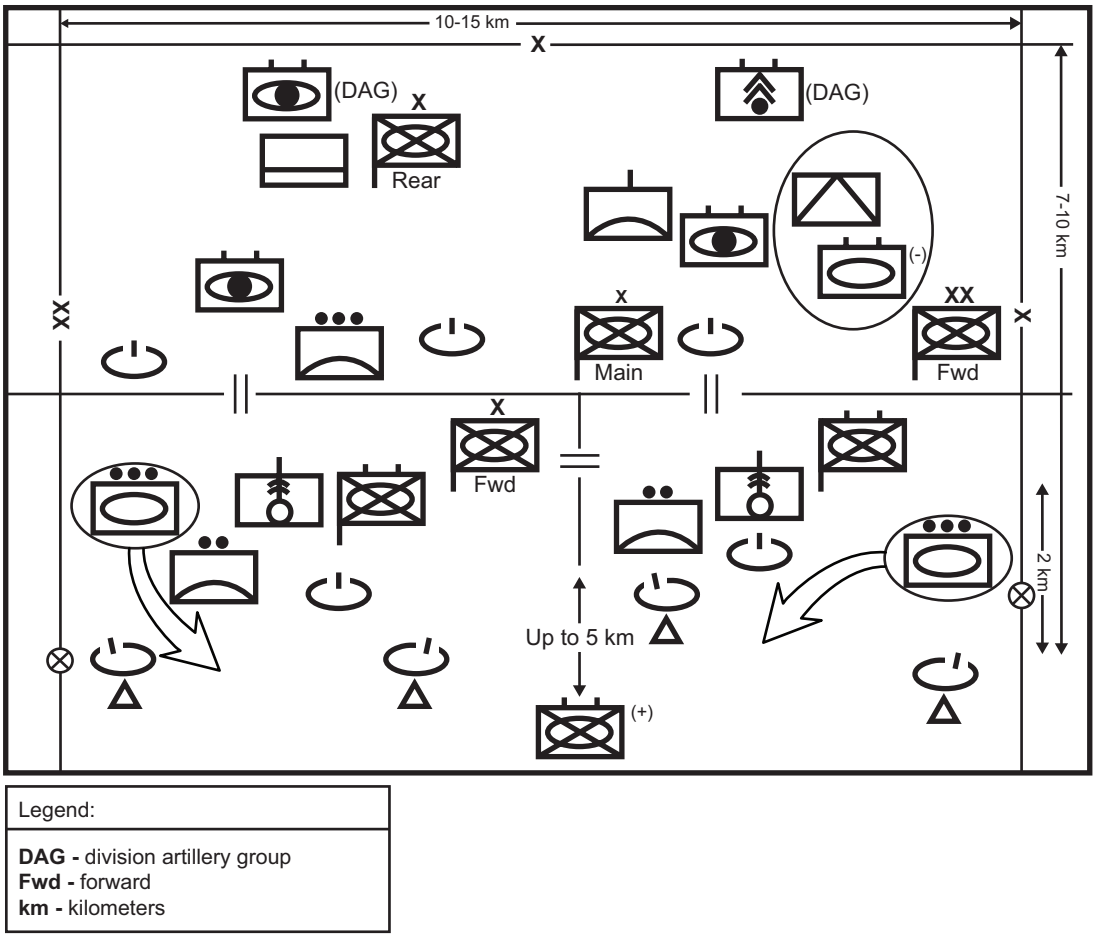


Figure 4-4. Adversary Template Provided by Higher Headquarters.

Situation templates predict what the enemy would do if they applied their doctrine to their current place and situation. Applying enemy threat models to the actual situation in order to produce situation templates requires company commanders to make informed and reasonable decisions. The thought process behind these decisions is what allows the company commander to determine the enemy's most probable and dangerous COAs (see fig. 4-6 on page 4-9). Company commanders must ask themselves the following questions:

- What will terrain and weather force the enemy to do?
- Does terrain exist that would allow the enemy to do what they would most like to do? If so, where is that terrain?

EXAMPLE: The adversary template predicts that the enemy will place mortars 1 to 3 kilometers behind its forward positions. Considering the effects of terrain and weather, the company commander determines that to do so would mean the enemy placing mortars in the middle of a swamp. In creating a situation template, the company commander determines that the enemy will probably place mortars on the far side of the swamp, where they can more easily displace if necessary. In making this decision, the company commander is simultaneously creating a situation template and establishing possible enemy most likely and enemy most dangerous COAs. When the company commander completes the process, developing an effective plan for neutralizing or destroying the enemy mortars is easier and more accurate.

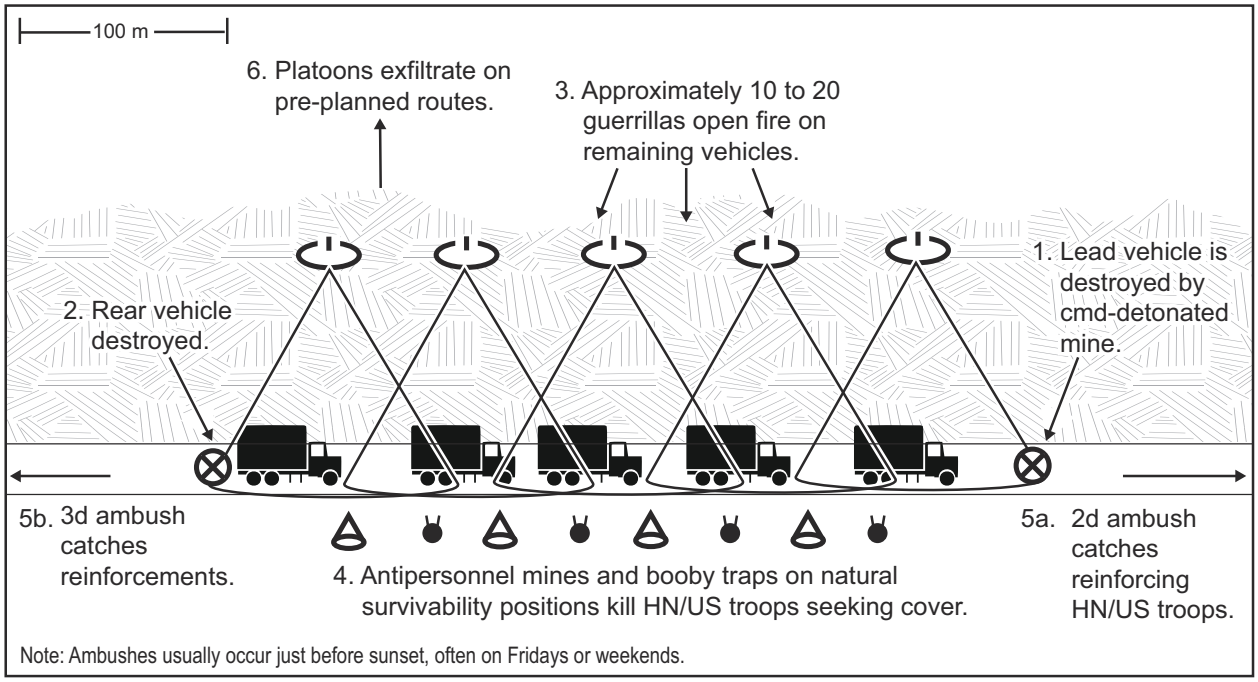


Figure 4-5. Adversary Template Produced by the Company Level Intelligence Cell.

Event Templates

Through the process of creating the situation template and determining enemy courses of action (ECOAs), company commanders must also determine how they think operations will unfold. If the situation template represents the initial array of threat forces in the battlespace, the event template seeks to predict movement and countermovement across time. From this analysis, company commanders can begin to determine what events, indications, and decisions are required at what times and in what places. Company commanders should draw annotations of time on the template to show what the enemy will be doing and where they will be doing it at a specific time. The longer and more detailed the operation, the greater the requirement for multiple event templates. Total time depicted on event templates should at a minimum cover the duration of the company operation. Figure 4-7, on page 4-10, is an example of an event template.

EXAMPLE: Company F is planning to execute a cordon and search on a suspected bombmaking factory. Adversary templates indicate Company F can expect a sniper threat to become active within 20 minutes of setting up a cordon and that most sniper shots occur within 100 to 150 meters of the target. Through careful analysis of the terrain, the company commander and intelligence specialist create a situation template that indicates most likely positions from which snipers may engage the company's cordon. The company commander and intelligence specialist then create an event template that predicts at what time and from where the snipers could become active. The event template includes preplanned and on-call adjustments to cordon positions to throw off potential sniper shots while assigning counter sniper assets to overwatch identified, likely enemy sniper positions and ingress/egress routes.

Event Matrix

To best depict phases of the event template, an event matrix that shows individual components in

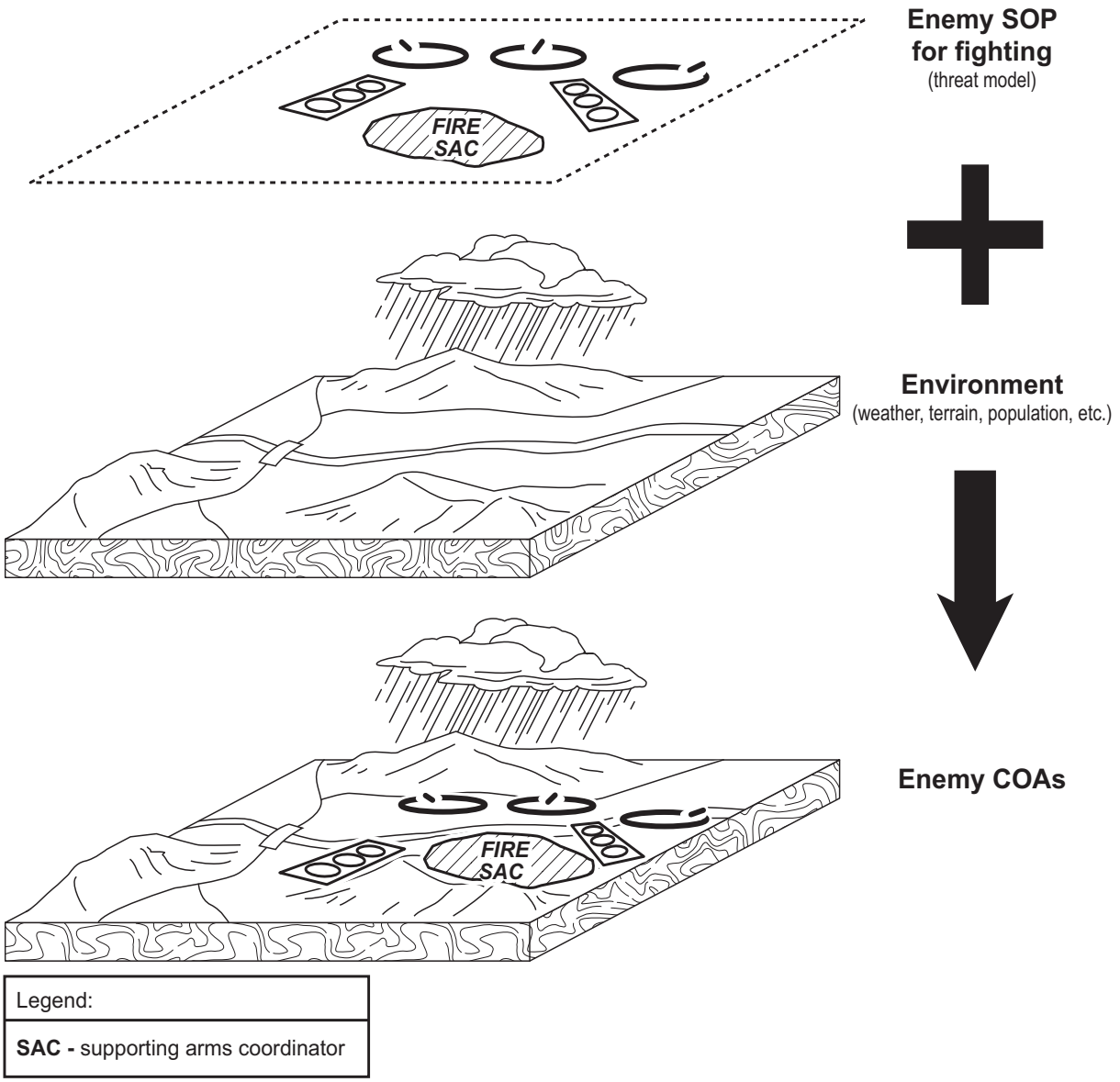


Figure 4-6. Creation of Enemy Situation Template.

chronological order is used. When faced with an unconventional threat, the event matrix is more useful than an attempt to template the profile. Like the event template that it may augment, the individual components of the event matrix aid the infantry company commander in determining when and where to assign collection assets in support of critical decisions and events that will occur during the operation. Table 4-3, on page 4-10, is an example of an event matrix.

Named Area of Interest

Named areas of interest (NAIs) focus collection assets on spots where they can best serve a company commander's decisionmaking. During a specific operation, NAIs may aid the company commander by validating or invalidating assumptions made during the generation of situational and event templates, such as determining if the battalion's artillery was successful in destroying the enemy mortars or if the enemy is massing for

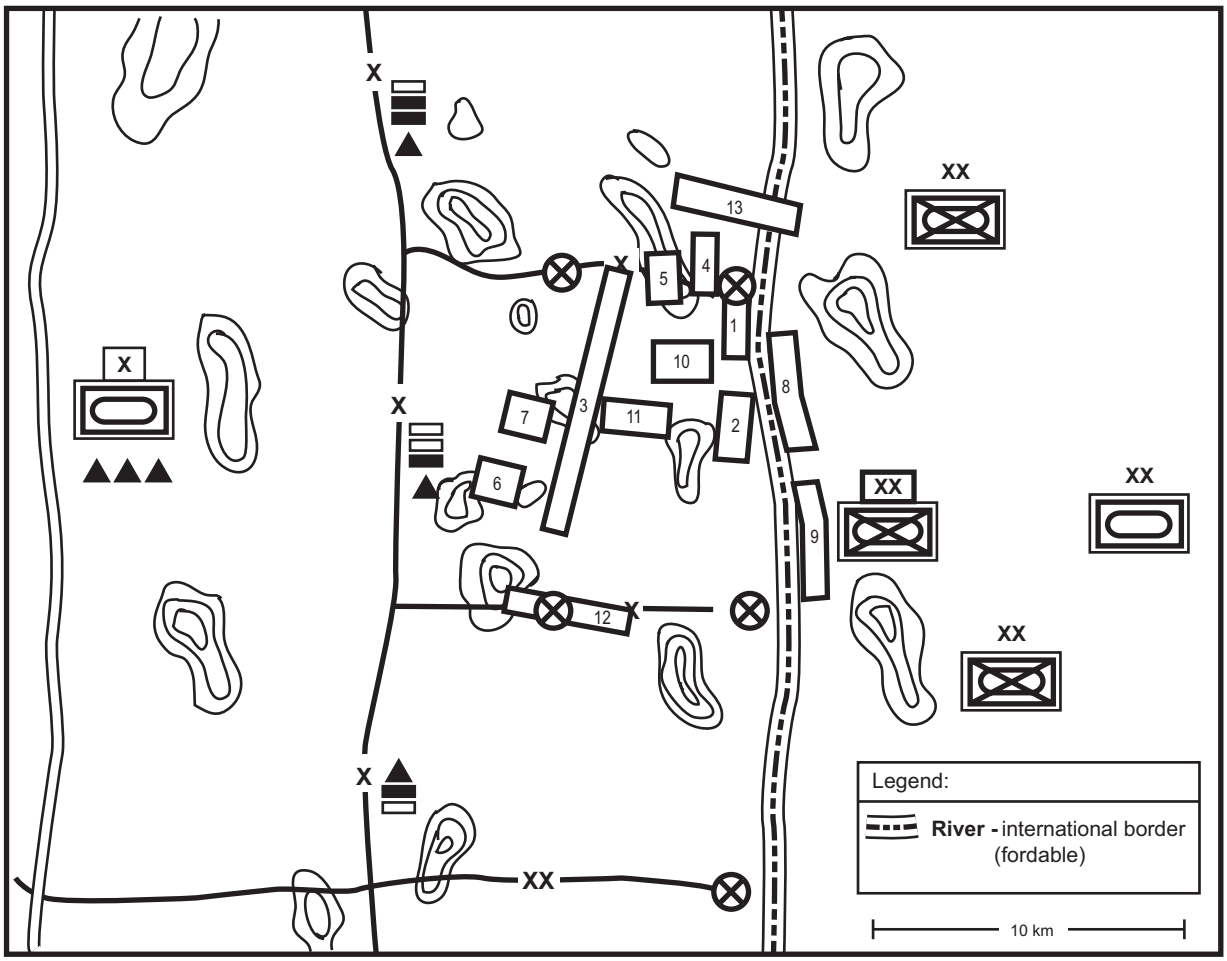


Figure 4-7. Event Template Example.

Table 4-3. Event Matrix Example.

NAI #	No Earlier Than	No Later Than	Indicator
1	H-7 h	H-2 h	Engineer preparation of artillery positions
1	H-2 h	H-30 min	Artillery occupies firing positions
1	H-1 h	H-15 min	Artillery commences preparatory fires
2	H-2 h	H-1.5 h	Combat reconnaissance patrol conducts route reconnaissance
2	H-1.5 h	H-30 min	Rifle company (-) in march formation

Legend
h hour
min minutes

a counterattack. During operations, NAIs help prioritize collection assets against satisfaction of IRs and PIRs. While there are no limits on the numbers of NAIs a company commander can designate, there are limited resources upon which the company commander can draw to collect information on all NAIs. Figure 4-8 shows an NAI overlay.

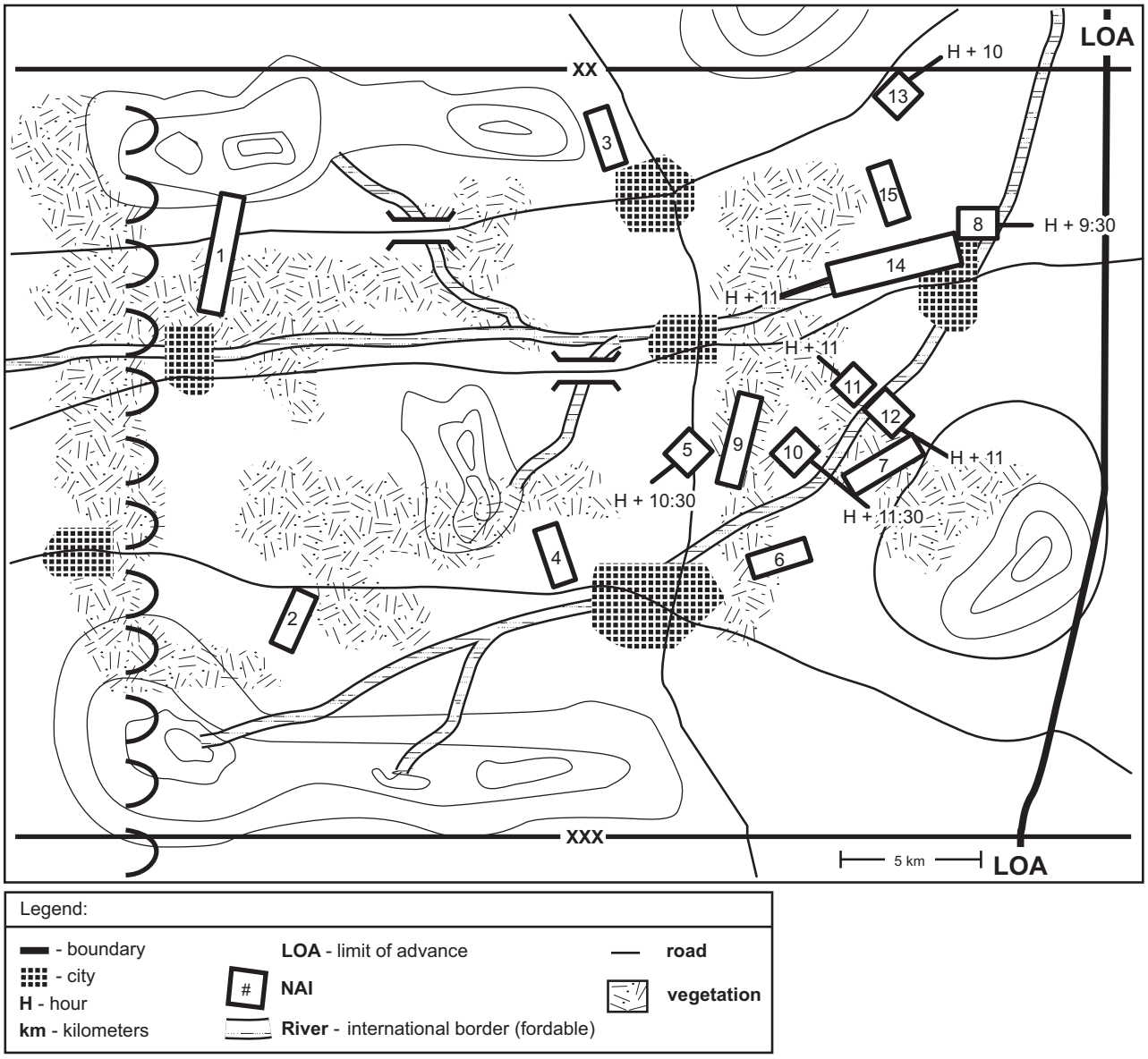


Figure 4-8. Named Area of Interest Overlay.

Named Person of Interest

The named person of interest (NPI) is an emerging concept that has proven useful in stability operations. The same principles of NAIs apply to NPIs. An NPI is a person whose activities will satisfy a specific information requirement. An NPI's activity or lack of activity will help to confirm or deny a particular threat COA. This concept is nondoctrinal and emerging at this time, but its usefulness is evident.

Information Intelligence Preparation of the Battlespace

Fires planning is linked closely with the IPB process as part of problem framing and COA development. In order for IO to be an effective asset in the infantry company fight, the IPB process must address, define, and refine specific IO considerations.

Within the IPB process, company planners must consider the information environment (IE) in order to properly apply IO to the battlespace. The IE is relatively abstract: a manmade construct that describes and characterizes an operational environment based on the existence of information and information systems. It consists of a physical dimension, an information dimension, and a cognitive dimension. The IE manifests itself in very real ways. It generates tangible results and IO must address them and their impact on operations. Within the IPB process, the company should consider physical, information, and cognitive dimensions of the enemy and the local population:

- Physical dimension: What are the technological and human characteristics that make up the AO and have an impact on information?
- Information dimension: How does information flow in the battlespace and by what methods?
- Cognitive dimension: How is information interpreted and used in terms of values, biases, perceptions and beliefs, and decisionmaking?

The information IPB closely resembles the traditional IPB process:

- Define the IE.
- Describe the IE effects.
- Evaluate the enemy's use of information.
- Determine the enemy's activities in the IE.

In coordination with the company intelligence specialist, the FST surveys the three dimensions of IE and identifies significant characteristics. As with the rest of IPB and intelligence collection, bottom-up refinement is continuous. Depending on the level of threat and the composition of the local population, the IE may not be homogenous throughout a company's AO (see table 4-4).

When describing the IE effects, the intelligence specialist and FST conduct detailed analysis of significant IE characteristics identified in the first step. The combined effects of this analysis form an understanding of their aggregate effect across the IE. To visualize the structure of the IE and the relationship between its components, the FST places its analysis on a map in a similar manner as a modified combined obstacle overlay. This combined information overlay is a graphic depiction of where and how IE effects will impact company operations (see fig. 4-9).

When evaluating the enemy's use of information, the intelligence specialist and the FST next identify the enemy's information and information systems and profile their leadership and

Table 4-4. Information Intelligence Preparation of the Battlespace.

Significant Characteristics	Dimension Lens	Effects on Operation
Media	Cognitve	Media is generally positive of military operations
	Information	Media broadcasts reach 74% of population
	Physical	Available radio infrastructure
Populace	Cognitve	Believe that guerrilla forces are criminal
	Information	Rely mostly on word of mouth
	Physical	75% Arabic, 25% Christian
Communications Infrastructure	Cognitve	Population has limited confidence in infrastructure
	Information	Unreliable infrastructure makes communications slow and puts increased reliance on personal exchange
	Physical	Limited ground communications networks, uses cellular as primary

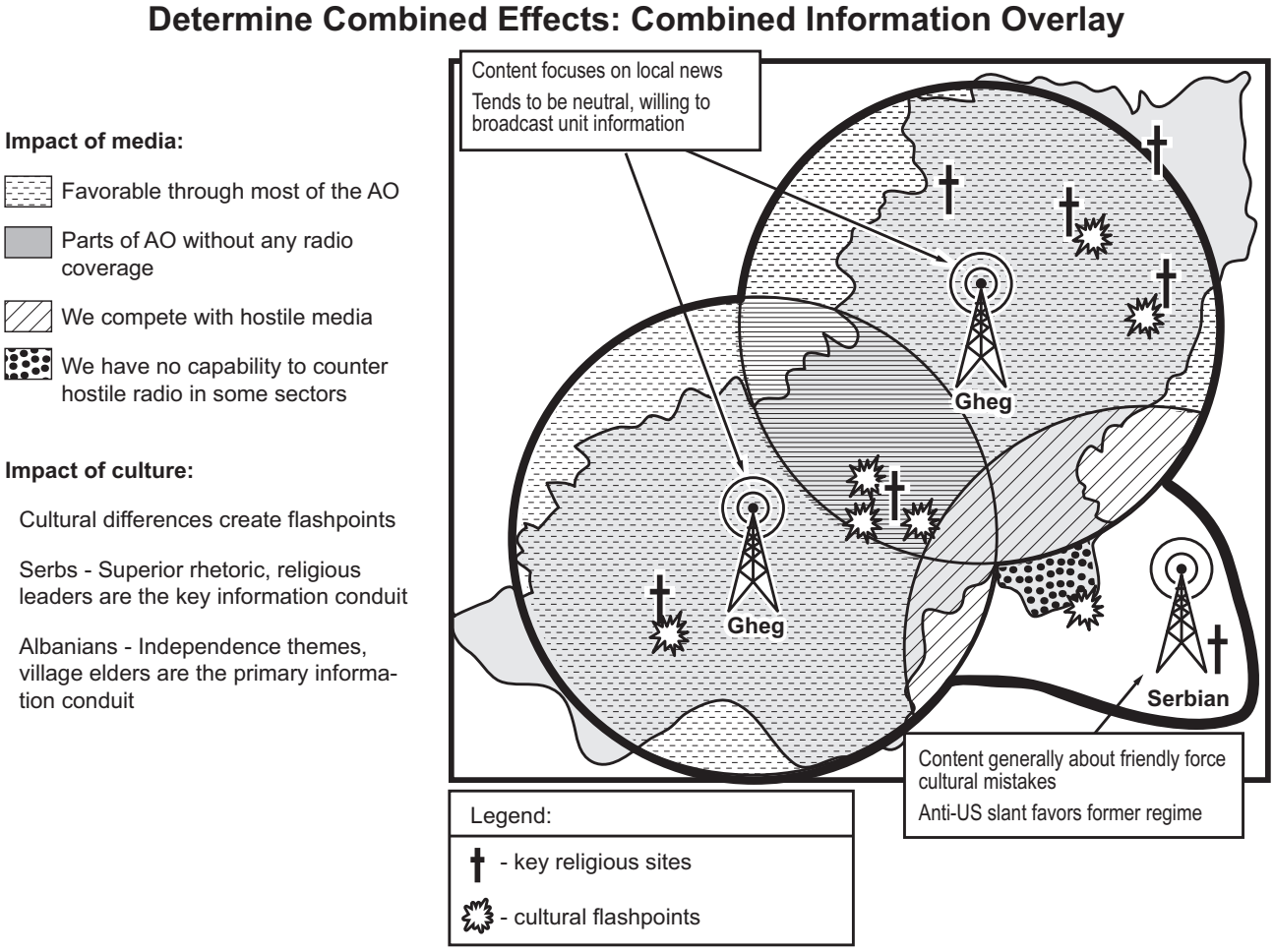


Figure 4-9. Combined Information Overlay.

decisionmaking processes. Properly identifying the enemy persons and entities that actually make decisions is critical. In some cases, formal and public leadership might not necessarily be the decisionmakers or those who wield power. The following are some important considerations:

- The enemy's ability to disseminate propaganda.
- The enemy's ability to disrupt friendly communications.
- The enemy's ability to deceive friendly forces.

When determining enemy activities in the IE, the FST and intelligence specialist define what the enemy must achieve in the IE to attain their objectives and the means they possess to achieve it. The result of this process is identification of enemy weakness that can be exploited and enemy strengths that must be countered. This information, in turn, allows the FST to determine and nominate any HVTs associated with the enemy's capabilities, such as physical assets and dissemination processes (see table 4-5 on page 4-14). Company commanders provide guidance on whether to attack nominated targets based on analyses of operational gain versus intelligence loss; for example, an infantry company commander may choose not to attack enemy communications because the intelligence gleaned from monitoring enemy traffic is of greater value than the inefficiencies the enemy may experience if they lost their communications ability.

Table 4-5. Potential Information Operations Target Sets.

Technical	Human
C2 systems	Enemy leaders
ISR systems	Nontechnical command and control (couriers)
Electronic attack systems	Nontechnical media assets (reporters)
Radio/TV/print outlets	Civilian leaders (religious, tribal, civil)
	Discrete populace groups (villages, neighborhoods)

Legend
TV television

Intelligence Cycle

The intelligence cycle describes the general sequence of activities involved in developing information into intelligence. The cycle does not prescribe a procedure to follow, but describes a process that generally occurs. The cycle has six phases through which information is—

- Planned (referred to as planning and direction).
- Obtained (referred to as collection).
- Assembled (referred to as processing and exploitation).
- Converted into intelligence (referred to as production).
- Provided to decisionmakers (referred to as dissemination).
- Used in making decisions (referred to as utilization).

These phases are discussed in the following subparagraphs.

Planning and Direction

The company commander's IRs are critical portions of design and are a primary driver for the planning process. Company commanders need to ensure that all available intelligence assets and all attachments to the company, such as armorer and engineer attachments, are integrated into the process to ensure the right information is being pursued by the right assets. They might ask what the armorer and engineers need to know for a successful breaching effort or which intelligence assets are best used to get that information. Marine Corps Intelligence Activity Publication 1540-002-95, *Generic Intelligence Requirements Handbook (GIRH),* contains lists of IRs by mission profile and can provide significant assistance to the company commander.

Upon receipt of planning guidance and direction from the company commander, the intelligence specialist and CLIC monitor and execute the overall intelligence effort for the company. Intelligence planning and direction is a continuous function and a command responsibility. Company commanders must ensure they provide coherent and actionable guidance and direction to the CLIC, as required.

Collection

Friendly forces obtain information through the collection process. Company patrols are the only organic intelligence assets the company commander possesses, so tasking patrols with valid and specific orders or requests to help answer priority PIRs and IRs is critical. While planning to use their own patrols to meet the most critical IRs, company commanders should not make the mistake of ignoring external assets. These assets may not belong to or be in direct support (DS) of the company, but they are often available if requested. The assets can provide redundant collection for important IRs and fill gaps in the company's collection plan. Accessing these assets requires that the company intelligence specialist produce well written, thought out, valid requests. A well organized, efficient IPB process at the company level plays a vital role in providing the company commander the information needed to

secure external intelligence support. The intelligence specialist and CLIC uses various tools, such as the collections matrices seen in table 4-6 and figure 4-10, on page 4-16, to organize collection assets against NAIs.

Geospatial intelligence, signals intelligence (SIGINT), human intelligence (HUMINT), CI, measurement and signature intelligence, open-source intelligence, and technical intelligence disciplines can support company operations.

Geospatial Intelligence

Geospatial intelligence is the exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the earth. Geospatial intelligence consists of imagery and geospatial information. It derives the information from multiple collection platforms of diverse capabilities, such as maps, patrol debriefs with pictures of the local leadership, UA feeds, or images from theater and national assets. An example of company-generated geospatial intelligence is when document pictures are taken on a patrol with such information as time, location, names, and directions and are turned into the CLIC during the patrol debrief.

Table 4-6. Collection Matrix Example.

	Time						
	0001	0400	0800	1200	1600	2000	2400
Sniper 1			NAI 1				
Sniper 2	NAI 1						
Wasp	On call						
Raven			NAI 2				
Scan Eagle				NAI 1,2,3			
CI/HUMINT team		Meet source with 1/2 security element					
SST				NAI 2			
GSP		NAI 1					
TAC recon						NAI 1	
1st Plt 1st Sqd	NAI 2				NAI 2		
1st Plt 2d Sqd		NAI 2					
1st Plt 3d Sqd			NAI 1				NAI 3
1st Plt 4th Sqd				NAI 3			
2-1	NAI 3				NAI 1		
2-2		NAI 1				NAI 3	
2-3			NAI 3				NAI 1
2-4				NAI 1			
3d Plt	Reserve						
4th Plt	FOB security						

Legend
GSP ground sensor platoon
plt platoon
recon reconnaissance
sqd squad
SST signals intelligence support team
TAC terminal attack controller

Signals Intelligence

Signals intelligence is derived from the interception, processing, and analysis of foreign communications. Signals intelligence can provide timely and accurate data on enemy forces that may include details on enemy composition, identification, and location. Companies can expect to work with detachments from the radio battalion in the form of SIGINT support teams or radio reconnaissance teams. The company commander must discuss and understand the capabilities and limitations of these SIGINT teams to properly support and employ them in the company's intelligence collection effort. The SIGINT support teams and radio reconnaissance teams collocated with companies will normally have significant security clearance, physical security, and access control requirements.

Human Intelligence

Human intelligence is information coming from human sources. A number of entities provide a company's HUMINT, from attached CI/HUMINT exploitation teams to national agency reporting. If a company commander fails to integrate CI/HUMINT teams operating in the company's AO with the intelligence collection effort and scheme of maneuver, the teams will default to HHQ reporting requirements. Careful evaluation of HUMINT is required to determine the accuracy and reliability of the information provided. It is important to recognize that, while any Marine can

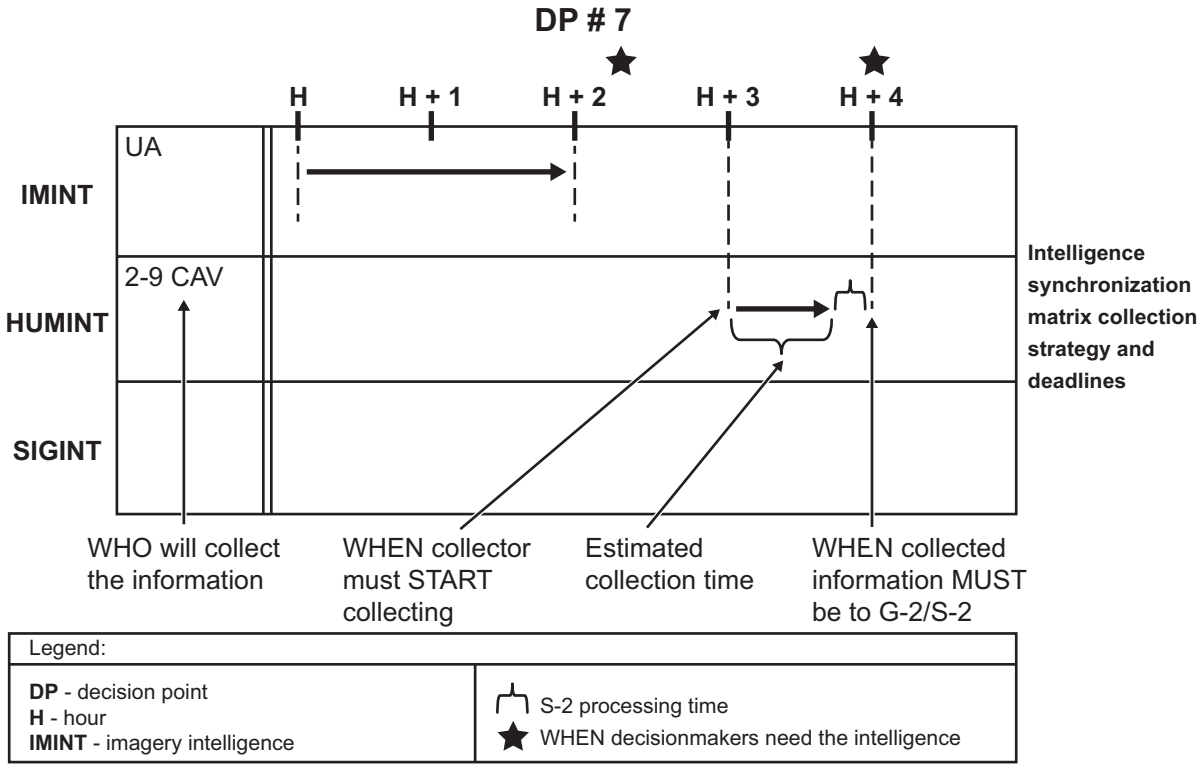


Figure 4-10. Operation-Based Chronological Collections Matrix.

conduct tactical questioning, only CI/HUMINT team Marines may task and run sources. Company commanders should recognize the requirement to provide CI/HUMINT teams with appropriate security and that CI/HUMINT teams cannot operate on their own without support from the company.

Counterintelligence

Counterintelligence is similar to and often confused with HUMINT, as CI uses many of the same techniques for information collection. In addition, CI/HUMINT teams serve as the primary source for CI functions in the Marine Corps. Counterintelligence obtains information by or through the functions of CI operations, investigations, collection and reporting, analysis, production, dissemination, and functional services. Among its functions, CI supports FP during all types and phases of military operations; detection, identification, and neutralization of espionage; antiterrorism; and enemy threat assessments.

Measurement and Signature Intelligence

Measurement and signature intelligence is information gathered by technical instruments, such as radars, passive electro-optical sensors, radiation detectors, and remote ground sensors. Examples that a company commander would likely encounter are ground sensor platoons and biometric automated tool sets.

Open-Source Intelligence

Open-source intelligence is information of potential intelligence value that is available to the public, including periodicals, posters, radio and television broadcasts, and unclassified internet networks (blogs and chat rooms). Open-source intelligence can provide a good baseline for local population and societal trends, attitudes, and demeanor. However, careful evaluation of open-source intelligence sources is necessary in order to determine the accuracy and reliability of the information provided.

Technical Intelligence

Technical intelligence is derived from the exploitation of foreign materiel and scientific information. Technical intelligence begins with the acquisition of a foreign piece of equipment (see app. C) or foreign scientific/technological information. Specialized, multi-Service collection and analysis teams then exploit the item or information. These technical intelligence teams assess the capabilities and vulnerabilities of captured military materiel and provide detailed assessments of foreign technological threat capabilities, limitations, and vulnerabilities. Technical intelligence is useful at the tactical level to see how the adversary is using technology, such as the building of IEDs, to drive friendly counteractions. While most technical intelligence will be provided by multi-Service level teams, rudimentary technical intelligence at the company level can often come from battalion gunners or explosive ordnance disposal (EOD) units.

Processing and Exploitation

Information is assembled through processing and exploitation. With the potential for vast amounts of information coming in to the CLIC, it is essential that information is catalogued, organized, assessed, and prioritized. Such processes allow relevant information to receive the focus of the intelligence specialist and CLIC, potentially relevant information to be coherently stored for later retrieval, and irrelevant information to be discarded. Proper organizing and databasing also create superior turnover products for follow-on units. Examples of the processing of information include the translation of documents or of foreign writing on pictures obtained during a patrol or the retrieval of sensitive information from a seized computer or hard drive. Much obtained information requires exploitation at higher levels of command that possess the necessary resources and assets. Companies should track the results of this exploitation. Since the exploitation of much of the gathered information is beyond the capabilities of the company intelligence specialist, but perhaps very important and relevant to the company in the form of intelligence, it is essential that the intelligence specialist establish effective means of tracking the progress and receiving the results of exploited information. The company intelligence specialist is responsible for ensuring that information delivered to HHQ for exploitation possesses the appropriate amplification and guidance to ensure that critical information is extracted and disseminated first.

Production

Production is the process of converting information into intelligence and assessing the value of the intelligence. Raw information can assist with intuitive decisions, but information produced into intelligence can assist with analytical decisions. Production asks “So what?” and “What does this information mean to the company and its mission?” During this step, information is—

- Evaluated to determine pertinence, reliability, and accuracy.
- Analyzed to isolate the significant elements.
- Integrated with other relevant information and previously developed intelligence.
- Interpreted to form logical conclusions that bear on the situation and support the commander’s decisionmaking process.
- Placed into the product format that will be most useful to the eventual user.

Dissemination

Dissemination is the process by which intelligence is provided to decisionmakers throughout the chain of command, both vertically and horizontally. Dissemination must be timely, it must be in the appropriate format, and it must reach the right people. The infantry company commander must ensure that the processes with which the CLIC disseminates intelligence are effective. The company intelligence specialist and CLIC face two concerns—the methods available to pass intelligence and the intelligence requiring dissemination. Disseminating relevant and timely

intelligence is more important than its format. Notifying a platoon outpost by radio that they will likely experience a small arms attack in the coming 12 hours is far more effective than delaying notification while attempting to send or deliver a large graphics file with supporting documentation. The CLIC uses a combination of supply-push and demand-pull methods as appropriate to the importance of the intelligence and the methods of dissemination available.

Utilization

Utilization is the process by which intelligence helps to make decisions. Commanders may provide direction on their IRs, information might be collected and converted into intelligence, and the intelligence may be disseminated. However, unless that intelligence is exploited through decision and action, all the effort serves no purpose. Intelligence has no value for its own sake. Its value lies in action. Actually, taking action based on intelligence begins the whole cycle again by generating future IRs, which require the company commander to provide planning and direction guidance.

Intelligence Support to Operations

Intelligence is inseparable from operations. Intelligence drives operations by shaping planning and execution. Operational actions develop logically from intelligence and, in turn, drive new IRs. An infantry company commander with effective intelligence knows the nature of the terrain and weather conditions the company will encounter, the composition and status of the infrastructure in the AO, the makeup and attitude of the population the company will encounter, and how the combined effects of these factors will influence mission accomplishment.

The relationship between intelligence and operations should be as close and direct as that between intelligence and command. In addition to the influence of intelligence on the conduct of operations by its identification of enemy capabilities and estimation of ECOAs and possible reactions to friendly COAs, intelligence provides important support to operations by helping to identify friendly critical vulnerabilities that the enemy may exploit.

The relationship between operations and intelligence necessitates mutual support. Just as intelligence identifies opportunities for exploitation through operations, so can operations provide the stimulus for intelligence. Regardless of the primary mission, all operations have an additional objective of gaining information about the enemy and the environment. Some operations possess this goal as the primary mission. For example, the objective of a tactical maneuver, such as a reconnaissance in force, may be to learn more about enemy capabilities and disposition or to solicit the enemy's reaction to a specific situation.

Intelligence Support to Planning

Intelligence support is necessary in each step of the MCPP.

Problem Framing

During problem framing, the company intelligence specialist receives the HHQ order and related IPB products, the company commander's initial intent and planning guidance, and other direction as necessary. The intelligence specialist and CLIC should participate fully in design and the overall problem framing process. At a minimum, the CLIC will assist in conducting IPB and provide the following:

- Enemy situation (situation templates).
- Weather and terrain analysis.
- Possible ECOAs.
- Requests for information (enemy-focused intelligence gaps).
- Recommended PIRs.

Course of Action Development

Products developed through the IPB process present intelligence in the form of images that permit decisionmakers to visualize the situation, see patterns, and assess potential alternatives. As planning moves forward, the company intelligence specialist aids in COA development through creation of the reconnaissance and surveillance plan and an initial intelligence estimate.

Reconnaissance and Surveillance Plan

At the company level, the reconnaissance and surveillance plan largely consists of proper employment of the company's organic patrol capability and aggressively seeks support from other available, external intelligence assets. The company intelligence specialist determines—

- What information is needed.
- Which asset can best obtain that information.
- From where (physical location) the information can best be collected.
- Routes to that location.
- The best insertion means.

Initial Intelligence Estimate

The company intelligence specialist, as able, provides an initial intelligence estimate based on the results of its work during problem framing. The company intelligence specialist ensures that this estimate is updated as intelligence is gathered. Establishing operation-specific read boards, issuing changes, or providing regularly scheduled briefing updates are some of the ways that the company might maintain situational awareness among company decisionmakers and the COC. The company intelligence specialist should brief the following items:

- Updated intelligence.
- Possible ECOAs (most probable/most dangerous).
- Current situation templates.

Course of Action Wargaming

As discussed in chapter 3, conducting formal COA wargaming at the company level is not usually possible because of limits on planning time, personnel, or facilities. Should the company possess the opportunity to wargame various COAs, the company intelligence specialist should continue to identify and validate PIRs, IRs, and associated NAIs. Products, such as event templates and matrices, continue to be refined. Updated IPB products should include the following items:

- PIRs with latest time intelligence is of value.
- Refined NAIs.
- HVTs.
- Final situational templates.

Course of Action Comparison and Decision

The company will rarely have more than one COA; still, should the company commander wish to conduct COA comparison and decision, the company intelligence specialist and CLIC should be prepared to provide the following:

- Assessment of ECOAs on friendly COAs.
- Assessment of the company's ability to collect required information in support of the commander's PIRs.
- Updated IPB products, PIRs, and intelligence estimates.

Orders Development

During the orders development step, the company intelligence specialist produces the intelligence products required to support the company commander's order. The company does not normally produce large OPORDs with detailed narratives. Rather, the company intelligence specialist should expect to verbally brief weather and terrain (KOCOA), produce ECOA graphics, and answer the questions of the platoons and attachments.

Transition

The company intelligence specialist assists in orders development and dissemination, which may include the following:

- The order (OPORD or FRAGO).
- Collection matrix.
- Updated IPB.

Intelligence Support to Execution

Intelligence support to execution differs in significant ways from intelligence support to planning. First, while intelligence support to planning requires developing a large volume of basic intelligence and preparing broad-scope estimates to develop and analyze COAs, intelligence support to execution involves the satisfaction of a much larger body of IRs in a significantly greater degree of detail. For example, a ground sensor platoon detachment alerts the CLIC to activity in its sector of responsibility. The CLIC alerts the WO who tasks a UA to cover the area. Information from the UA is passed to a nearby patrol. The patrol searches the area and confirms or denies the activity reported by the other sensors.

A second major difference between intelligence support to planning and intelligence support to execution is the time available for developing an intelligence product. Often days, weeks, and sometimes months are available to provide intelligence support to planning, but intelligence support to execution must normally be developed in hours, minutes, or even seconds. Success in execution often depends on the ability to provide immediate answers to critical questions concerning enemy force dispositions, actions, and intentions.

Intelligence support during execution focuses on providing the commander with practical knowledge that gives an exploitable advantage over the enemy. Although eliminating uncertainty during execution is impossible, focused intelligence operations can reduce uncertainty by providing situational awareness and identifying opportunities as they present themselves in the battlespace. Intelligence support to execution provides indications and warning of new or unexpected enemy activities, enhances efforts to engage the enemy through support to targeting, assists in protecting the force through CI measures and operations, and supports the planning of future operations by providing timely and accurate BDA.

Targeting

Intelligence drives every step of the targeting process. Intelligence supports targeting by executing the following functions:

- Identify the enemy threat, capabilities, and likely ECOAs.
- Identify HVTs and high-value individuals (HVIs).
- Identify where/when HVTs and HVIs are vulnerable.
- Focus collection assets.

Assessment

As discussed in chapters 2 and 3, feedback and assessment occur continuously in operations—during execution, current operations, and future operations planning. The company intelligence specialist looks for feedback and intelligence that assess the effects friendly operations produce across all aspects of the environment. Company leadership adjusts operations based on the effects produced and may expand the operation, continue it as is, halt it, execute a branch or sequel, or take steps to correct damage caused by a mistake. While traditional, lethal assessment metrics include destruction and neutralization criteria, nonlethal metrics include changes in the following:

- Local attitudes.
- Public perceptions.
- Quality and quantity of information provided by locals.

- Economic or political situation.
- Insurgent activity.

CARVER Evaluation

The CARVER evaluation is a means of integrating the efforts of intelligence and operations planners to evaluate the value of potential targets. This method considers six aspects of a target and assigns a subjective weighted ranking to evaluate the relative merit of striking a particular target. The memory aid CARVER stands for—

- Criticality: the importance of the target to enemy and friendly COAs.
- Accessibility: the ability to get to the target and back.
- Recuperability: the ability of the target to be easily replaced.
- Vulnerability: a unit's ability to produce effects on target.
- Effect: the first and second order effects (positive and negative) of engaging the target.
- Recognizability: the ability to recognize the target under various operational conditions.

Target Folders

Tracking persons who are targets, such as HVIs, is often a more complicated and difficult process than tracking other HVTs, such as enemy bridging or C2 assets. Therefore, while the method of using target folders can apply to any particular target, target folders are more generally associated with persons. Though there is no standard format for developing HVI target folders, company commanders can reasonably expect that their parent battalions or other HHQ will provide them with the requisite format. Elements most often found in target folders include the following:

- A biographic profile with physical description.
- A multidiscipline report on the target's historical background.
- An estimate of the target's importance.
- Recent significant activity.
- Known associates.
- Known or suspected associated facilities.
- Known means of communication.
- Vulnerabilities.
- Intelligence gaps.
- Link analysis.
- Significant event reporting chronology.
- Assessments and supporting maps or imagery products.

Company Level Intelligence Cell Training

Intelligence training must be a continuous process. The battalion intelligence section is responsible for providing sustainment and mission-specific training to intelligence specialists assigned to infantry companies. If the company commander deems it necessary to create a CLIC, then the company's intelligence specialist and the battalion intelligence section provide assigned Marines the necessary training to perform their duties. The preferred method is to plan and train for a large CLIC because it is easier to have the trained Marines available and not use them than to need them and not have them. Most skills acquired through schools are perishable if the graduate is not frequently required to perform those tasks. The following represent training opportunities for Marines assigned to the CLIC:

- *CLIC Course*. The CLIC Course is provided through the Marine Corps Intelligence School and introduces the Marines to IPB, analysis, collections, targeting, briefing, and debriefing skills in both an automated and nonautomated environment.
- *CLIC Systems Administration Course*. This course is provided through the Marine Corps Intelligence School and introduces students (to include communicators) to the system administration skills required to establish an intelligence data communications path.
- *Sustainment training*. Battalion intelligence sections aggressively seek to execute regularly

scheduled intelligence specialist and CLIC sustainment training. Battalion intelligence sections and company commanders should actively seek to incorporate CLIC operations into regularly scheduled training and exercises.

- *Expeditionary Warfare Intelligence Course*. The Expeditionary Warfare Training Group Pacific hosts this course. The curriculum offered provides students with additional experience in conducting IPB in a broad range of expeditionary operations.

Intelligence Training for All Marines

The company commander uses the company intelligence specialist and other assets to ensure that intelligence training occurs for all Marines within the command in order to maximize the collection efforts at the company level. Sending out a patrol to satisfy various IRs will fail if the personnel comprising the patrol do not know what they are looking for, what other things they see that might be of value, and how to collect the information correctly. Patrols must possess a basic understanding of how the information they collect will be exploited. The Marine Corps and its sister Services provide a wealth of classroom, practical application, simulator, and computer-based training to assist infantry companies with increasing the understanding of military intelligence within the ranks of the company. Figure 4-11 indicates the types of intelligence-related training available and offers recommendations on whom in the infantry company should receive that training. Types of training that infantry company commanders should consider for their company personnel include the following:

- *Tactical site exploitation*. This training teaches company personnel how to search facilities and properly retrieve and process materials discovered.
- *Unmanned aircraft and unmanned aircraft systems training*. As technology matures, it is increasingly likely that infantry companies will possess organic UA systems that will be used by company personnel.
- *Law enforcement-related programs*. Many law enforcement skills, from detainee handling to developing awareness of community patterns, are useful to infantry companies, especially in stability operations.
- *Language training*. Many language resources are available to assist commanders in developing and sustaining relevant language training programs.
- *Biometrics training*. Various biometric-based tracking and databasing systems exist that require trained personnel to operate.
- *Tactical questioning training*. This training enables company personnel to more effectively speak with and question (vice interrogate) persons encountered in the community.

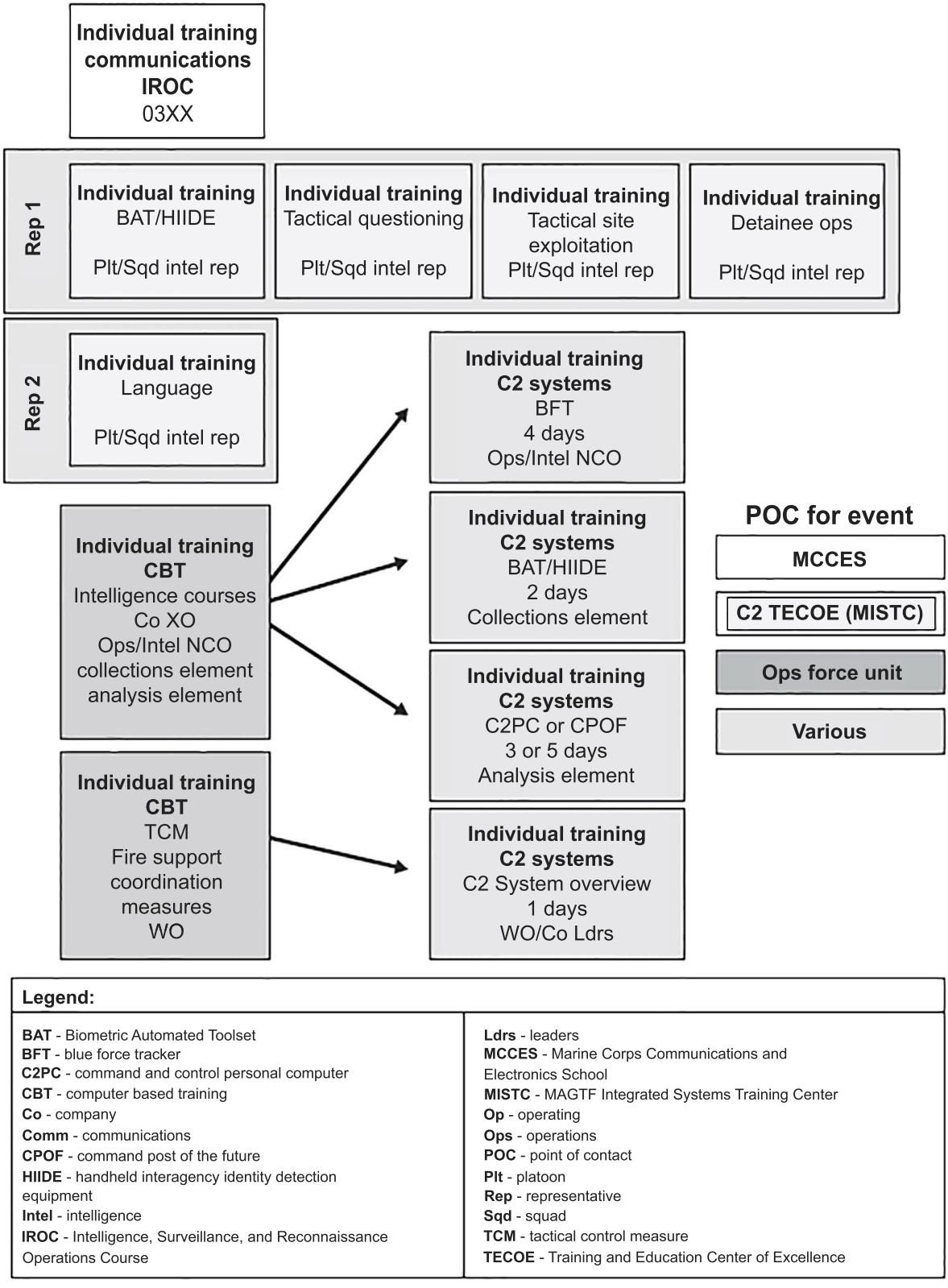


Figure 4-11. Intelligence Training Flowchart.

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CHAPTER 5
COMPANY LEVEL FIRE SUPPORT

The infantry company serves as the primary executor of lethal and nonlethal fires in its battlespace. The FST plans and executes the company's fire support tasks based on guidance and direction from the company commander and coordinates with HHQ fire support agencies. The FST will coordinate, plan, and control organic and nonorganic fire support assets to the company. While the FST may often reside with the company COC, it may just as likely deploy elsewhere within the battlespace to execute the company commander's intent.

The infantry company does not normally provide full range clearance of fires in its battlespace; however, there are unique circumstances when a company is required to coordinate its own fires. In these cases, the FST will require personnel and equipment augmentation, specific and detailed deconfliction procedures, and additional training. The following are some examples of when it may be appropriate to execute control of fires at the company level versus the battalion:

- While conducting operations in a noncontiguous battlespace.
- When greater situational awareness exists at the company level than at the battalion level.
- When conducting distributed operations at the company level.
- When temporary control of fires is granted to the company for a specified time, phase, or event.

Roles and Responsibilities

Company Commander

Proper employment and coordination of fires in support of the company's mission is an inherent responsibility of the company commander. Company commanders must know and understand the roles, duties, functions, and capabilities of their FST and the fire support systems available to the company. Company commanders are also responsible for ensuring their FSTs are properly trained.

The company commander must provide coherent, concise, and clear guidance to the FST on the intent for fires and desired effects in order for it to plan and execute fires in support of the company mission. This guidance usually is in the form of one or more EFSTs (refer to MCWP 3-16, *Fire Support Coordination in the Ground Combat Element*, and MCRP 3-16.6A, *Multi-Service Tactics, Techniques, and Procedures for the Joint Application of Firepower [J-FIRE]*), but must at least include the scheme of maneuver, effects desired, and restrictions.

It is essential that the company commander ensures synchronization and integration of the fire support plan with the scheme of maneuver. He/She is also responsible for proper integration of the company's fire support plan with that of the parent battalion's plan. Company commanders must ensure they fully understand the requirements from HHQ with regard to fire support and the planning considerations and execution of fires in support of the company. Using the company commander's fire support guidance, the FST is the primary action element for coordination with the battalion. The FST submits lists of targets, requests fire support assets, and refines targets in support of the company's fire support plan and scheme of maneuver. The FST integrates battalion-directed limitations into the company's plans. The company commander must supervise this process and remain actively aware of potential changes to the fire support plan.

Fire Support Team

At a minimum, the FST will consist of a leader, an FO (mortar/artillery), an RO, and a terminal controller. Depending on the mission and the fire support systems allotted, a naval gunfire spotter, IO representatives, and CMO representatives may assist the FST or company commander.

Roles and Responsibilities of the Fire Support Team

The FST in the infantry company executes fire support functions, such as targeting coordination and fires integration. The FST may be required to conduct fire support coordination. The team consists of the FST leader, artillery FO/scout/RO, joint terminal attack controller (JTAC)/forward air controller (FAC), shore fire control party, and mortar FO.

The FST leader is normally the company's weapons platoon commander. Fire support team leaders coordinate with the FSC of HHQ for fires planning and to ensure support of the company commander's intent for fires. Fire support team leaders use the specialized experts within the FST to accomplish the mission. The FST leader—

- Is responsible to the company commander for the proper planning and execution of fires in accordance with the company commander's intent, guidance, desired effects, and direction in support of the company's maneuver.
- Advises the company commander on the capabilities and limitations of fire support systems and assets.
- Supervises the FST in planning and execution of hasty and deliberate fires to create desired effects. Actions include targeting, product and orders development and dissemination, rehearsals, coordination with HHQ, fratricide avoidance, and effects assessment.
- Organizes and integrates FST functions into the company COC to include serving as the infantry company COC's primary means of conducting fires communications with subordinate, adjacent, and higher commands.
- Ensures integration of all lethal and nonlethal fires with the intelligence collection effort and the scheme of maneuver.
- Approves, coordinates, and disseminates targeting products and priorities, FSCMs, and other appropriate documents.
- Is prepared, if tasked, to control fires in the company's battlespace through approval, modification, and denial and recommend FST augmentation requirements to the company commander.
- Is responsible to the company commander for fires training of organic company fire support personnel.
- Ensures assigned targets are refined, observed, rehearsed, and fired according to the scheme of fires.
- Directs FST members in the execution of fires in support of the company to include managing battlespace geometry (BSG), tracking and updating friendly and enemy situations, and preventing fratricide.

The artillery FO/scout/RO is responsible for the accomplishment of the following:

- Requesting and controlling artillery fires.
- Providing the company commander and the FST leader with recommendations regarding employment of field artillery.
- Assisting the company commander and FST leader with fire support planning and artillery support.
- Maintaining verbal and digital communications on doctrinal artillery fire and coordination nets.
- Performing duties of the FST leader as directed or as needed.

The JTAC/FAC is responsible for the accomplishment of the following:

- Providing terminal control of aircraft.
- Orienting aircraft to the enemy situation and disposition of friendly forces.
- Providing the company commander and the FST leader with recommendations regarding employment of aviation assets.

- Providing the FST the capability to locate and engage targets through the use of aviation assets.
- Maintaining communications on doctrinal aviation control and coordination nets.
- Assisting the company commander and FST leader in fire support planning, submitting aviation requests, and maintaining situational awareness of special instructions (SPINS) and the air tasking order flow.

The shore fire control party has the following responsibilities:

- Controlling naval surface fire support (NSFS).
- Providing the company commander and the FST leader with recommendations regarding the employment of NSFS assets.
- Maintaining communications on doctrinal NSFS control and coordination nets.
- Assisting the company commander and FST leader in fire support planning and NSFS requests.

The mortar FO has the following responsibilities:

- Controlling 81-mm mortar fires.
- Providing the company commander and the FST leader with recommendations regarding the employment of mortars.
- Maintaining communications on doctrinal mortar control and coordination nets.
- Assisting the company commander and FST leader in fire support planning and mortar requests.

Fire Support Enablers

The fire support enablers are the joint fires observer, the IO representative, and the CMO representative. In the case of IO and CMO, the company should seek formally trained personnel for these billets. Failing that, the company should seek to train personnel from within the company if these billets are needed.

The joint fires observer is any Marine in the company who has completed the Joint Fires Observer Course. Personnel with this training can control fires within certain restrictions. This capability adds to the company's flexibility in employing supporting arms by reducing the demand on the FST and increasing the number of observers and potential controllers throughout the company, its platoons, and squads. The joint fires observer—

- Requests, adjusts, and controls surface-to-surface fires.
- Provides targeting information in support of Type 2 and Type 3 CAS terminal attack controls.
- Maintains communication with appropriate support and supporting agencies, such as FST, artillery, mortars, JTAC/FAC, and FSCC.

The IO representative is responsible to the FST for all company IO and has the following responsibilities—

- Advise the company commander on IO planning considerations.
- Ensure that company IO plans are coordinated with the HHQ IO plan.
- Coordinate all IO matters with higher, adjacent, and subordinate units.
- Recommend IO priorities and target nominations.
- Coordinate intelligence support to all IO.
- Prepare and coordinate command information messages with HHQ.
- Coordinate talking points with higher and disseminate to subordinate elements.
- Manage company broadcast system programs.
- Compile subordinate unit reporting to provide IO assessment/population atmospherics.

The CMO representative has the following responsibilities:

- Advise the company commander on CMO planning considerations.
- Ensure that company CMO plans are coordinated with HHQ CMO plans.
- Ensure the civil information gathered by company personnel and any associated civil affairs

personnel are incorporated into the overall company intelligence collections plan for analysis and dissemination to HHQ.
- Advise the company commander on project nominations and supporting project submission packages.
- Track all company level projects and coordinate all projects in the company AO initiated by HHQ.
- Advise the company commander on all United States Government interagency, NGOs, and international organizations operating in the company AO.
- Coordinate activities of civil affairs team members.

Fire Support Planning

The goal of fire support planning, according to MCWP 3-16, is coordinating and integrating fires from armed aircraft, land-based and sea-based indirect fire systems, and electronic warfare systems that directly support land, maritime, amphibious, and special operation forces to engage enemy forces, combat formations, and facilities in pursuit of tactical and operational objectives.

Determining lethal and nonlethal fire support requirements (including how to combine them in a manner that creates a dilemma for the enemy and how to meet those requirements with the fire support systems available), developing a fire support plan, and integrating it with both the HHQ fire support plan and the company scheme of maneuver is a difficult process. The FST's leader and its members will execute most of the detailed work required to create a fire support plan; however, it is essential that the company commander devote appropriate energy to overseeing the process because the fire support plan is normally critical to the company's mission success.

The company commander best understands the ramifications of the fire support plan. For example, in a stability operation, the company commander is more likely to recognize that a successful lethal strike could have unintended, negative effects on the local population and the company's ability to accomplish the mission. Fires planning at the company level may use the troop leading steps commonly referred to as BAMCIS [begin planning, arrange for reconnaissance, make reconnaissance, complete the plan, issue the order, supervise] (see table 5-1). Actions may occur in sequence or simultaneously. The FST leader must organize the efforts of the FST to meet all these requirements in a time-constrained environment. Two questions should focus the efforts of the FST: Is the fire support plan fully integrated with operations? How will fires support operations?

Begin Planning

During this phase, FST leaders participate in the company's problem framing and design processes. Company commanders provide the FST with the intent for fires and their desired effects to support maneuver. The FST leader works closely with the company intelligence specialist to understand the enemy and friendly situations and the environment (see chap. 4). The FST will begin coordination with HHQ and will work continually to refine the fire support plan throughout the planning process. As problem framing moves forward toward COA development, the FST leader should be able to provide the company commander an initial concept of fires—at least task and purpose—for inclusion in the commander's WARNORD. In order to accomplish this goal, the FST leader considers the mission, coordination with and refinement of the HHQ fire support plan, the fire support resources available, and initial targeting.

Mission

The FST should ensure that the fire support planning is not too complex. As products are briefed and disseminated, the FST leader should use the task-purpose-method-effect format to ensure the company understands the fire support plan and its requirements. With regard to the company's

Table 5-1. Fire Support Actions in BAMCIS Format.

Troop Leading Step	Fire Support Actions
Begin planning	Update friendly and enemy situations Find out assets available, allocations, and FSCMs Obtain battalion's target list worksheet, FSEM, and attack guidance Understand the battalion fire support plan and how it affects your company Identify fire support tasks for the company and brief the commander on above Receive the commander's mission Receive the commander's fire support guidance Participate in WARNORD Issue WARNORD to fire support personnel and mortar section on fire support issues
Arrange for reconnaissance	Conduct map analysis Plot obstacles and known enemy locations Plot all battalion targets List fire support tasks Advise the commander if guidance can/cannot be met with available assets and allocations Refine battalion targets, if necessary, and request additional assets as required Determine if battalion targets support commander's guidance Plot targets necessary to support commander's guidance (within target allocation) Determine purpose, engagement criteria, trigger points, and primary and alternate executors Develop target list worksheet Develop FSEM Brief commander on initial fire support plan
Make reconnaissance	Ensure battlespace observation is maintained Accompany maneuver leaders on reconnaissance Confirm or modify plan Verify target location, trigger points, and observation plan (primary and alternate)
Complete the plan	Modify the plan as necessary after reconnaissance Brief commander on the scheme of fires Emphasize observer movement, OP requirements, and triggers Receive approval for fire support plan Transmit target list worksheet and coordination requirements to battalion FSCC and company mortars Brief fire support personnel on fire support plan
Issue the order	Participate in company orders brief Ensure fire support representatives and mortar section leader attend orders brief if possible
Supervise	Conduct rehearsals Conduct inspections as required Continue to refine targets and triggers for actual location, ground reconnaissance, or new enemy information Continuously update and coordinate the plan as necessary

Legend
FSEM fire support execution matrix

specific mission, the FST leader should consider the following:

- What is the mission?
- How much time is available?
- What is the enemy situation and capabilities?
- What is the scheme of maneuver?
- What are the results of the IPB?
- What are the desired effects and what criteria define success?
- What maneuver and FSCMs exist?

Higher Headquarters Coordination

The company commander and FST must properly understand the HHQ fire support plan, guidance for fires, and the effects of fires on the company's scheme of maneuver in order to produce a valid company level fire support plan. Initial answers to the following important questions exist within the HHQ plan:

- What is the HHQ fires plan?
- What is HHQ IO plan and what are the authorities for information related capabilities (e.g. PA,

combat camera [COMCAM], MISO, cyberspace, EW)?
- What is the HHQ shaping plan and does it adequately support the company scheme of maneuver?
- Which of the battalion's subordinate units is the main effort?
- Who has priority of fires and when?
- Will priority of fires or priority targets shift? If so, what is the trigger and what is the signal?
- Are there limitations on supported arms in terms of ROE, collateral damage, BSG, and fratricide mitigation? If so, what FSCMs are needed and do they support the scheme of maneuver and desired effects?
- What is the approval process for fires?

Available Resources

A key factor in beginning the planning is determining what actual fire support systems are available to the company. The most readily available source for this information is the battalion's fire support plan (Appendix 19 [Fire Support] to Annex C [Operations] of the battalion OPORD). Products, such as FSCMs, the fire support execution matrix, and the target list, will provide guidance and direction on what and when a company can expect to use various types of fire support systems, to include IO capabilities and assets. When addressing available resources, company commanders and their FST leaders consider the following questions:

- Does the FST have the required personnel and equipment (e.g., JTACs, joint fires observers, FOs, IO representatives, laser designators, and appropriate communication platforms)?
- What are the allocated fire support assets (e.g., artillery, mortars, or civil affairs teams)?
- What are the allocated air assets (e.g., rotary-wing and fixed-wing CAS, assault support, and EW)?
- What assets can acquire and track the targets?

Initial Targeting

The FST begins the targeting process as early as possible and uses the decide, detect, deliver, and assess (D3A) targeting process (discussed later in this chapter). The IPB and initial intelligence estimate process will provide the FST leader with the preliminary information on how fires can support the company's mission. The HHQ fire support plan will provide initial direction and guidance on targets. The FST combines these sources of information with the company commander's guidance to begin the company targeting process, nominating targets when necessary and refining HHQ targets as required. A coherent targeting process allows the development of the company's EFSTs and effective input into the intelligence collection plan. As initial targeting proceeds, the FST leader considers the following questions:

- What is the HHQ targeting cycle?
- What is the air tasking order cycle?
- What are the most likely avenues of approach?
- What types of targets need to be attacked and when?
- What are the priority targets?
- What airspace coordination areas will affect the fire plan?
- Are there any unique C2 or communications requirements?
- How can targets and target locations be continuously refined?

Arrange for Reconnaissance

Within the planning process, the FST continues to participate in problem framing and supports the transition to COA development. With the company commander's intent and planning guidance, limitations, and task and purpose of company fires understood, the FST leader must focus efforts on developing the details necessary to produce the initial fire support plan for use during COA development. Further, in cooperation with

the company intelligence specialist, the FST integrates ISR requirements into the initial fire support plan, including scout snipers, the collection and reconnaissance plans, observer requirements, and aerial reconnaissance. Of note, the process of arranging for reconnaissance includes analyzing maps, developing the initial fire support plan, and continuing coordination with HHQ.

Conduct Map Analysis

The FST should plot all known elements of BSG, to include obstacles, friendly and enemy locations, and battalion targets. The FST coordinates this information with the company intelligence specialist and CLIC along with requests for information, target location refinement, and similar issues for inclusion in IPB development and the intelligence collection plan. The FST should also plot additional targets necessary to support the company commander's guidance within target allocation from higher.

Develop the Initial Fire Support Plan

With the results of problem framing and in conjunction with the company commander's scheme of maneuver, the FST leader should continue the D3A targeting process and analyze EFSTs. If necessary, EFSTs should be refined and, if resource gaps appear, the FST should request necessary additional assets. At this point in planning, the FST leader should advise the company commander on the ability or inability to meet the commander's intent for fires given available assets and allocations. Identifying issues early in the process enables the company commander to advocate for greater resources to support the company's scheme of maneuver more effectively. In addition, the FST should—

- Determine purpose, engagement criteria, trigger points, and primary and alternate executors of fires.
- Refine targeting decide and detect measures.
- Develop initial fire support plan products, such as the target list worksheet, company fire support execution matrix, and any preplanned fire actions (such as leaflet drops, groups, or series).
- Brief commander on initial fire support plan.

Continue Higher Headquarters Coordination

As the initial fire support plan is completed, it is critical that all elements of the FST continue to coordinate with HHQ and designated supporting agencies. As with intelligence, logistic, and other support plans, the fire support plan will continue to undergo changes and modifications as battlespace requirements change and organizations external to the company complete their planning. With an initial fire support plan completed, the FST must be sensitive to changes that could alter the ability to execute that plan, such as the following considerations:

- What is the ammunition status of fire support agencies?
- What is the planned ordnance load for aviation assets?
- Is there a need for special munitions, such as smoke, illumination, or improved conventional munitions?
- What special considerations for fuze/shell combinations apply in this situation?
- Is there a requirement to register fire support assets?
- What is the guidance on counterfire?
- What is the guidance on suppression of enemy air defenses?
- What is the nature of future plans or on order missions?

Make Reconnaissance

During this phase, the company commander and FST leader should confirm the fire support plan, whether lethal, nonlethal, or a combination of both. For lethal fires, the FST leader should ensure that battlefield observation is continuous

for those who will be controlling fires and assessing their effects. The FST should confirm or deny the requirements of the intelligence collection plan and prepare to support the plan with fires as necessary. At a minimum, if they cannot attend themselves, FST leaders should ensure that personnel who will control fires accompany the appropriate maneuver leaders when those individuals make their reconnaissance. Across the FST, target locations, trigger points, and the observation plan (primary and alternate observers) should be refined and confirmed through personal reconnaissance, intelligence feedback, and close coordination with company commanders and their subordinate maneuver element commanders.

Complete the Plan

The next step after completing the reconnaissance steps will be to apply any modifications discovered or identified to the initial fire support plan. As the plan is completed, the company commander's concern transitions from planning to execution. Accordingly, within the fire support plan, the FST needs to pay close attention to observer movement, OP requirements (placement and security), and fire support triggers. With the approval of the company commander, the fire support plan is submitted to HHQ for final approval. Copies of these documents must go to any supporting arms units.

Issue the Order

During the company OPORD, the FST leader briefs the fire support plan. The FST ensures that all available fire support representatives attend the orders brief.

Supervise

The FST leader should be prepared to conduct the CAR at the company level. If a formal CAR cannot occur, the company commander must ensure that some form of rehearsal takes place, even if it consists of radio backbriefs from maneuver commanders and their assigned organizations, such as FOs, joint fires observers, or FACs. Within the FST, the FST leader conducts necessary inspections and backbriefs. Refinement of targets and triggers remains continuous based on possible fires registration, new enemy information, or ground reconnaissance. The fire support plan is never finished; it is continuously updated and coordinated.

Targeting

Targeting is a continual, decisionmaking process, MCWP 3-16 states. The publication continues to explain that commanders and key personnel (fire support, intelligence, operations and planning) must understand the functions associated with the process, be knowledgeable of the capabilities and limitations of acquisition, target intelligence development, and attack systems, and be able to integrate them. The entire targeting process must be fully integrated into the tactical decisionmaking process.

The primary purpose of targeting is to support the company commander's intent for fires and desired effects by determining what people, equipment, infrastructure, or other things require acquisition and attack or influence. The following subparagraphs discuss the limited targeting process at the company level using the D3A methodology. There are possible scenarios in which the company deploys into a larger and more dispersed battlespace than normal with accompanying expanded targeting and fire support roles and responsibilities. In these cases, a larger and more complicated targeting picture emerges that requires expansion and augmentation of the FST in order to execute more deliberate target processing. The company commander and FST must address the proper employment of more and varied resources against the appropriate targets with the correct method of engagement and assessment. They must also address increased staffing of the FST, CLIC, and company COC as well as that within subordinate maneuver elements so that the expanded fire

support planning and targeting requirements receive adequate support. As MCWP 3-16 explains:

> *Targeting must be completely integrated into the fire support planning process. For example, the priorities established by the commander in the* decide *phase are not for targeting alone, but include his/her guidance for intelligence operations, fire support planning, and execution of fires. The four phases of D3A are inherently intertwined and overlapping.*

The Marine Corps' doctrinal targeting methodology, D3A (see fig. 5-1), serves fundamentally as a thought process. The company commander and FST leader must remember that the D3A targeting methodology is a tool for their use, not a set of lock step procedures that dictate their actions. However, as targeting responsibilities for an infantry company increase, D3A becomes a more formalized tool that requires greater detail, greater coordination, and the production of numerous tools and products to support all aspects of fire support planning and integration. Once begun, D3A is a continuous process that is fed by intelligence and operations functions and then feeds intelligence and operations functions. Company commanders should avoid artificial and unnecessary delays or missed opportunities due to inaction or waiting for perfect products.

Decide

The FST leader must supervise and provide guidance for the decide function. This function provides the overall focus for the targeting process and sets priorities for intelligence collection and attack planning. It initially begins in problem framing and in conjunction with IPB with the establishment of enemy and friendly situations; the development of event and decision support templates; and the identification of NAIs, target areas of interest, decision points, HVTs, and associated high-payoff targets. When executing the decide function, the company commander and FST leader consider the following questions:

- What targets should be acquired and attacked or influenced?
- When and where will targets likely be found and who will locate them?
- How should the targets be attacked (artillery, precision munitions, information related capabilities)?
- What effects need to be produced on the target (suppress, neutralize, destroy)?
- Is BDA required? For example, is a suppression effect required before another phase of an operation begins?

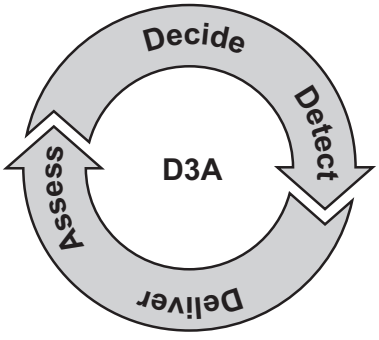


Figure 5-1. Decide, Detect, Deliver, and Assess Targeting Methodology.

The company commander must take an active interest in supervising the coordination of the fire support, intelligence, and operational plans. The company intelligence specialist's development of the most likely and most dangerous enemy COAs drive identification of HVTs and appropriate high-payoff targets. In turn, targeting directly affects the company intelligence specialist and the CLIC's creation of the intelligence collection plan. Positioning the FST within the company COC best achieves this interaction and is the most preferred method when the company executes its wide scope of responsibilities.

Detect

During the decide function, the FST and company intelligence specialist work together to determine targets, and then refine those results into HVTs and high-payoff targets. The detect function consists of execution of the intelligence

collection plan and integration of the results into the targeting process. During continuous operations, the FST makes immediate determinations regarding what actions to take on refinement of existing targets or engagement of newly identified targets.

Intelligence Collection

Part of the intelligence collection process entails tasking sensors to detect, find, and track targets designated during the decide function. There are many different means of target detection, consisting of a host of organic, nonorganic, joint, Service, and national level assets. While the company commander does not possess ready access to most of these, a properly trained and coordinated CLIC can use the request process to gain information from many of them. As discussed in chapter 4, clearly articulated, properly identified requirements provide the best opportunity for leveraging intelligence assets outside of the company. Intelligence assets and their functions include the following:

- Communications and direction finding assets (such as radio battalion, counterbattery radar, and aviation EW assets) help locate enemy C2 nodes, their indirect fire assets, and their various communications nets.
- Visual reconnaissance assets (such as company patrols, ground reconnaissance units, and light armored reconnaissance) help locate enemy maneuver elements and direct fire assets.
- Multi-sensor and aerial imagery assets (such as aviation platforms, satellites, and UA) help locate enemy C2, logistic functions, and fire support systems.
- Ground remote sensors help track enemy movement.
- HUMINT assets (such as CI/HUMINT teams) help locate targets (such as enemy maneuver elements, insurgents, informers, and IED layers).
- Civil affairs teams, IO, and similar assets help identify civic projects from advisory efforts to local employment plans.

Essential Reporting Information

When integrating the results of the intelligence collection plan with the targeting process, certain essential reporting requirements exist regardless of the method or asset used to gather intelligence. From a fire support standpoint, failure to capture these requirements may render the intelligence useless. Essential information includes the following:

- Reporting agency.
- Date-time group of acquisition by the sensor.
- Description of the activity.
- Size of the target.
- Target location, altitude, and target location error.
- Status (stationary or moving).

Deliver

The keys to success within the deliver function are well-established procedures for execution, coordination, and rehearsals within the FST and company COC. A perfect fire support plan that never leaves the FST or company COC is the same as not having a fire support plan at all. Further, as stated by Army General George Patton, “A good solution applied with vigor NOW is better than a perfect solution 10 minutes later!”

Effective deliverance of fires relies upon all persons and agencies involved in the process having knowledge and understanding of the plan. It is an integral part of the FST’s responsibilities to ensure that such understanding occurs. The execution of fires should follow the attack guidance created in support of the company commander’s plan, which consists of the following information:

- Time of attack.
- Desired effect.
- Attack system.
- Number and types of munitions.
- Response time.

Assess

Determination of the effects of fires on designated targets occurs within the assess function of

D3A. The requirement for accurate assessment is similar to the requirement to assess the effects of all operations as discussed in chapter 2. This assessment allows the targeting process to re-enter the decide function, during which decisions about re-engaging targets occur. Assessment is a continuous process related to the individual targets, not the fire support plan as a whole.

> **EXAMPLE**: Either a group or series created a suppressive effect to allow maneuver in a particular phase of the operation or it did not. If not, then a recommendation regarding refinement, reattack, or a modification to the duration of the fires is required.

> **EXAMPLE**: The local job program is achieving success or it is not. If not, is more money required, more security wanted, or more incentive for participation needed?

The formal method used is combat assessment, which measures effectiveness of force employment during military operations. It is composed of three elements: BDA, munitions effectiveness assessment, and reattack recommendations.

Battle Damage Assessment

Battle damage assessment gives a timely and accurate picture of the generated effect of fires on the enemy and aids in determining if a reattack is necessary. The requirement for a reattack is determined during the decide phase. While BDA is primarily an intelligence responsibility, it requires coordination with maneuver and operational elements to be effective. In order to be effective, there are three principles of BDA that must be followed:

- The assessment must be important to the commander, not just easily measurable.
- The assessment must be objective.
- Ideally, the assessment consists of information from more than one collection asset.

Battle damage assessment consists of three aspects to the target:

- Physical damage inflicted by such effects as blast, fragmentation, or fire.
- Functional damage, which is the attempt to determine if and to what extent the target can still operate.
- Assessment of the target system as a whole.

Munitions Effectiveness Assessment

The second of the three components that make up combat assessment is munitions effectiveness assessment. As the name suggests, it is simply an assessment of how well the designated munitions performed against the target engaged. This FFIR is fed into the intelligence community as a means of determining how well a given weapon performed. It drives modifications or evolution of such things as weapon methodology, tactics, and employment parameters. While the company commander ensures that the FST records and forwards this portion of combat assessment, it is not necessarily a portion of the fight at hand.

Reattack Recommendation

The reattack recommendation provides direct feedback into the targeting cycle. Using BDA and munitions effectiveness assessment, the CLIC and FST determine whether fires produced the desired effects. The recommendation should address the target's critical elements, the target system, and enemy force strengths. This recommendation feeds the decide portion of the D3A process during which the commander makes the final decision regarding effects produced and whether a reattack is necessary.

Fire Support Coordination

Fire Support Coordination at the Company Level

The ability for the infantry company to operate across a broad range of operations often includes

the requirement to operate semi-independently with augmentation. In these circumstances or in situations specifically designated by HHQ, the infantry company may control and coordinate fires. This level of responsibility often entails personnel and equipment augmentation to the infantry company.

One of the immediate demands on the infantry company employed in this manner is the requirement of the FST to maintain situational awareness at all times through direct integration with the company COC watch process. The FST must be aware of and track the following:

- The position of all friendly units to include those transiting through or operating in the company's battlespace; this includes aviation.
- BSG for all friendly units across the battlespace.
- The location and status of all fire support assets.
- Theater-specific issues, such as ROE, collateral damage estimate, aviation SPINS and routing, and all Appendix 19 (Fire Support) of Annex C (Operations) products from HHQ that affect the company battlespace.

If the infantry company is operating an FSCC, it must do more than safely deconflict fires. In addition to its normal role, it now must monitor, manage, use, and provide input into the following:

- The fires plans of the HHQ, company, platoon, and others.
- Attack guidance matrices.
- Management and utilization of the air tasking cycle to include airspace control order, air task order, and SPINS.
- Collateral damage estimate determination and management to include ROE use.
- FSCM management.
- Management of the location and status of all fire support assets to ensure continuous coverage of the battlespace to include such things as ammunition and fire capability status.

Clearing Fires at the Company Level

Fires clearance procedures at all levels follow the same principles. The following subparagraphs regarding the process of clearing fires emphasize the need for company commanders to clearly and carefully consider who within the company leadership is authorized to clear fires and under what circumstances they are authorized. Upon receiving a request for fire and based on a complete understanding of the guidance for fires and the aforementioned requirements for controlling fires, the approving authority plots the target location, consults the attack guidance matrix, conducts necessary coordination, clears fires, completes the mission, and conducts counterfire procedures.

Plot the Target Location

The FST must determine how the fires will affect such things as friendly units, FSCMs, airspace coordinating measures, or collateral damage concerns. The effects of fires is based on considerations that include target location error, weapons effects radius, estimated miss distances, and probability of incapacitation radius.

Consult the Attack Guidance Matrix

The FST consults the attack guidance matrix or similar tool to ensure that the correct fire support platforms engage the correct types of targets. Clearance personnel must understand the attack guidance matrix and the methodology and assumptions used to create the document.

Conduct Necessary Coordination

The FST coordinates with lower, adjacent, higher, HN, or other agencies, depending on the asset used and the mission's specific requirements. Only a complete understanding of the operational environment will ensure that the FST contacts the correct agencies through the correct channels with the correct information.

Clear Fires

Decisions to approve, modify, or deny fires involve numerous considerations. Only upon completion of all other steps and an analysis of the decision does the approving authority make its decision to approve, modify, or deny.

Complete the Mission

Fires clearance is not complete merely upon delivery of the first rounds on target. Refinements of fires, friendly maneuver, enemy action, and unexpected movements of civilians are actions that may cause any given mission to be denied or modified at any point during execution. Indeed, previously denied fire missions might receive approval depending on changing battlefield conditions, such as evacuation of civilians near the engagement. Approval authority must continue to monitor execution, record BDA, and disseminate information as appropriate in order to maintain control of fires.

Conduct Counterfire Procedures

Due to the automation of both incoming and outgoing fires detection, counterbattery fires present unique considerations. These considerations do not supersede standard fires clearance procedures. In operations or theaters with significant ROE and collateral damage estimate limitations, the chief consideration will be clearing the enemy's point of origin—normally not under friendly observation. The company commander dictates the level of risk that is acceptable in conducting counterbattery fire and includes proper guidance in the instructions to the company COC and FST.

Information Operations

While IO are not new to warfare and conflict, the ability of current and future technology to generate, organize, and disseminate information results in information being a decisive factor in today's operational environment. Information operations are those things that a company does, both offensively and defensively, to protect its own information and to gain an advantage in the IE in order to create a positive effect in the operational environment. They are nonlethal fires delivered in support of the company commander's scheme of maneuver and, therefore, are nested and synchronized and contribute to the commander's end state. Official definitions are provided in JP 1-02; MCRP 5-12C; and Secretary of Defense Memorandum 12401-10, *Strategic Communication and Information Operations in the DOD*.

Information operations employment at the company level primarily focuses on influencing and informing local target audiences, including adversary decisionmakers. The ability of the infantry company to conduct daily personal interaction with the audience is often the company's greatest contribution to IO. Company commanders must endeavor to inculcate the company with an understanding of this impact. They should ensure that all Marines not only receive necessary training and messages in order to support the company's IO concept, but also understand that operations occur under the constant scrutiny of a globalized media. The PCCs and PCIs should include current IO messages. What the individual Marine does or fails to do, good and bad, directly impacts IO.

Planning of IO follows the top-down planning, bottom-up refinement philosophy. Accordingly, the FST assists company commanders in developing and employing bottom-up IO that reflect local conditions nested within top-down national and regional messages. Information operations rely upon decentralized development and implementation. Decentralization facilitates flexibility and initiative at the company level and allows closer integration with the company commander's CONOPS while remaining consistent with strategic level messages.

Information Operations Capabilities

Information operations is not a discrete, standalone capability but is the integrated and coordinated, application of all information-related

capabilities (IRC), both organic and nonorganic, to affect the decisionmaking of adversaries and potential adversaries thereby creating an operational advantage. A number of discrete capabilities (e.g., PA, cyberspace operations, COMCAM, space operations, MISO, special technical operations) and activities (e.g. operations security [OPSEC], military deception [MILDEC]) exist as specialty capabilities each with their own unique attributes.

However, IO is not synonymous with these individual discrete capabilities or activities; much like fire support is not synonymous with artillery or aviation. As with traditional supporting arms assets that are applied with a combined arms approach, the focus of IO is on integrating IRCs with all other capabilities in a way that best supports the commander's decisionmaking, the actions of subordinates, and mission accomplishment. More art than science, IO is focused on the human mind and seeks to influence behaviors to produce operational advantages. In many cases, operations that the company performs may be heavily focused on influencing the adversary with information-related capabilities supported by kinetic actions.

Computer Network Operations

Computer network operations include both the offensive and defensive capability to attack and defend computer networks. Computer network attack and computer network exploitation address strategic assets that provide an offensive capability against enemy computer networks. Computer network defense focuses on agencies and processes that protect friendly computer networks from disruption and intrusion. Computer network operations commonly go unnoticed by company staffs due to their highly sensitive nature and are coordinated by HHQ.

Electronic Warfare

Dedicated EW platforms within the EW community generally execute offensive and defensive activities. The EW community also provides varying levels of support to other commands. The three types of EW are electronic attack, electronic protection, and EW support.

Electronic attack is a form of fires and receives the same considerations in planning and coordination. Normally delivered by air platforms, it can support company operations by conducting tactical jamming to deny or degrade enemy communication capabilities and can help isolate company objectives. Certain electronic attack capabilities and operations can also support static and mobile FP missions.

Electronic protection addresses electronic countermeasures and other procedures that ensure continued company use of the electromagnetic spectrum despite enemy EW activities. The company commander must give special attention to the types of electronic countermeasures employed by the company in relation to those employed by other Services and coalition partners operating in the company's battlespace to ensure deconfliction. The FST should coordinate frequency and spectrum deconfliction with HHQ's EW officer.

Infantry companies normally interface with EW support in the intelligence collection capacity. Electronic warfare community units, such as the radio battalion or other joint SIGINT collection assets, can provide support to company operations with an ability to search for, intercept, identify, and locate or localize sources of intentionally and unintentionally radiated electromagnetic energy, such as cell phones or wireless command detonation devices. This capability enables the company to conduct immediate enemy threat recognition, targeting, and planning as well as to provide intelligence input into future operations (see MCWP 3-40.5, *Electronic Warfare*, for more information).

Operations Security

Operations security is the continuous action of analyzing friendly information and actions, determining how the enemy may exploit vulnerabilities, and mitigating friendly activities accordingly.

From personnel releasing inappropriate information in e-mails to patrols establishing predictable patterns, good OPSEC at the company level seeks to reduce the enemy's ability to harm friendly forces by identifying friendly weaknesses early. The root of good OPSEC is discipline and avoidance of complacency. Company commanders must ensure that basic measures, such as adhering to communications plans, varying patrol routes and departure times, and self-censoring personal communications, become an integral part of the company's thought patterns in order to avoid offering the enemy an easy target. Companies should ensure that their internal OPSEC nests properly with the HHQ OPSEC plan, to include close coordination with deception operations, to ensure their success. Chapter 12 provides further information on OPSEC.

Military Information Support Operations

Currently, the Marine Corps possesses an organic MISO dissemination capability of three to four MISO detachments to support MISO. United States Army MISO teams may also support tactical dissemination. Whether or not a MISO team is with them, infantry companies often support MISO. Company tactical operations, such as patrols, often provide a MISO campaign the mechanism with which to influence and persuade the target audience's attitude and behavior. On patrol, a company's Marines communicate approved messages (or talking points); disseminate MISO products, such as leaflets, posters, or handbills; and conduct face-to-face interaction with the populace. In today's IE, even MISO conducted at the company level can have strategic effects. Tactical MISO teams occasionally augment rifle companies, but company commanders and their FSTs should expect to request these types of assets specifically when needed.

Military Deception

Military deception is highly sensitive in nature and executed via specific authorities, normally residing at the general officer level. Tactical deception occurs at the company level and requires careful planning and integration with OPSEC and detailed coordination with HHQ MILDEC plans to produce the desired effect. Tactical deception plants seeds of doubt, disrupting the enemy's decisionmaking process and misleading the enemy regarding friendly intentions. Objectives of the company's deception plan can be to cause the enemy to draw false assumptions regarding force disposition, time and location of attack, or focus of the main effort.

Public Affairs

Public affairs can be particularly useful to the infantry company regarding media engagement and dissemination of truthful, accurate information to foreign and domestic audiences. Public affairs and IO ultimately support the dissemination of information; however, an important distinction is that IO seeks to influence a target audience, while the purpose of PA is to inform a global media, a global audience, and counter enemy propaganda. This distinction is key when implementing these assets into the IO plan; moreover, PA personnel will likely resist placement under the "IO umbrella" as it may compromise their legitimacy. Company commanders should use PA to publish accurate information in order to counter enemy misinformation and disinformation. Preplanned press releases, statements, and talking points should complement all operations.

Combat Camera

Combat camera can be useful to the infantry company by capturing both video and still images of operations and engagement for historical documentation as well as supporting imagery requirements of other activities. Combat camera supports the commander's imagery requirements and produces timely products supporting the commander's intent and mission objectives. Complete access to areas of operations and timely exploitation of collected imagery are key to COMCAM success. The COMCAM Marines support the commander's situational awareness, IO, PA, and

CMO objectives to include ISR, BDA, MILDEC, legal, and history functions.

Civil-Military Operations

Civil-military operations, by their nature, usually affect public perceptions in their immediate locale. Using PA and MISO to disseminate information about CMO efforts and results can affect the perceptions of a broader audience and favorably influence key groups or individuals. Company commanders should take an active interest in ensuring target audiences receive constant information on the activities, efforts, and positive actions of the company or company-supported operations.

Information Operations and Decide, Detect, Deliver, and Assess

Information operations, targeting, fires, and employment of IRCs follow the D3A targeting process (see fig. 5-2). The results of the information IPB analysis provide the FST with the preliminary information on how IO can support the company's mission and offer possible targets. The development of IRC employment follows the same methodology as that of lethal fires. Employment and use of IRCs are included within the development of the company fire plan and EFSTs. Possible targets receive task, purpose, method, and effect analysis and development. Information operations fires requirements and capabilities are included in the intelligence collection plan. Inclusion of IRCs within the company fires plan adds maturity and depth to that plan in two ways: by accounting for the second and third order effects of lethal fires and by placing lethal fires in context through synchronization of IO effects with lethal engagement.

The information IPB results provide the input for the development of targets, their task and purpose, and their contribution to the company's

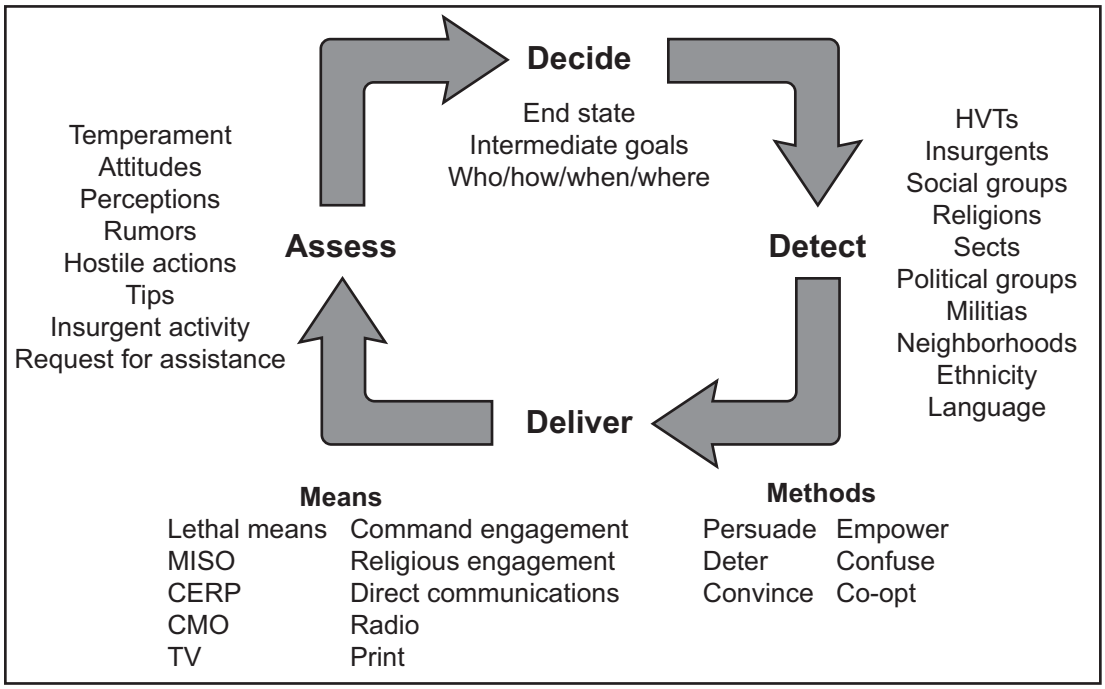


Figure 5-2. Information Operations/D3A Targeting Cycle.

mission (see table 5-2 and fig. 5-3). Within the decide function of D3A, the FST continues planning to include determining which targets to prosecute, coordinating with HHQ and IRC assets on nominated targets, and including those targets in the intelligence collection plan. A key challenge to the FST during the decide function is marshalling, requesting, and integrating the many various IRC assets and methods to achieve the assigned purposes. This task becomes increasingly more difficult as the size and complexity of a company's assigned battlespace grows. Another challenge will be seeking to synchronize integrated IO efforts with lethal fires. In many instances, it is far easier to designate and prosecute a lethal target than a target in support of an IO objective. Company commanders must guard against any tendencies to neglect IO because it appears difficult. They must consider augmenting the company FST with IO personnel when conducting operations in an IO-demanding environment.

Detecting targets that support IO objectives can be more difficult than detecting lethal targets due to the requirement to use multiple organic and nonorganic sensors to develop a picture of the target. Therefore, it will require more work on the part of the FST and company intelligence specialist to

Table 5-2. Information Operations Essential Fire Support Task Example.

Task: Decrease public support to enemy in Gonsol Village				**Purpose:** Deny enemy sanctuary and freedom of movement in Alpha Co AO				
Method:								
Decide			**Detect**	**Deliver**				**Assess**
TGT set	**TGT**	**LOC**	**Asset**	**Task**	**Purpose**	**Method**	**When**	**MOE**
Gonsol Village	Mohammed Ishmail	Gonsol Village	EMT	Influence local leadership to support Alpha Co operations	Legitimize Alpha Co's presence in Gonsol Village	Radio broadcast/KLE	TBD	Public display of support and participation in Alpha Co operations
Local religious leaders	Mullah Sadik	Gonsol Village	Alpha Co Cdr	Engage to report enemy activity in Gonsol	Prevent enemy collection efforts	KLE	TBD	Increase in intelligence on enemy activity
Effect: Enemy influence on local population reduced								

Legend
Co company
Cdr commander
EMT expeditionary military information support operations team
KLE key leader engagement
LOC location
TBD to be determined
TGT target

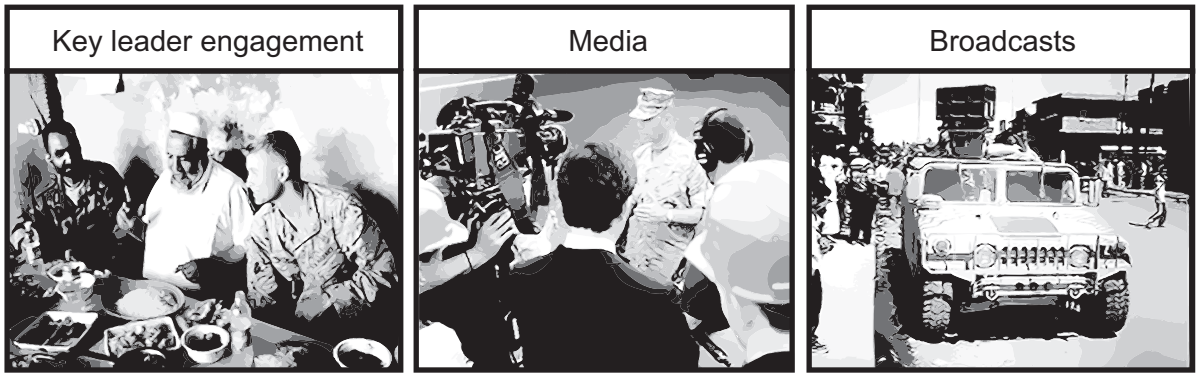


Figure 5-3. Key Leader Engagement.

determine an appropriate target within a group of tribal elders than it will to place a scout sniper team in overwatch of a road intersection upon which enemy artillery assets may pass. Therefore, the FST must closely work with the company intelligence specialist to ensure that IO requirements are coherent, tracked, and properly detailed.

Like the assessment of lethal fires, the assessment of IO efforts allows the targeting process to re-enter the D3A decide function during which decisions about re-engaging existing targets and prosecuting new targets occur. The assessment of IO efforts is continuous. The assessment of nonlethal fires uses MOEs vice BDA and munitions effectiveness assessment (see chap. 2 for a full discussion of MOE methodology). Since IO assessments rely on both qualitative and quantitative data, company commanders ensure that feedback and assessment on the effects of IO efforts in the battlespace occur with all company operations. For IO effort assessments to have value, it is important that the FST focus on the actual impacts of the IO effort vice the quality or quantity of the IO effort itself. The FST must also understand that establishing direct cause and effect relationships between IO efforts and responses in the IE is difficult and can lead to erroneous interpretations. The best guard against such errors is to fully integrate IO within all company operations as part of a holistic approach to success and not a single effort of its own. The following are possible methods of assessing IO effects:

- External assets, such as CI, HUMINT, and human environment teams; special operations forces; civil affairs and MISO teams; and other interagency organizations.
- District stabilization framework reports that also provide understanding of the sources of conflict to enable more structured and effective targeting.
- Key leadership engagement reports.
- Patrol debriefs, most especially those portions detailing atmospherics (see chap. 4 for discussion of tasking patrols with collection requirements).

Information Operations Execution

The company FST integrates IO with maneuver operations to produce effects in their AO. Execution of IO efforts, like all fires, must occur within the construct of combined arms. Information operations efforts alone will fail unless combined with maneuver (action). Along with the numerous nonorganic assets that may be available, the platoons and squads of the infantry company represent the single best agents of IO because of their daily, face-to-face contact with the local populace.

Both lethal and nonlethal fires are essential in creating effects on the battlefield that will support the infantry company's maneuver operations. The IE is an important and often decisive portion of the battlespace that needs to be understood and positively influenced to achieve success. Employment of IO occurs within the combined arms paradigm, through organic and nonorganic capabilities and assets, and as an integrative tool that the company commander uses to address information concerns in the operational environment.

Influence of the Individual

All actions can have IO implications. Every action or inaction can be broadcast immediately and have immediate strategic impact. Individual company personnel possess a face-to-face level of access that senior personnel do not have; the actions of junior Marines who are actually in contact with the local populace will normally have more of an impact in shaping the attitude of the

local populace toward friendly forces than IO messages developed by HHQ. Whether it is a conversation with the locals or a firefight with the enemy, individual Marines manage perceptions and can be the best weapons or the worst liabilities of the IO effort. The company must ensure that company personnel understand the messages (talking points) associated with every operation: Who is the audience? What are the effects friendly forces are trying to achieve? How are those effects measured?

Whether providing security for new school construction or assaulting a hill against a conventional enemy, Marines should be equipped to articulate what they did and why they are there. Proper execution depends on proper planning. The FST needs to consider the message, the messenger, and the medium used to deliver that message.

Note: It is important for the members of the infantry company to understand the IE and consider the various methods and media they can use to support IO objectives.

Influence of the Company Commander

The responsibility for proper and effective IRC support across the company rests with the company commander. The company commander should institute an IO training and education regimen as soon as possible. Due to time and training constraints, linking IO into other training opportunities is an efficient way of conducting simultaneous training actions. Whether in the gas chamber or conducting nonlive fire squad attacks, Marines can receive and practice IO messages regarding what they are doing, why they are doing it, and how their actions contribute to the success of the operation. Similarly, the company commander must ensure the FST receives comprehensive and proper IO training for planning and executing all types of lethal and nonlethal fires.

Hearts and Minds

Winning hearts and minds does not necessarily mean being liked. Rather, the term "hearts" means convincing the population that the success of friendly forces is in their long-term best interest. Similarly, the term "minds" means convincing the population of the eventual victory of friendly forces. In conjunction with IO fires, the infantry company best wins hearts and minds by establishing relationships and trusted networks. The principal emotive content is respect, not affection, with the intent to promote trust and confidence that eventually can lead to greater intelligence collection.

Nesting Command Messages

In the same way that proper planning effectively nests both task and purpose horizontally (adjacent units) and vertically (higher to subordinates), the company ensures that their messages are appropriately nested. When seeking to add specificity to HHQ messages for the local environment, the company commander and FST need to understand the amount of latitude they may or may not have and the request process required to modify messages originating from HHQ. Further, companies must coordinate messages (and modifications) with adjacent units to avoid "information fratricide," especially when friendly units share population groups.

Publicity of Enemy Violence and Use of Terror

The enemy's use of violence, terror, intimidation, and other actions should receive appropriate publicity to discredit them and delegitimize their actions. Their disregard for civilian losses should also be exploited. Accurate reporting of enemy actions carries the weight of legitimacy, so exaggerations or rumors should be avoided. At the same time, successes of friendly units (to include

HNSF) should be highlighted and positive results reinforced. Proper employment and integration of a combat camera capability with PA or MISO can help disseminate accurate and truthful information and influence and inform audiences.

EXAMPLE: The company COC receives reporting from 1st Platoon that they have just come upon a village where two teenage males have received injuries inflicted by the enemy for not being able to pay money during an attempted "shake down." Looking to exploit the situation, the company COC instructs the platoon to provide medical care to the injured persons, ensuring that they take pictures of the treatment. They also advise the platoon commander to conduct a leader engagement with the local village elders, emphasizing the company's commitment to the populace, and get further details of any other injustices done to members of their village. The company also requests a follow-up engagement for a later date between the village and a civil affairs team. The company FST forwards the information (with interview details and pictures) to HHQ to produce psychological products (condemning the enemy acts of injustice) and provide information for public affairs press releases. The company commander uses the same information to prompt other respected leadership in the area of operations to denounce such actions via local radio broadcasts con-ducted each day at the forward operating base.

Quick Response to Enemy Propaganda

When facing enemy forces that are widely disseminated and decentralized, the infantry company faces challenges in responding to enemy propaganda as fast as it may appear. Delayed responses can let the enemy story receive widespread attention and acceptance, achieving enemy propaganda victory or even dominance of the IE. Company commanders, their FSTs, and those involved in the IO effort can do the following things to counter the enemy's potential ability to spread propaganda quickly:

- Develop preplanned, preapproved, and prepublished products that counter most likely enemy actions, such as innocent civilian casualties due to an IED and intimidation attempts.
- Develop internal company COC and FST battle drills to rapidly initiate IO requests to HHQ.
- Work with HHQ IO staffs and approval authority to streamline request and approval processes and to develop best practices, which ensure timely approval of new IO messages.
- Inculcate members of the company with an IO mindset so that IO tempo is generated through information push to the company FST and COC vice information pull from the company FST and COC.

EXAMPLE: Bravo Company's mission is to clear village X, a village abandoned by its local population and occupied by only the enemy. The company intelligence specialist and CLIC confirmed this information through multiple sources. The FST, CLIC, and company commander know that the enemy consistently conducts false reporting and exaggerates civilian casualties to delegitimize friendly forces in the eyes of the local population. Anticipating that the enemy will attempt to do the same during the upcoming operation, the FST develops an IO EFST that addresses this likely enemy action:

TASK: Highlight the lack of noncombatants in village X.

PURPOSE: To deny the enemy the ability to accuse friendly forces of causing civilian casualties.

The FST determines that they will request and integrate a combat camera team into the operation. The team will document the abandoned village using still and video imagery and conduct recorded interviews with civic and tribal leadership of the displaced civilian population, confirming they had fled the village and that it was in enemy hands. By synchronizing IO with company operation, by understanding enemy patterns, and by coordinating with HHQ in advance, Bravo Company can quickly respond and defeat any enemy propaganda attempt to discredit friendly forces.

CHAPTER 6
OFFENSIVE OPERATIONS

This chapter discusses the basic principles employed at the company level to gain contact with and attack the enemy. It includes the tactics and techniques used by the company commander when applying the principles of offensive combat. Various other publications, located in the references of this publication, offer guidance on the special considerations applying to warfare in jungle, deserts, and mountains, which this chapter does not address.

Purpose of the Offense

Among the three types of operations—offense, defense, and stability—the offense provides the means of decision and that is why, as illustrated in figure 6-1, it is inherent to every possible operation. In defensive operations, the preplanned counterattack can serve to decisively defeat the enemy's assault. In stability operations, the offense results in aggressively pushing HA out into the community vice waiting for the populace to try and make their way to aid stations.

Offensive operations seize the initiative and dictate tempo. They provide freedom of maneuver and action while massing fires to achieve goals. Offensive operations focus on the enemy, the situation, and the problem, but not seizure of terrain, occupation of facilities, or distribution of resources. The spirit of the offense demands that company commanders take every opportunity to dictate the terms of engagement by seizing the initiative through offensive action. In sum, the offense allows company commanders to impose their will upon the enemy, the situation, and the problem.

Marine Corps Planning Process in Offensive Operations

As discussed in chapters 2 and 3, the company commander uses an abbreviated version of MCPP appropriate to the time and resource limitations typical to an infantry company. The company commander must take the many products, formats, orders, and guidance received from HHQ; discern the mission through the design and problem framing processes; and translate it into language relevant to the training and experience of platoon commanders and squad leaders. The following list represents the recommended thought, planning, and orders process for the offensive operations at the company level:

- Understand the environment and the nature of the problem, the decisive point, and what must be achieved at that point to accomplish the mission (problem framing) using the company's task and purpose received from HHQ.
- Determine a concept for the main effort and the supporting efforts necessary to place the

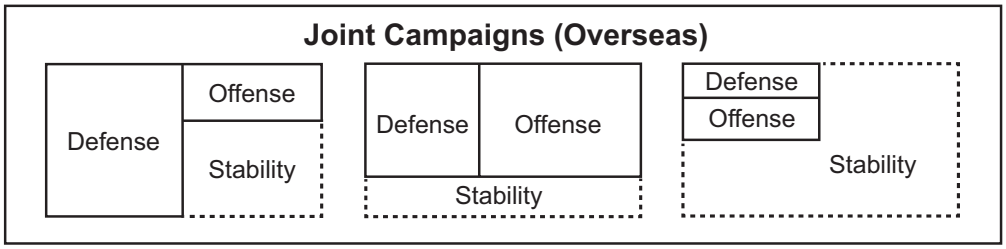


Figure 6-1. The Offense Across a Range of Military Operations.

main effort at the point of decision (problem framing and COA development).
- Create the task and purpose of the main and supporting efforts by determining the essential tasks of each (COA development).
- Task-organize combat power and resources to meet the needs of the main and supporting efforts (COA development).
- Assign command and control, such as platoon commanders and squad leaders, to the task-organized units making up the main and supporting efforts (COA development).
- Establish control measures to clarify and support the operation (COA development).
- Verify, using MCPP as a means of testing the concept, that the main effort is sufficiently weighted to accomplish the mission and that the mission of the main effort accomplishes the mission of the company (COA wargaming, COA comparison, COA decision).
- Complete the movement, intelligence collection, fires, logistic, and contingency (time permitting) plans (orders development).

Characteristics of Offensive Operations

Within the three operational areas in a range of military operations, there are four characteristics that apply to all offensive operations—surprise, concentration, controlling tempo, and audacity.

Surprising the enemy disrupts their ability to respond effectively, induces psychological shock, confuses or overloads C2 systems, and reduces their defense coherence. Company commanders achieve surprise by—

- Estimating the enemy commander's intent and denying him/her the ability to gain situational awareness.
- Attacking the enemy at a time and place they do not expect in a manner for which they are unprepared.
- Acting in a bold and unpredictable manner.

Concentration is massing the overwhelming effects of combat power and resources to achieve a single purpose. The art of concentration is the company commander's success in balancing the defensive requirements of dispersion while ensuring the massing of fires at the proper time and place.

In order to retain the initiative, the offense seeks to control tempo. All actions that seek to allow friendly forces to cycle through the OODA—observe, orient, decide, act—loop (see fig. 6-2) decision process more quickly than the speed of events or of a particular enemy contribute to controlling or dictating the tempo of the engagement and problem management.

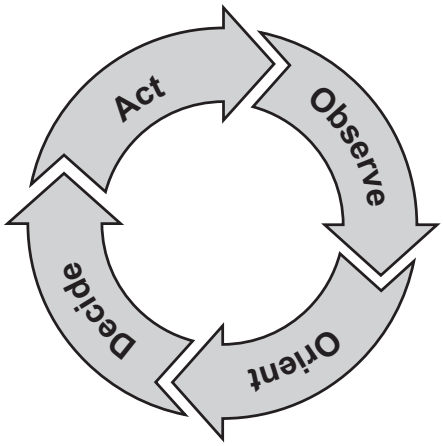


Figure 6-2. The Observe, Orient, Decide, Act Loop.

Audacity is a simple plan of action, boldly executed, that inspires subordinates to overcome adversity and danger. Company commanders apply audacity by developing bold and inventive plans that produce real results. They temper boldness and ruthlessness with strong leadership and sound judgment. They understand not only the difference between acceptable risk and foolhardiness, but also that a good plan executed now is better than the perfect plan executed too late.

Fundamentals of Offensive Operations

While the characteristics of offensive operations are generalities, the fundamentals of offensive operations are the rules that evolved as commanders applied the principles of war to accomplish offensive missions. The fundamentals do not replace the principles of war; rather, they reflect general truisms resulting from the application of the principles to maneuver warfare doctrine, task-organization capabilities, and a range of military operations.

Orient on the Enemy

Orienting on the enemy is the cornerstone of Marine Corps doctrine. The purpose of the offense is to use decisive action to force the enemy to react; it follows that the key to conducting offensive actions in the battlespace relies upon focusing those actions on influencing whatever entity constitutes the threat facing the infantry company. Such things as terrain, infrastructure, or environment are not the focus of the offense, but become goals and objectives if they serve to enforce the commander's will on the enemy.

Gain and Maintain Contact

In order to employ the offense as the decisive action in defeating an enemy or satisfying a certain problem set, constant contact with the enemy or situation is critical. In order to seize or retain the initiative, company commanders must firmly grasp and understand the situation at hand. Whether pursuing a retreating enemy or arriving in the midst of humanitarian crisis, the company must gain contact in order to develop the situation. Once in contact, that contact must continue in order to deliver a steady stream of intelligence on the enemy or situation, limit friendly vulnerability to surprise or unacceptable risk, and retain the initiative.

Develop the Situation

Developing the situation is an approach to resolving complex problems and situations. It is both a philosophy and a method that seeks to take advantage of time available, experience, observation, and other inputs to build understanding of the situation at hand. As commanders build this context, they recognize patterns, discern COAs, and take offensive action to positively influence the future.

Concentrate Superior Firepower at the Decisive Time and Place

Successful offensive action requires the massing of superior combat power, resources, or fires at the decisive place and time and the rapid application of this power to destroy the enemy or resolve the problem. Using fire and maneuver, avoiding the culminating point through maintenance of momentum, and developing the situation continually are methods by which the company commander masses at the decisive point.

Achieve Surprise

Surprise is a fundamental of the offense in that it lays the foundation for successful decisive action by paralyzing, delaying, or disrupting the threat's ability to react effectively and coherently.

Exploit Known Enemy Weaknesses

Maneuver warfare doctrine is based on identification and aggressive exploitation of critical enemy vulnerabilities while avoiding enemy strengths. In a broader sense, company commanders resolve the situation or tactical problem by seeking to gain the greatest advantage or resolution at the least cost. Whether exploiting an enemy flank or an opportunity to develop common ground with a village population in order to overcome local opposition to establishing a refugee resettlement camp, the principle and requirements of commanders are the same: a basic understanding of

the situation and a fluid mindset to exploit known enemy weaknesses with maximum speed. Company commanders must not hesitate to exploit weaknesses and opportunities.

Seize or Control Key Terrain

The successful accomplishment of the offensive mission across a range of military operations is often dependent upon the early control or neutralization of key terrain as identified during the IPB process (see chap. 4). The mere possession or dominance of key terrain, whether physical terrain or the human environment, is irrelevant unless exploited accordingly—to the detriment and defeat of the enemy and to establish the conditions for further success and mission accomplishment.

Gain and Maintain the Initiative

A paramount objective of the commander in the offense is to seize and retain the initiative. By taking the initiative, company commanders dictate the terms of the battle or the resolution of the problem while forcing threats to react on the commanders' terms. Through seizing and retaining the initiative, the friendly force imposes its will upon the problem and upon the enemy.

Neutralize the Enemy's Ability to React

Company commanders must endeavor to disrupt and neutralize negative effects on the mission. While this effort applies to both the enemy's capability to react to the commander's tactical dispositions and to maneuver, it also requires significant risk assessment and appreciation of consequences, including second and third order effects, in stability-related operations. Isolation of the battlefield and destruction of or interference with enemy support and reinforcement actions reduce their responsiveness, mitigate risk, enhance the security of friendly forces, and assist in gaining and retaining the initiative. Understanding the role of stakeholders, establishing effective feedback mechanisms, and leveraging local civic leadership increase the likelihood of success while protecting the force.

Advance by Fire and Maneuver

Fires (lethal, nonlethal, or both) without maneuver do not provide decisive results. Attempting maneuver without fires invites destruction or failure. Fire and maneuver characterize the infantry company's offensive actions. The company commander uses fire and maneuver to create a preponderance of combat power and effects at the decisive point.

Maintain Momentum

Maintaining momentum is establishing a consistently higher operating tempo than the enemy or situation. In offensive actions, the company commander seeks to avoid or mitigate the culminating point—that point at which logistics, fatigue, or the enemy stops the attack or offense. When planning, the company commander considers friendly weaknesses; mitigates them; and, once in contact, makes every effort to gain and maintain momentum until securing the objective or achieving the goal. Establishing a sustainable battle rhythm is essential to maintaining momentum and avoiding the culmination point in steady state and dynamic operations. Flexibility and speed in the employment of combat power and resources are essential, but not at the cost of competency and efficiency.

Act Quickly

Speed is a weapon and a function of momentum. When acting quickly, the infantry company seeks to act and move faster than the enemy does. The ability to do so not only enables the offensive action to impose the commander's will on the enemy, but also mitigates risk and exposure of friendly forces to the reaction of the enemy.

Exploit Success

Because combat power and the ability to affect positive change on a given problem are relative, commanders exploit any information, tactical success, advantage, or opportunity that accrues

during offensive action to generate a greater effect than merely that of local success. Upon achieving superiority at the decisive time and place, the company commander must be prepared to exploit success by avoiding the culminating point and leveraging unexpected opportunities that present themselves. Speed of action, preplanned pursuit and resupply, possession of a reserve of combat power and resources, and similar measures aid exploitation.

Be Flexible

Flexibility is essential to the infantry company's ability to adapt successfully to changing battlefield conditions. Because the enemy exercises independent will and the company commander can never have complete knowledge of the battlefield, the plans and actions of offensive action must take into account contingencies through simple, loosely coupled plans.

Be Aggressive

As the agent of decisive action, the offense is inherently aggressive and focused on the energetic pursuit of victory. Aggressive action is not the same as rash or reckless action; rather, it is characterized by bold initiative, speed and endurance, and the willingness to succeed in the face of hardship, unexpected obstacles, and the challenge of facing an independent will.

Provide for the Security of the Force

Force protection is a warfighting function and the defense of the operational area is inherent to all activities across a range of military operations. Security is necessary whether a force is in garrison, moving, participating in security operations in permissive or hostile environments, or in active combat. All units are responsible for their own security, regardless of the security provided by other units.

Types of Offensive Operations

There are four general types of offensive operations—movement to contact, attack, exploitation, and pursuit. Though described in a logical or notional sequence, these operations may occur in any order or simultaneously throughout the battlefield (see fig. 6-3). A movement to contact may be so successful that it immediately leads to exploitation or an attack may lead directly to pursuit.

Movement to Contact

Movement to contact is an offensive operation conducted to develop the situation and to gain or maintain contact. A properly executed movement to contact allows the commander to make initial contact with minimum forces and to expedite the

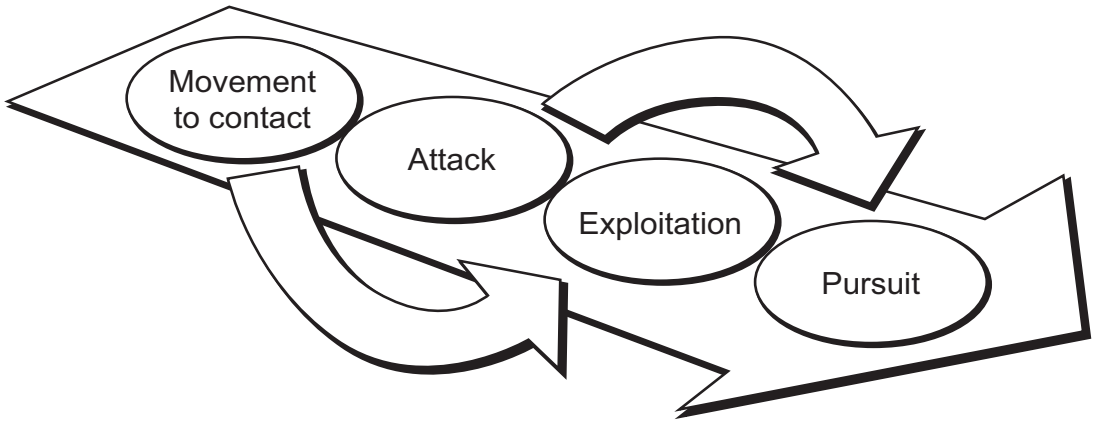


Figure 6-3. Types of Offensive Operations.

employment and concentration of the force and resources whether within a combat or stability environment. It also creates favorable conditions for subsequent actions. Companies executing this task use the smallest force possible to make contact and develop the situation. On contact, company commanders have five options: take offensive action, take defensive action, bypass, delay, or withdraw. They may use any means of transportation, but generally adopt some form of march column formation and organization (see fig. 6-4). Planning a march requires significant preparations and attention to detail to ensure the movement takes place with minimum confusion and delay.

At a minimum, a movement to contact consists of a security element (advance and rear guard) and the main body. Depending on METT-T, company commanders may place additional security with each column or element and may use flank and rear security to screen the main body. For example, the commander of the main body element may choose to put a small "point element" forward to provide additional security for the main body and serve as a connecting file with the advance guard.

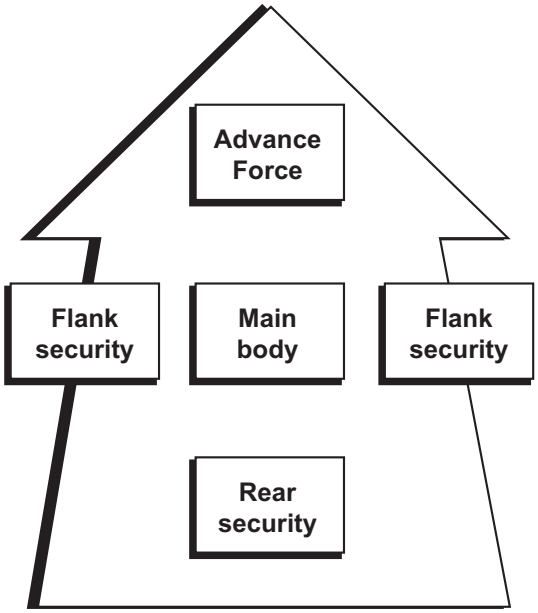


Figure 6-4. Movement to Contact.

In planning movements to contact, the company commander should consider—

- Rapid movement.
- All-around security.
- Ease of control.
- Direct control of the main body, which normally is the decisive element.
- Possibility of multiple teams finding the enemy.
- Decision points and criteria for committing the main body.

Within the overall OPORD addressing the task and purpose of the movement to contact, company commanders devote substantial effort to such things as the manner in which the movement will occur, the relationships between elements, and movement contingencies. The march order should consist of detailed instructions regarding route, destination, schedule, rate of march, formation, and other control measures not covered by the unit's SOP. When possible, these instructions are augmented with overlays, maps, march tables, and similar products.

Movements to contact occur as either approach marches or search and attacks. Depending on the mission, companies may seek to engage and destroy an enemy or approach an AO in support of stability operations. They could use either method or a combination of the two.

Approach March

Company commanders choose the approach march method of conducting a movement to contact when the location of the threat, unstable situation, or other conflict is roughly known. Companies using an approach march do not wander around the battlespace; rather, they move forward aggressively along a route to the place of most likely contact.

The company commander assumes that contact with an enemy is imminent. Units in the main body are task-organized and tactically grouped

for immediate deployment from the march column. Mission-related considerations outweigh other concerns and company commanders may choose to deploy the company into formations less efficient to movement than a tactical column. Similar to other types of marches, the approach march is generally organized into an advance guard that provides forward security and reconnaissance as it seeks out the enemy or moves into an uncertain or chaotic situation, a main body from which decisive action maneuver and action originates, and a rear guard that provides security to the rear.

The advance guard, which is normally a rifle platoon for a company-sized movement, is a security detachment that precedes the main body in order to provide forward security and reconnaissance. Divided into a point element, an advance party, and a support element, the advance guard must possess enough combat power not only to seek out the enemy, but also to prevent an enemy or chaotic situation from engaging or involving the main body until the company commander wishes to commit that decisive element.

The main body is the decisive element in the approach march. When encountering an enemy or reaching the destination for further operations, the advance guard deploys, reports, and develops the situation. The company commander forms and decides upon a COA and then uses the main body to execute that plan. The main body contains the bulk of the company's combat power and resources. From those resources, the main effort and any other supporting efforts are drawn. During movement, the main body groups itself tactically along the assigned route, generally forming a tactical column. The main body provides its own flank security.

The rear guard is a security detachment that follows the main body in order to protect the rear of the movement. Normally consisting of a single squad, the rear guard is organized and tasked similarly to the advance guard. A fire team-sized rear point provides security and early warning of enemy threats. The rest of its parent squad forms the rear party that supports the rear point if necessary and delays enemy attacks until support from the main body arrives. The rear guard provides its own flank security.

While conducting the approach march, the nature of the mission dictates speed, formation, and other variables. While the purpose of the operation is to gain and maintain contact, company commanders should not let caution so slow the approach march that the enemy can avoid contact, dictate contact, or allow unstable situations to worsen significantly. Similarly, company commanders should not move so fast that their movement loses cohesion, blunders into unexpected threat situations, or becomes unable to mass fires at the point of decision. As expected from offensive action, the ideal solution is to move aggressively, relying on good security and reconnaissance, and to find the enemy or determine the threat situation first, thereby allowing the company to deploy as it pleases on ground of its choosing to resolve the problem when desired.

Each major subdivision of the march column establishes security detachments that protect the flanks of the unit while on the march. Flank guards engage the enemy as required in order to prevent exposure of the company.

The use of security elements and temporary OPs/listening posts (LPs) ensures security of the main body during halts. Flank guards occupy blocking positions located on tactically key terrain.

Contact between the various elements of the tactical march column is the responsibility of the senior unit. The main body is responsible for maintaining contact with the advance guard and rear guard in the same way that the support element of the advance guard is responsible for maintaining contact with the advance party.

A battalion-sized movement to contact may use a rifle company employed as the advance guard or as part of the main body. Regardless, the general considerations and missions of the elements remain the same and company commanders plan accordingly.

Search and Attack

While the approach march is a relatively direct method of movement to contact, infantry companies employ the search and attack method when the location of the threat, unstable situation, or source of conflict is in an unknown location within a general area. A company commander employs this form of movement to contact when the enemy is operating as small, dispersed elements, when the task is to deny the enemy the ability to operate in the battlespace, or when the company seeks to further develop the situation within a given area. Some examples of search and attack situations are—

- *Protect the force*. The enemy is prevented from massing for an attack or other operations, such as disruption or destruction of friendly military or civilian operations, equipment, property, and key facilities.
- *Collect information*. Information is collected about the threat, the human environment and physical terrain, and other intelligence required to support operations.
- *Destroy the enemy*.
- *Deny the area*. The enemy is prevented from operating unhindered in a given area that it might use as a base camp or for logistic support.

The company commander assumes that contact with an enemy is highly likely. Units of the company are task-organized into elements—reconnaissance elements, maneuver elements, and support by fire elements—designed to locate and fix the enemy and decisively resolve the issue. Mission-related considerations dictate whether the company commander tasks subordinate elements with one or all of these various tasks. A robust enemy threat might dictate that one platoon locates the enemy, another platoon supports by fire to fix the enemy, and a last platoon maneuvers to decisively finish the enemy. A lesser enemy threat might dictate that all rifle platoons in the company deploy organized to carry out all three tasks themselves. Companies may employ subelements built around the rifle platoons to conduct a search and attack or they themselves may serve as elements of a battalion-sized search and attack operation. Battalions assist subordinate companies by ensuring the availability of supporting fires and other resources.

Elements tasked with finding the enemy do so through patrols, OPs, tracking techniques that include locating enemies hiding among the population, approach march techniques, or a combination of all of these. When the enemy is located or identified, the reconnaissance element reports to company headquarters, continues to track the enemy or situation, and prepares for the arrival of follow-on forces or resources tied to fixing and finishing the situation. Based on likely locations as determined by IPB, elements of the company conducting reconnaissance functions receive specific guidance on zones of operation, routes, actions upon contact, and/or engagement and disengagement criteria.

When the reconnaissance element locates the enemy, the fix element deploys with enough combat power and resources to prevent the enemy from retrograding or reinforcing or to prevent chaotic situations from further degrading or spreading until the main effort or finish element arrives.

Elements tasked with finishing the enemy or resolving a situation serve as the main effort tasked with accomplishing the company commander's desired end state. After the other elements locate and fix the enemy, the assault element deploys to accomplish the mission.

The company must enter the designated battlespace to begin operations. In planning, the intelligence estimate will define the battlespace in such terms as areas of interest and influence and NAIs. Using this estimate, the security threat, and the mission, the company commander enters the battlespace with the company either en masse or by infiltration:

- *En masse*. Company commanders may choose en masse occupation in the face of significant enemy threats, when forceful occupation of the battlespace is part of establishing dominance over the enemy or population, or when speed and simplicity are required.

- *Infiltration*. Company commanders may choose infiltration when the level of enemy threat is low and does not immediately threaten the survivability of any part of the company, when surprise or stealth are desired, when avoiding intimidation or alarm of the populace, and when time is not necessarily a factor in the speed of occupation.

Stealth, aggressiveness, flexibility, sustainment, rapidity of decisionmaking, and exploitation of opportunities characterize the daily actions of a search and attack operation. Company commanders must not restrict themselves to certain methods of employment; rather, they must use good problem framing and design to determine the best way to locate, fix, and eliminate enemy threats and resolve conflict in their AOs. They must also task-organize combat power and establish employment techniques accordingly.

Conducting search and attack operations requires a significant amount of detailed planning. Key planning considerations are geometries of fire, control measures, intelligence update/dissemination, communications, linkup procedures, and logistical support. Creating an environment in which subordinate units safely and efficiently operate with maximum independence and initiative is difficult. An honest assessment of the company's abilities is required before employing this movement to contact technique and should include the following points:

- HHQ desired end state.
- ROE.
- Succinct mission statements for subelements.
- Engagement criteria and triggers.
- Size of force required based on intelligence estimates.
- Logistical support considerations based on mission duration and requirements.
- Control measures.
- Rehearsals.
- FP.

Attack Types

Infantry companies attack known enemy threats and specific enemies, their positions, their means of support, and other pressure points associated with their will to resist. Attacks are offensive operations of coordinated movement that are supported by fire and are conducted to seize or secure terrain or to defeat, destroy, or capture the enemy. While the offense is inherent in all operations across a broad range of military operations and company commanders must always consider environment, ROE, and the presence of noncombatants on the battlefield, the attack remains an aggressive, offensive action during which violence is limited only by the enemy's level of resistance and the law of war. There are eight types of attack—hasty, deliberate, spoiling, counterattack, feint, demonstration, reconnaissance in force, and raid. The ambush, an attack technique appropriate to the infantry company, is also included in this discussion.

Hasty

Hasty attacks seek to take advantage of the enemy's lack of preparedness by using boldness, surprise, and speed to achieve success with the forces immediately at hand and with minimal time devoted to preparation. Usually conducted as means of exploiting an opportunity, hasty attacks require only minimum coordination with higher and adjacent commanders.

Deliberate

Deliberate attacks normally occur due to the enemy's preparedness to receive an assault. Therefore, deliberate attacks involve detailed reconnaissance to pinpoint objectives, enemy positions, and obstacles in order to determine potential vulnerabilities and appropriate supporting positions to exploit them. Company commanders follow the MCPP steps to determine the decisive point, organize the available combat power, and designate main and supporting efforts and a reserve, as

appropriate. Breaching, supporting, and assaulting tasks are resourced; the direct and indirect fire support plans, to include CAS, are integrated into the scheme of maneuver; and control measures and triggers are emplaced accordingly. Finally, company commanders develop plans for consolidation, reorganization, avoidance of the culminating point, and exploitation.

Spoiling Attack

Spoiling attacks are limited objective attacks used to delay, disrupt, or destroy the enemy's ability to attack. Spoiling attacks normally occur within the defense, though they may also occur to stop the enemy's offensive action prior to launching a larger friendly attack. Company commanders produce these effects by striking the enemy during vulnerable moments in their preparations, such as in their assembly areas (AAs) or attack positions or while they are on the move. Spoiling attacks may be either hasty or deliberate and their conduct is similar to other types of attacks.

Counterattack

A counterattack is an offensive action conducted by the defense to regain the initiative or to deny success of an enemy attack. Similar to the use of a reserve, preplanned counterattacks integrated into the defensive plan are preferred to improvised counterattacks that risk reinforcing failure. Commanders conduct counterattacks either with a reserve or with lightly committed forward elements. Execution of the counterattack occurs after the enemy launches its attack, reveals its main effort, or creates an assailable flank.

Planning and rehearsing counterattacks is similar to that of all other types of attacks: combat power, tasks, supporting fires, routes, triggers, and similar measures are determined and assigned; moreover, counterattacks planned as part of the defensive scheme of maneuver receive greater planning emphasis than those planned as contingencies. Well-planned counterattacks are likely to succeed given the defender's superior knowledge of the terrain, the ability of the defender to generate parity between forces at the point of attack, and the inevitable degradation of cohesion experienced by attackers as they penetrate an objective.

Feint

Feints are limited scope attacks with an extremely specific objective intended to cause the enemy to either react in a particular way or delay or disrupt reaction, such as by repositioning forces, committing reserves, or shifting fires. An infantry company is unlikely to conduct a feint internal to its own operations, but it is more likely to conduct an actual, full scale attack on a limited objective that delivers a feint effect determinable by HHQ.

The following are some of the planning considerations for the company commander:

- The higher commander's intent regarding force preservation.
- Disengagement criteria and plans.
- Assignment of limited depth and attainable objectives.
- Clear follow-on orders that ensure the feinting force is prepared to exploit the success of the main attack, if necessary.

Feints are successful only if the enemy believes that a full-scale attack is underway; therefore, it is essential that the feints occur with the same level of precision and violence as any attack. Higher headquarters must issue a clear task and purpose, including identification of the specific enemy action(s) the feint must trigger (or deny). Feints are most effective under the following conditions:

- When they reinforce the enemy's expectations.
- When the attack appears to present a definite threat to the enemy.
- When the enemy demonstrates consistent early committal of their reserve.
- When the attacker has several feasible COAs, any of which the enemy could confuse for the main effort.

Demonstration

Similar to a feint, the demonstration is an attack designed to deceive the enemy about the location of the main attack; however, the friendly force does not make contact with the enemy. Demonstrations may be an economy of force measure. The company commander, when participating in a demonstration as part of a larger force, should consider the following:

- *Limit of advance*. The limit of advance is a control measure that ensures the enemy can see the demonstration force but cannot effectively engage it with direct fires.
- *Security measures*. Security measures, such as robust local security or a counterreconnaissance plan, prevent engagement by the enemy.
- *Contingency plans*. The demonstration force must be prepared to respond effectively to enemy direct or indirect fires while avoiding decisive engagement.
- *Follow-on orders*. Clear, specific follow-on orders must ensure that the demonstration force is prepared to exploit the success of the main attack if necessary.

Reconnaissance in Force

The infantry company is unlikely to conduct a reconnaissance in force attack on its own, but may participate in a reconnaissance in force conducted at the battalion level or above. A reconnaissance in force is an attack designed to gain information and to locate and test enemy dispositions, strengths, and reactions. While it may share some similarities to a movement to contact, which is designed to leave a commander maximum latitude for final disposition (transitioning to the offense or defense or avoiding decisive engagement), the reconnaissance in force is an offensive action that seeks specific information and enemy reactions.

While lacking the subtlety of other methods, a reconnaissance in force tends to develop information more rapidly and in more detail than other types of reconnaissance. An infantry company participating in a reconnaissance in force may be tasked to conduct limited objective assaults that are designed to determine the enemy's situation and maintain pressure on them by uncovering their weaknesses or forcing them to commit planned fires and use of their reserve. Since the situation is unknown, the infantry company can expect to be part of a task-organized, combined arms force that is capable of dealing with a variety of situations.

Raid

A raid is a limited objective attack involving swift penetration into a hostile area and a planned withdrawal upon completion of the mission; the planned withdrawal separates raids from other types of attack. Raids may occur in permissive and uncertain/hostile environments. Infantry companies can conduct company-level raids or be task-organized to participate in them as an element of a larger force. Raids occur in daylight or in darkness and both within or beyond the scope of supporting friendly units or supporting arms. When a raid occurs beyond the reasonable support of a parent unit, the raid force is an independent unit for the duration of the raid and receives resources accordingly. Raid forces receive specific objectives to focus their efforts and assist in decision criteria. The primary differences between the raid as a type of attack and as a type of patrol (see chap. 8) are size and scope. The raid force should withdraw using a different route from that used to approach the objective.

The company conducts raids to accomplish the following missions:

- Capturing personnel.
- Capturing or destroying C2 locations.
- Destroying logistics, caches, and other means of support.
- Obtaining information concerning enemy locations, dispositions, strength, intentions, and methods of operation.
- Confusing the enemy and disrupting their plans.

The raid force is normally task-organized into command, support, assault, and security elements but may also contain reconnaissance and reserve elements. Specialized attachments normally move with the assault force. There are four phases to a raid—

- Movement to the objective area.
- Isolation of the objective.
- Actions on the objective.
- Withdrawal from the objective area.

When planning a raid, the company commander makes the following considerations:

- Deception.
- Selection of routes to and from the objective.
- Lethal and nonlethal fires planning.
- Specialized assets appropriate to the mission, such as demolitions or site exploitation.
- Method and resources to isolate the objective.
- Emergency extraction or reinforcement plans.
- CASEVAC plan.
- Detainee processing plan.
- Signal plan.

Ambush

An ambush is a surprise attack from concealed positions designed to reduce the overall combat effectiveness of an enemy force, capture or harass a threat, and to destroy or capture equipment or supplies. Imagination, need, and the infantry company's abilities and capabilities are the only limitations on the types, methods, and purposes of ambushes.

Control, coordinated fires, and surprise characterize an ambush. Company commanders usually employ ambushes within the context of a larger task and purpose. Ingress and egress routes, mounted or dismounted movement, survivability of the ambush force, and a host of other factors affect how ambushes aid accomplishment of the mission.

While the actual method used to conduct the ambush varies by the level of threat, the terrain, and the skill of the ambush force, there are two general types of ambush:

- Point ambush, when the ambush force deploys to attack the enemy in a single kill zone.
- Area ambush, when the ambush force deploys to conduct several point ambushes throughout an area.

The ambush force is normally task-organized into assault, support, and security elements. The assault element executes the ambush. The support element fixes the enemy with direct fires; provides additional personnel for tasks, such as litter bearers and detainee handlers; and may be responsible for controlling supporting arms. The security element secures the objective rally point, provides protection and early warning to the assault element, and isolates the ambush site.

Regardless of how an ambush is employed, the general phases required to execute it successfully are—

- Tactical movement to the objective rally point.
- Reconnaissance of the ambush site.
- Establishment of ambush site security.
- Preparation of the ambush site.
- Execution of the ambush.
- Withdrawal.

Exploitation

The ability to exploit success for further gain is why the offense continues to be the form of decision on the battlefield. Exploitation is an offensive action applicable across all of the operational areas within a range of military operations. Once the enemy is disorganized in depth following a successful offensive action, exploitation multiplies the initial success by destroying vulnerable assets and resources, preventing the enemy from successfully disengaging and re-establishing other means of resistance. Exploitation helps to maintain dominance of tempo by exposing further

opportunities for exploitation. Initiative, boldness, and the unhesitating employment of uncommitted forces characterize exploitation, which can occur physically or through measures such as IO. Company commanders ensure that exploitation is a part of the planning process because the triggers for transition to exploitation require considerable judgment, intuition, and situational awareness.

Premature transition to exploitation can result in unnecessary risk of failure or casualties since the enemy's ability to resist or avoid engagement remains effective or the situation remains so unclear that use of force could adversely affect the local populace. Delayed transition to exploitation can result in lost opportunities or unnecessary risk and casualties due to the enemy's reconstitution of their ability to resist or successful escape and increased appearance of legitimacy.

In the hasty attack, the force in contact normally continues the attack, transitioning to exploitation. In the deliberate attack, the defense, or stability operations, the commander's principal tool for exploitation is normally the reserve, appropriately constituted to execute the decisive action of the mission (such as combat forces, engineering assets, CMO or IO, or various combinations thereof).

Use of the Reserve

Company commanders retain only those reserves necessary to ensure flexibility, continue momentum, and react to likely enemy responses to the exploitation. The reserve is positioned where it can exploit the success of the main or supporting effort(s). Exploitation forces execute bold, aggressive, and rapid operations using the commander's intent and mission tactics.

Exploitation Objectives

Typical objectives for the exploitation force include the following threat center of gravity assets:

- C2 assets.
- Reserves.
- Key terrain.
- CS and CSS units deep in the enemy's rear.
- Time-sensitive targets developed from actionable intelligence.
- Opinion and attitude of the local population.
- Infrastructure critical to the threat's ability to operate in the area.

Pursuit

When the enemy's ability to resist is broken and they attempt to escape, friendly forces shift to the pursuit. The infantry company is unlikely to conduct its own pursuit, but will likely participate in a pursuit as a component of a larger force. The difference between exploitation and a pursuit is the condition of the enemy. The object of a pursuit is to destroy the enemy force or the ability of the enemy to affect security, the local populace, or civic government and processes. Like exploitation, pursuit requires broad, decentralized control and rapid movement. Commanders may use organic and nonorganic assets to maintain observation on the enemy. Maximum use of C2 and observation assets maintains momentum.

Friendly forces task-organize themselves into a direct pressure force and an encircling force. When necessary, a direct pressure force alone can conduct a pursuit, but the preferred method is to apply both direct pressure and encirclement to ensure defeat of the enemy.

Whether through application of combat power, use of security measures, IO, or other nonlethal means, the application of direct pressure seeks to prevent the enemy from reorganizing or taking any effective action to survive. Encirclement seeks to ensure the destruction of the enemy by preventing escape or reinforcement. The encircling force must have greater mobility than the enemy.

Offensive Maneuver

Maneuver places the enemy at a disadvantage through the application of lethal and nonlethal fires and movement.

Organization of the Battlespace

Doctrinally, when conducting offensive action, the Marine Corps organizes the battlespace into deep, close, and rear areas. The infantry company can expect to operate within these areas as part of a larger force and will likely receive an AO, axis of advance, route of attack, or similar control measure with which to define the company's portion of the battlefield.

Distribution of Forces

Conducting offensive action normally imposes multiple tasks on the commander. Such tasks may come in the form of phases, conditions, or elements that are particular to any type of attack or form of offensive maneuver. These requirements directly affect the manner in which the commander divides the available combat power and resources in organizing for the offense. The company's combat power is normally organized into the main and supporting efforts and the reserve.

Company commanders weight the main effort to ensure success at the decisive point, which often means that the main effort contains the greatest concentration of combat power. The purpose of the main effort is to accomplish the company's mission; the designation of a main effort allows the company to focus all of its energies, actions, and resources toward enabling the main effort to achieve success. As the element that achieves the company's mission, the task and purpose of the main effort should nest directly with the company's task and purpose. For example, in conducting an attack on a strong point, a company commander is likely to task the company's main effort with the duties associated with the assault element.

Supporting efforts enable the main effort to achieve success at the decisive point. For example, in conducting an attack on a strong point, a company commander may task one of the company's supporting efforts with the duties associated with the breach element. The mission assigned to supporting efforts must directly support the main effort's purpose. Such nesting allows supporting efforts to exercise initiative to react on the battlefield in ways that would ensure the main effort's success, including being prepared to assume the main effort's mission. Supporting efforts receive the combat power, attachments, and any other enablers needed to accomplish their mission in support of the main effort. Supporting efforts may use suppressive fires, secondary attacks, deception, obstacle reduction, or other tactics to accomplish the following:

- Allow the main effort to maneuver to the decisive point.
- Prevent the enemy from reacting to the assault.
- Cause the enemy to dissipate their fire support or prematurely commit their reserves.
- Prevent the enemy from surprising the main effort.

The primary mission of the reserve is to conduct decisive movement, take advantage of sudden opportunities, and reinforce and exploit main effort success. Employment of the reserve at the decisive moment is the commanders' principal means to influence the action. A reserve does not reinforce failure. The reserve must be large enough to exploit success, yet its size should not materially weaken the main effort. The reserve might constitute a small part of the company in the case of a deliberate assault. In a movement to contact, the reserve may constitute the bulk of command that is ready for commitment as a main effort upon locating the enemy. Company commanders base their determination of the reserve's size on the following:

- Contemplated missions of the reserve.
- Forces available.
- Type of maneuver planned.
- Terrain over which the reserve must travel.
- Possible hostile reactions.
- Clarity of the situation.

Forms of Offensive Maneuver

For the infantry company in the offense, there are six forms of maneuver—frontal attack, flank attack, envelopment, turning movement, infiltration, and penetration.

Frontal Attack

Frontal attack (see fig. 6-5) is a form of maneuver in which an attacking force seeks to destroy a weaker enemy force or fix a larger enemy force along a broad front by the most direct route. It is generally the least desirable form of maneuver because it exposes the attacker to the concentrated fire of the defender and limits the effectiveness of the attacker's own fires. When conducting a frontal attack, the company commander must maximize the use of combined arms assets to mitigate the vulnerability of the force. The frontal attack is often the best form of maneuver for an attack in which speed and simplicity are key; it is useful in overwhelming weak defenses, securing outposts, or disorganizing enemy forces.

Flank Attack

A flank is the right or left side of any military formation and is generally weaker in terms of combat power than the front of the formation.

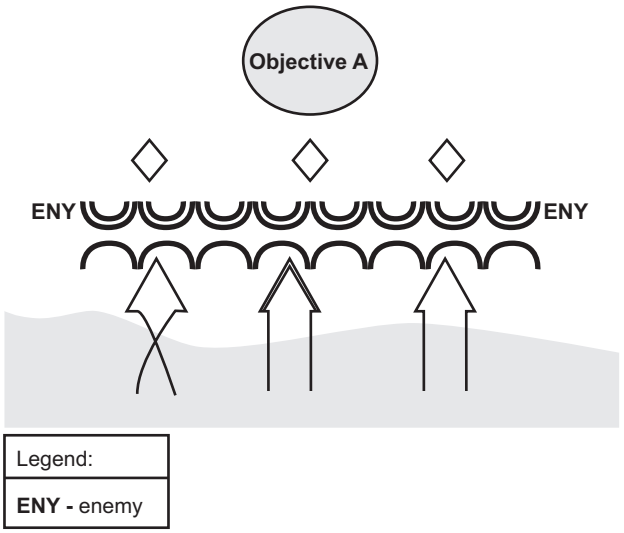


Figure 6-5. Frontal Attack.

Therefore, a flanking attack (see fig. 6-6) is a form of offensive maneuver directed at either flank of an enemy force. It is different from envelopment in that envelopment directs its attack beyond the flank and toward the rear of the enemy. Moreover, both flank attacks and envelopments are different from a turning movement in that, while a turning movement seeks to force the enemy to move, flank attacks and envelopments seek to engage the enemy in their current position. Exposed enemy flanks may be created by the attacker using fires or by a successful penetration. Flanking attacks are normally conducted by supporting efforts that fix the enemy's front while the friendly main effort attacks the enemy's flank. Due to their simplicity, flank attacks often serve as the form of maneuver favored by hasty attacks or immediate action drills during which speed and simplicity are paramount to maintaining battle tempo and, ultimately, the initiative.

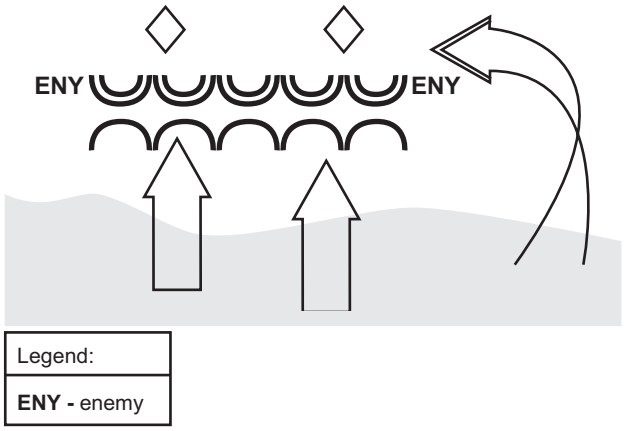


Figure 6-6. Flank Attack.

Envelopment

Companies will normally participate in envelopment as part of a larger force. Envelopment is a form of maneuver in which an attacking force seeks to avoid the principal enemy defenses by seizing objectives to the enemy's rear or flank in order to destroy them in their current position (see fig. 6-7).

A successful envelopment requires discovery or creation of an assailable flank. The envelopment is the preferred form of maneuver because the attacking force tends to suffer fewer casualties while having the most opportunities to destroy the enemy. Envelopments focus on seizing key terrain, destroying specific enemy forces, and interdicting enemy withdrawal routes.

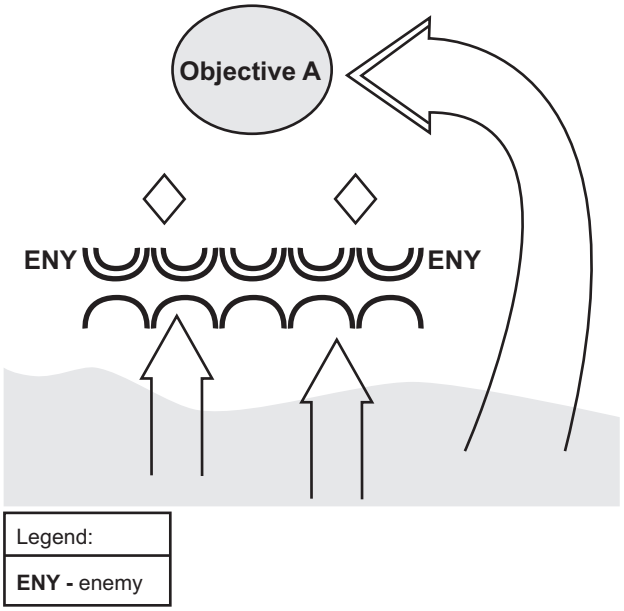


Figure 6-7. Envelopment.

Turning Movement

A turning movement is a form of maneuver in which the attacking force seeks to avoid the enemy's principal defensive positions by seizing objectives to the enemy's rear (see fig. 6-8). This tactic causes enemy forces to move out of their current positions (as opposed to flank attacks and envelopments, during which the friendly forces seek to engage the enemy in their current location) or to divert major forces to meet the enemy. For a turning movement to be successful, the unit trying to turn the enemy must attack something that the enemy will fight to save, such as a supply route, artillery emplacement, or a headquarters. In addition to attacking such a target, the attacking unit should be strong enough to pose a real threat to the enemy. The turning movement is a type of envelopment in which the attacker attempts to avoid the defense entirely. Instead, attackers seek to secure key terrain deep in the enemy's rear and along their LOCs. Faced with a major threat to their rear, the enemy is "turned" out of their defensive positions and forced to attack rearward. The company will likely conduct a turning movement as part of a battalion.

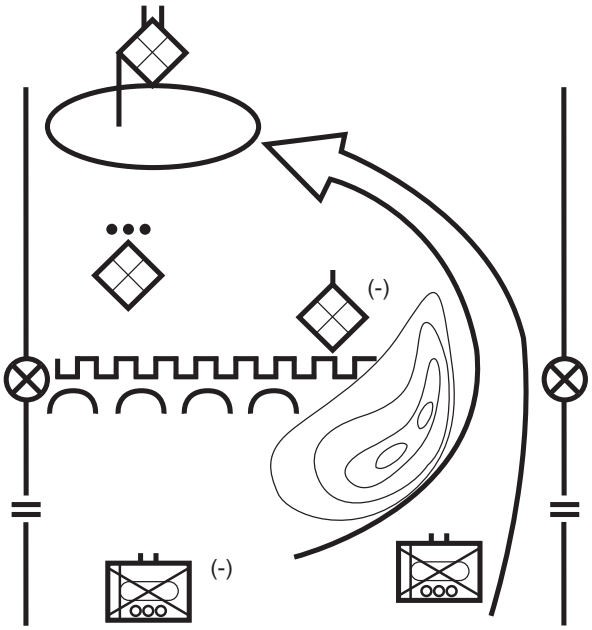


Figure 6-8. Turning Movement.

Infiltration

Infiltration is a form of maneuver in which an attacking force conducts undetected movement through or into an area occupied by enemy forces to occupy a position of advantage in the enemy's rear while exposing only small elements to enemy defensive fires (see fig. 6-9). Moving and assembling forces covertly through enemy positions takes a considerable amount of time. A successful infiltration reaches the enemy's rear without fighting through prepared positions. An infiltration normally occurs in conjunction with and in support of another form of maneuver. A company may conduct an infiltration (dismounted or mounted) as part of a larger unit's attack with the battalion employing another form of maneuver. Company commanders also may employ maneuver by infiltration to move their

platoons to locations to support the battalion's attack. A company may conduct an infiltration in order to—

- Attack an enemy-held position from an unsuspected direction.
- Occupy a SBF position to support an attack.
- Secure key terrain.
- Conduct ambushes and raids.
- Conduct a covert breach of an obstacle.

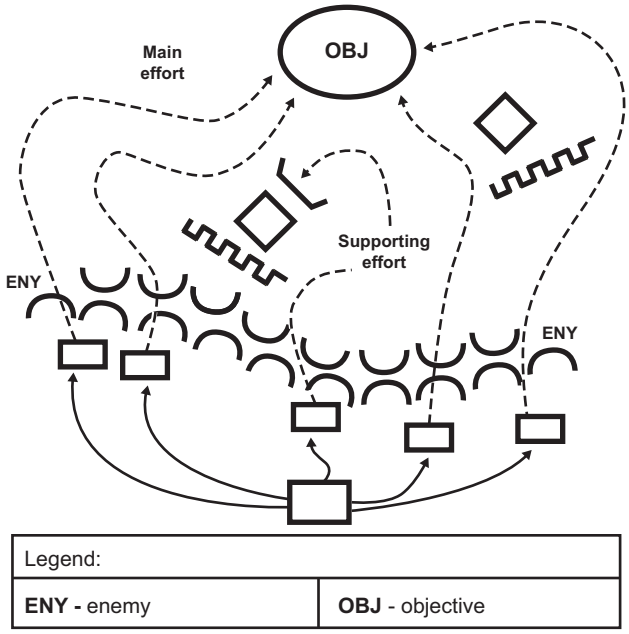


Figure 6-9. Infiltration.

Penetration

Penetration is a form of maneuver in which an attacking force seeks to rupture enemy defenses on a narrow front to create both assailable flanks and access to the enemy's rear (see fig. 6-10). Penetration occurs when enemy flanks are not assailable, when enemy forces are overextended, when weak spots in the enemy defense are identified, and when time does not permit some other form of maneuver. As part of a larger force penetration, the company will normally isolate, suppress, fix, or destroy enemy forces; breach tactical or protective obstacles in the enemy's main defense; secure the shoulders of the penetration; or seize key terrain. A battalion may also use the penetration to secure a foothold within a large built-up area. A penetration normally consists of the following three steps:

- Breach the enemy's main defense positions.
- Widen the gap created to secure flanks by enveloping one or both of the newly exposed flanks.
- Seize the objective.

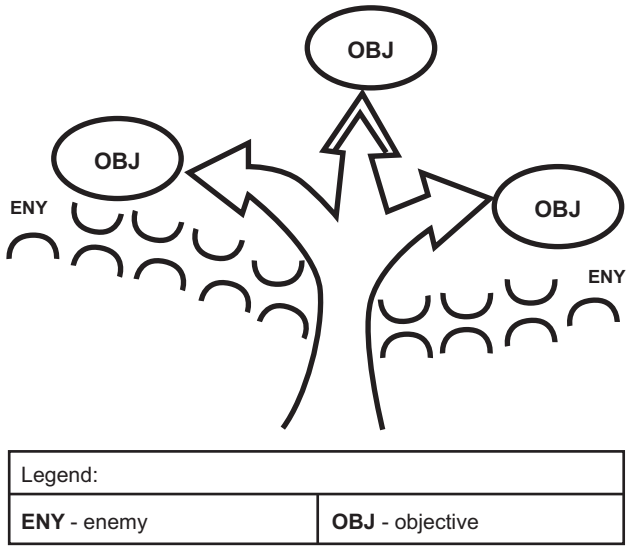


Figure 6-10. Penetration.

Phases of Offensive Action

Generally, planning and executing an attack or other offensive action occurs in five phases—preparatory, conduct, consolidation and reorganization, exploitation, and pursuit. While the actual elements within each phase might differ regarding the nature of the offensive action, the phases remain valid.

Preparatory

During the preparatory phase, the company commander completes planning, intelligence, and reconnaissance efforts. Offensive action planning needs to incorporate nonlethal operations that may prove necessary throughout the operation due to the presence of civilians on the battlefield and other similar considerations. The company conducts preliminary operations, such as PCCs and PCIs, orientation, rehearsals, and movement and

concentration, forward in the AA. Operations, such as passages of lines or reliefs in place (RIPs), commence in support of the attack. If planned, execution of deception operations, such as feints or demonstrations, occur while shaping or preparatory fires commence. Assessment and refinement of all these actions are continuous. Finally, since movement toward or in close proximity of the enemy occurs during this phase, the company commander mitigates security risk through assessing the likelihood of contact.

Conduct

The conduct of the attack involves three separate stages, all of which focus on successfully placing the main effort at the decisive point.

Assembly Area to the Attack Position. The company departs the AA per the company commander's plan. Departure may be simultaneous or staggered. Elements may move together toward the attack position or depart on varied routes. Preparatory fires and other shaping actions may commence. Upon arrival at the attack position—the last covered and concealed position prior to the line of departure—the company may or may not stop for final actions and coordination.

Line of Departure to the Assault Position. If not underway, the FST begins to execute the company's fire support plan to cover the movement of the various elements. Supporting efforts begin their missions. The main effort moves when indicated to the assault position—the last covered and concealed position before the objective—where it deploys into assault formations and conducts final coordination. Throughout the company, leadership moves to positions of observation to assess the effects of fires, confirm that conditions are set for the next event, verify routes, and enable communications and signal plan efficiency.

Movement From the Final Coordination Line Through the Primary Objective. When appropriate, the main effort assaults the primary objective, crossing the final coordination line and ceasing or shifting the supporting direct and indirect fires as required. Supporting efforts execute follow-on missions to include those actions necessary for the consolidation and reorganization and exploitation phases.

Consolidation and Reorganization

The purpose of consolidation and reorganization is to rapidly and efficiently prepare the attacking force for future action during the exploitation phase. Both actions are mutually supporting in that successful consolidation relies upon quick and efficient reorganization, while successful reorganization requires the security provided by initial defensive efforts in consolidation. Company commanders should not neglect to plan for this phase as such planning maintains tempo and momentum over the enemy. The implementation of both civil and military operations and IO are vital at this stage of the operation.

Consolidation pertains to all measures taken to organize and strengthen a newly captured position for its use against the enemy. Initially, assaulting elements assume a hasty defensive posture to repel possible enemy counterattacks. Concurrently, the company as a whole immediately begins taking necessary action to occupy the objective or, following minimum essential reorganization, to continue the attack. Regardless of mission, emphasis is on rapidly creating an organized effort through reorganization. In planning the consolidation and reorganization phase, company commanders include instructions on—

- Security.
- Displacement and positioning of forces, such as bringing supporting effort elements forward.
- Fires planning (preplanned fires in support of defending the objective, such as likely counterattack AAs and fires in support of pursuit).
- Reconnaissance (maintaining contact with the enemy remains crucial through the immediate use of patrols, UA, and other assets).

Reorganization includes all measures taken to restore internal communications and order in a unit after combat. Reorganization complements

consolidation and is the process by which the company is able to carry out further operations, whether coherently defending a recently seized objective, continuing the attack, or beginning the pursuit of the enemy. It includes the reporting of unit location and status to HHQ, redistribution of personnel and ammunition, CASEVAC, resupply, and restoration of control and communications.

Exploitation

The objective of exploitation is to complete the destruction of the enemy following a successful attack. A company normally takes part in exploitations as part of a larger force; however, the company should exploit tactical success at the local level within the higher commanders' concept of the operation.

Pursuit

The objective of the pursuit phase of an operation is the total destruction of the enemy force. The company may take part in a pursuit as part of a larger force or, because of its organic transportation, may act as the pursuit force that can close with and destroy the remnants of the enemy force. A pursuit typically follows a successful exploitation and is designed to prevent a fleeing enemy from escaping and to destroy them.

Attack Considerations

Elements of the attack are fire, maneuver, and close combat. The following subparagraphs provide company commanders and their subordinate commanders with guidance in planning for, executing, and controlling the fire, maneuver, and close combat inherent in the attack of infantry units. The commander must be prepared to establish a detainee/EPW collection plan, a casualty collection plan, and a logistic support plan.

Planning Considerations

The battalion commander assigns missions to the infantry company, usually expressed in terms of terrain objectives to seize, control measures to follow, and designation of attached/supporting units. The infantry company may be the main or supporting effort or the reserve of the infantry battalion. It may be foot mobile, mounted, or helicopter transported in the attack. When it is a reserve element of the battalion, it may use any form of mobility.

The AA is an area in which a command gathers and organizes preparatory to further action. In assessing potential AAs, company commanders make the following considerations:

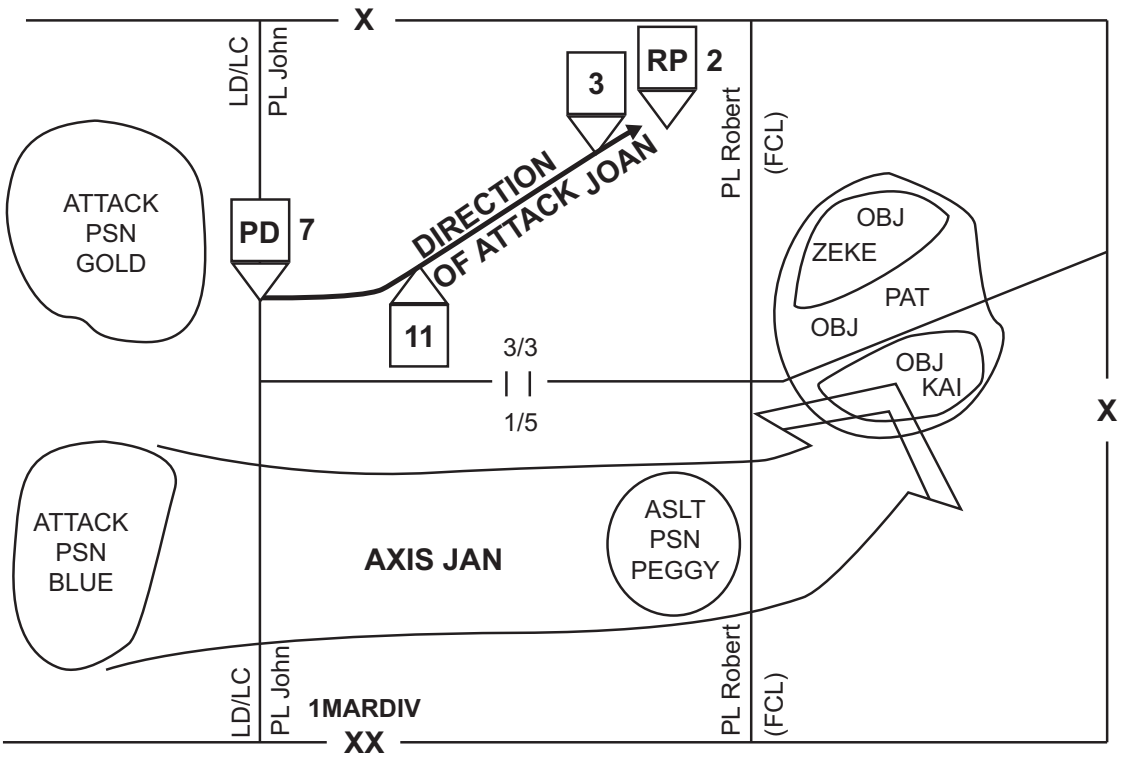
- Cover and concealment.
- Adequate space for the dispersion of troops, equipment, and vehicles.
- Ease of access and egress.
- Adaptability to defensible position.
- Location, preferably beyond the effective range of enemy mortar and light artillery fires.

In the AA, preparations for combat are finalized. They are as complete and detailed as the available time and the situation permit. Preparations include the following:

- Conduct personnel, weapons, and equipment PCCs and PCIs.
- Conduct final resupply of fuel, water, rations, and ammunition.
- Stage equipment and personal effects not required for the operation.
- Issue mission-specific special equipment for the operation.
- Conduct a rest plan consistent with security and preparations for the attack.
- Continue planning and intelligence updates.
- Designated attachments join the command.
- Conduct specialized training and rehearsals.

Tactical Control Measures

Infantry battalion, infantry company, and rifle platoon commanders control the maneuver elements of their respective units in the attack by using required control measures. To give



Legend:	
ASLT - assault **FCL** - final coordination line **LD/LC** - line of departure is the line of contact **OBJ** - objective	**PD** - point of departure **PL** - phase line **PSN** - position **RP** - release point

Figure 6-11. Tactical Control Measures.

subordinate echelons maximum freedom of action, only the minimum control measures necessary to ensure that the attack progresses in the desired manner are used. See figure 6-11.

Maneuver

Maneuver is the use of movement in combination with fire (or potential fire) employed to achieve a position of advantage over the enemy to facilitate the accomplishment of the mission. When possible, the commander employs those techniques that avoid the enemy's strength and conceal the company's true intentions. Company commanders maneuver their platoons to close with the enemy, to gain positional advantage over them, and ultimately to destroy them or force them to withdraw or capitulate. Within the actual mechanics of conducting maneuver, there are two elements:

- *Base of fire element*. The combination of fire and movement first requires a base of fire in which some elements of the company remain stationary and provide protection for the maneuvering forces by preventing the enemy from reacting to the movement.
- *Maneuver element*. Under the protective overwatch or effective suppressive fires of the base of fire element, the maneuver element moves to a position advantage using whatever techniques and formations appropriate to the situation in terms of such factors as risk, speed, terrain, weather, and conditioning.

Fires

In the attack, fires primarily occur when fixing or suppressing the enemy, when maneuvering against and assaulting them, and when exploiting success. When planning fires, the company commander uses the following method: task, purpose, method, effect for constructing, and determining the validity of a fire support plan (both lethal and nonlethal). Fire support team leaders use a briefing tool—purpose, location, observation, triggers, communications, and remarks—when preparing the fire support plan and order. While the FST executes the fire support plan, the company commander supervises that execution to ensure successful and appropriate prosecution of targets and the effectiveness of the created effects.

Planning of fires occurs within the construct of top-down planning, bottom-up refinement. Accordingly, company commanders refine the fire plan that was initially published by HHQ to ensure that the relevant portion meets company requirements. Additionally, company commanders ensure development of an appropriate intelligence collection and observation plan that supports triggers, decision points, and controls for initiating and shifting fires. In general, company fire support plans should—

- Suppress enemy weapon systems that inhibit movement.
- Fix or neutralize bypassed enemy elements.
- Obscure enemy observation or screen friendly maneuver. The company can take advantage of smoke in various maneuver situations, such as during a bypass or in deception operations.
- Support breaching operations. Fires can obscure or suppress enemy elements that are overwatching reinforcing obstacles. They can also obscure or suppress enemy forces on an objective area during the conduct of an assault breach.
- Illuminate enemy positions. Illumination fires are always included in contingency plans for night attacks.
- Conduct suppression of enemy air defenses.

Limited Visibility Considerations

Successful attacks during limited visibility depend on leadership, reconnaissance, training, planning, and surprise. While these fundamentals apply to daylight attacks, attacks during limited visibility require viewing these fundamentals with a greater emphasis on control (see fig. 6-12 on page 6-23). In this case, limited visibility does not mean a temporary state of reduced observation as might apply to heavy rain, snow, or battlefield obscuration; rather, it refers to a severely degraded state of visibility throughout the conduct of operation, such as darkness or dense, persistent fog. Such reduced visibility normally applies to night operations, but the term limited visibility is used because many of the issues discussed in the following subparagraphs may apply to those occasional circumstances when company commanders find themselves operating in environments of sustained, limited visibility.

Units equipped with night vision devices (NVDs) may conduct limited visibility attacks very much like daylight attacks. The fundamentals for a daylight attack still apply for nighttime attacks. Conducting attacks in this manner requires the following criteria:

- Personnel must be proficient in limited visibility attacks and the use of NVDs.
- Enough ambient light is available to employ the unit's NVDs.
- A successful reconnaissance of the objective area has been made.
- Additional control measures and techniques are considered.

Planning Considerations

Due to the increased complexity and greater risk in conducting limited visibility attacks, company commanders should make the following considerations when planning them:

- Feints and other deceptions may be more effective.

- Infiltration techniques require smaller units than normally employed. This requirement places greater responsibility and reliance upon the training and ability of junior leadership.
- The control of mounted and dismounted formations (to include navigation) requires decreased dispersion.
- Illumination support and/or employment of NVDs must be planned.
- Observing and controlling fires is more difficult.
- Rest plans must be implemented in conjunction with night operations to mitigate effects of fatigue and other human factors.
- Identification, friend or foe procedures are even more critical.
- Negative communications are possible due to the nighttime conditions, especially high frequency radios.
- All CSS functions, to include locating, treating, and evacuating casualties, require more time than normal.
- Linkups and passages of lines require increased planning and control measures.
- Degraded visibility increases the difficulty of bypassing or breaching enemy obstacles.
- Fire control techniques must be clearly established and easily understood.

Illumination and Fires

Company commanders always plan for illumination methods and make them available in case the enemy either illuminates the battlefield or possesses a night vision capability. The use of illumination is also effective during consolidation and reorganization, particularly for CASEVAC.

Illumination is available from artillery, mortars, grenade launchers, and hand-fired and aircraft flares. Illumination placed beyond the objective assists assaulting unit visibility by backlighting the enemy during their defense. Marines must be prepared to rapidly transition from conducting illuminated to nonilluminated operations and vice versa. In the orders process, company commanders issue specific guidance and criteria on the employment of illumination.

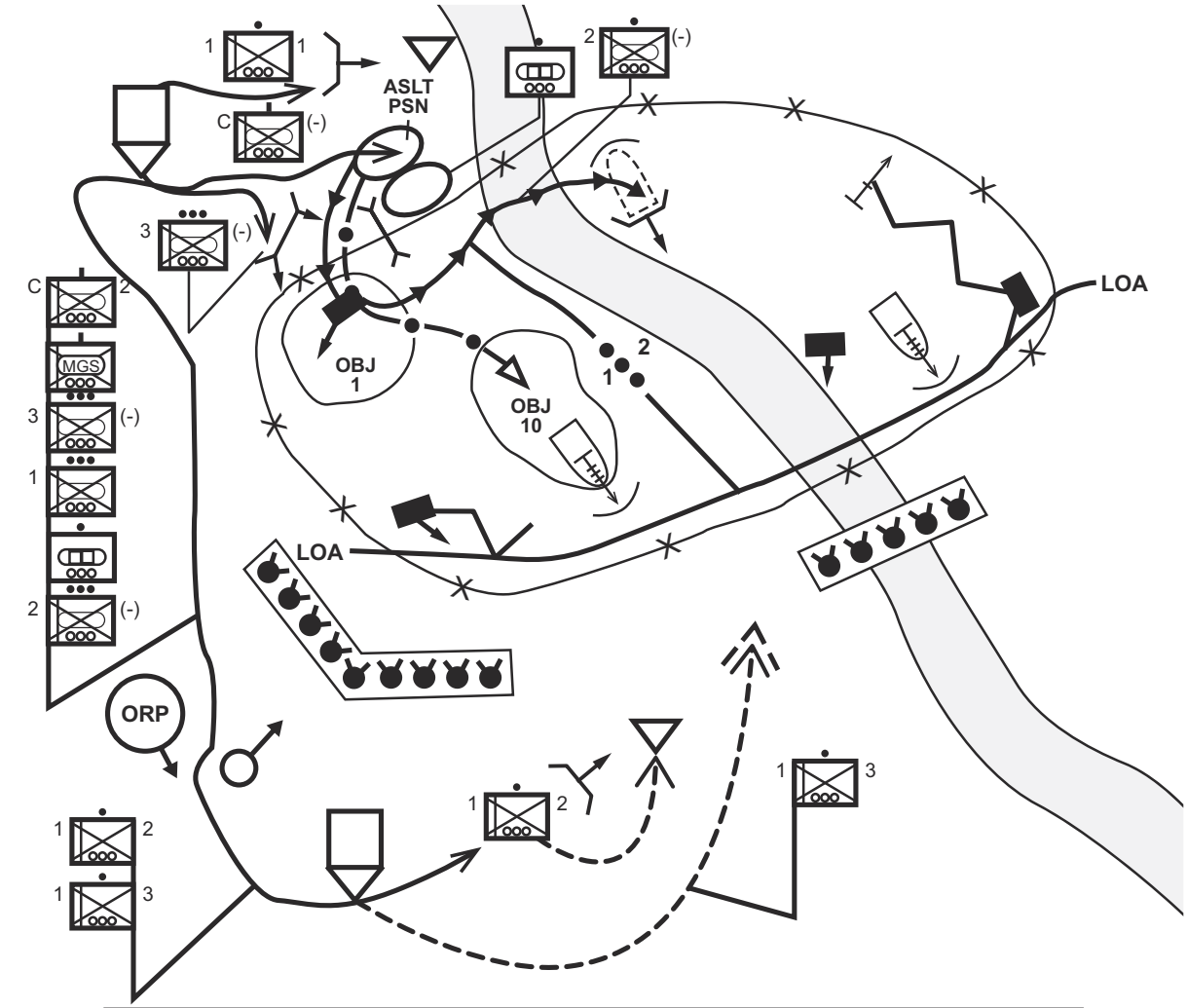
Given the visibility available by illumination, illuminated supported attacks are almost identical to daylight attacks. These may be most effective when speed is essential, when there is limited time for reconnaissance, or when the enemy is weak or disorganized. The commander must plan illumination time requirements and request sufficient ammunition to support the attack through its duration. Any break in illumination may reduce the effectiveness of suppressive fire when the attackers need it most.

In circumstances during which the enemy is likely to use illumination or possesses a night vision capability, company commanders should consider using smoke to obscure the enemy in the same manner as a daylight attack. As with normal obscuration fires, smoke effects are close to or on enemy positions to avoid restricting friendly movement.

Shifting fires requires greater planning due to observer limitations, but has the potential for greater shock effect on the enemy in conjunction with ground maneuver. Strict adherence to methods of synchronizing fires, such as time on targets or series timelines, is critical for both the main effort and supporting arms.

Deconfliction of CAS is significantly more difficult under limited visibility conditions and illumination can disrupt a pilot's ability to accurately deliver munitions. Company commanders must ensure the company's reporting discipline is good enough to allow the FST to deliver accurate identification of friendly locations to CAS platforms.

Limited visibility conditions hinder target designation for CAS and other supporting arms. In the company's fires plan, the FST reinforces methods of positive identification and includes redundant means for target designation should primary means fail or prove unable to see the target.



Legend:

BTR - Bronetransportyor
LOA - limit of advance
MG - machine gun
MGS - machine gun system
OBJ - objective
ORP - objective rally point
PSN - position
RP - release point

Figure 6-12. Limited Visibility Attack with Night Vision Devices.

Reconnaissance and Rehearsals

Reconnaissance is critical in every attack, but more so for attacks during limited visibility. The reconnaissance plan should include leaders down to the lowest level possible. While balancing the need for detailed information against the risk of deception and surprise, company commanders ensure that reconnaissance, route rehearsal, placement of guides, and other similar control measures occur during daylight, twilight, and times of limited visibility when possible. The intelligence collection plan should establish continuous surveillance of the objective in case the enemy repositions units and weapons or prepares additional obstacles. On those occasions when reconnaissance proves unsuccessful, company commanders should request a delay in the attack time to allow for further reconnaissance. If a delay is not possible, they should consider an illuminated or supported attack. Subordinate units rehearse all phases of the attack, paying particular attention to movement, position occupation, BSG considerations, and other control measures.

Simplicity

The success of limited visibility attacks relies more on simplicity than on complex maneuvers. Attacks during periods of limited visibility do more than risk failure if compromised during the approach: a competent enemy taking advantage of such a vulnerable time will inflict considerable damage on such an exposed unit. Limiting the potential of mischance is a function of limiting the complexity of the attack—commanders should keep their plans simple. Accordingly, company commanders should try to use small and easily identified objectives that are approached by simple, well-marked and guided routes and are driven by a well-defined decisive point upon which the combat power of the company focuses. The company uses a simple, explicit signal plan that incorporates event driven methodology and includes controlling direct and indirect fires.

Consolidation and Reorganization

Consolidation and reorganization are the same as for a daylight attack with the following exceptions:

- Guides lead trains and support elements forward to their positions.
- Changes to task organization are avoided to keep the consolidation plan simple.
- Locating and evacuating casualties and EPWs takes longer.
- Unit positions should be closer together to ease control and improve mutual support. Adjustment to positions occurs as visibility improves.

Helicopterborne Operations

Helicopterborne operations are tactical movements by helicopter that support a ground tactical plan. Helicopterborne operations are deliberate, precise combat operations designed to allow the rifle company to strike over extended distances (regardless of terrain and without dependence on ground LOCs) and to attack the enemy when and where they are most vulnerable. Raids and assaults are the two primary missions for helicopterborne tasks forces.

The use of helicopterborne operations occurs in situations that are limited in duration, require superior mobility or the ability to influence in depth, and are typically against undefended or lightly defended objectives. Due to the complexity of these operations and the vulnerability of helicopterborne forces to ground fire and other aircraft, functional and detailed planning are centralized and precise and synchronization of maneuver and fires is essential. Due to the relative lack of tactical mobility once on the ground, ground forces normally land on or near the objective, may or may not operate in conjunction with other ground forces, and rely on planning and rehearsals to overcome initial disorganization after debarkation. The enemy threat determines wave composition, to include the size and makeup of the

initial wave, follow-on waves, and preplanned contingency and logistical support waves.

Helicopterborne operations provide a range of methods to exercise tactical deception, from the threat posed by the very existence of the capability to such overt methods as demonstration landing. Regardless of the mission and purpose, helicopterborne operations have five phases: planning, loading, air movement, landing, and tactical ground operations.

Planning Considerations

Centralized and precise functional and detailed planning and synchronization of fires and maneuver are essential. Among factors to consider are task organization, the enemy threat, CASEVAC, alternate LZs, and re-embarkation.

Task Organization

The battalion is the lowest level unit staffed with sufficient personnel to plan, coordinate, and control helicopterborne operations. Therefore, when company-sized helicopterborne operations occur, most planning occurs at the battalion. When the battalion conducts helicopterborne operations, it becomes a task-organized force called a helicopterborne task force. This task organization combines ground and aviation assets to accomplish the ground tactical plan.

Enemy Threat

The composition of the enemy threat, to include mobility and air defenses, determines the size and composition of the initial assault wave, the likelihood of an active enemy defense of the LZ, and the fire support and aviation escorts required to mitigate the threat.

GO/NO GO Plan

The GO/NO GO plan applies not only to committing the helicopterborne force, but also can equally apply to decision criteria throughout the operation. At a minimum, GO/NO GO plans have two components: first, enemy action or lack of action that meets predetermined criteria for acceptable risk and friendly action and composition; second, resource criteria that meet predetermined criteria for acceptable risks. For example, movement of enemy air defense assets into the proximity of an LZ meeting a NO GO criteria could result in cancellation of the operations. Another example is two helicopters in the initial wave that are grounded for mechanical failure, but the five remaining meet the minimum criteria to allow the operation to proceed.

Alternate Landing Zones

When possible, commanders should select other LZs that will still allow mission accomplishment. The use of alternate LZs normally requires building contingency plans since the alternate LZ characteristics often change such things as the number of airframes that can land at any one time or the routes of the ground force.

Re-embarkation

Re-embarkation plans occur in two ways. The first applies to a planned withdrawal as in a raid. The second applies to unforeseen contingencies and, like all withdrawals, may or may not occur under enemy pressure. Immediate extract missions refer to re-embarkation occurring under enemy pressure. Even in those cases when the ground force expects to link up with another ground force, planners still create re-embarkation contingency plans.

Casualty Evacuation Plan

The CASEVAC plan conducted by the ground force is noticeably different from plans the force might normally conduct on its own. First, the limited tactical mobility of the ground force complicates movement of casualties over any appreciable distance. Second, the proximity of the enemy, the nature of the terrain, and other factors normally necessitate movement of casualties to some point where aircraft will be less vulnerable during extraction. Lastly, both of these factors indicate that CASEVAC might be delayed until medical augmentation of the ground force arrives.

Immediate Action Plan

Immediate action plans normally apply to the ground force and constitute actions that can range from reacting to unexpected contact with the enemy to actions on the objective. As such, they may or may not include the participation of the aviation element.

Fire Plan for Assault

In addition to the overall fire support plan for the ground tactical plan, the most complicated portion are those fires occurring before and during the landing phase. These fires may come from indirect ground and aviation assets. They may necessitate the insertion of ground observers sometime prior, the use of airborne observers, or both. They may occur along the aircraft ingress and egress routes. The success of these fires may directly affect the GO/NO GO criteria through shaping operations within the battlespace.

Bump Plan

Proper problem framing and solid GO/NO GO criteria determine the parameters of the bump plan. This plan simply determines the priority of the passengers remaining within the wave in the event of mechanical failure. If done correctly, when reduced to the absolute minimum number of aircraft for mission success, the assault force will still consist of the right number of the right skill sets to accomplish the mission.

Ground Force Situational Awareness

Stick leaders and ground force leadership within the assault waves should take advantage of such things as jump seats and extra aircraft helmets with intercoms to maintain situational awareness of the operation and orientation of their particular aircraft especially when landing.

Key Billets and Duties

There are four key leaders who command helicopterborne operations—mission commander, helicopterborne unit commander, air mission commander, and marshalling area control officer.

The mission commander is the senior ground force commander responsible for planning, coordinating, and executing the operation. If a company will act as the ground force, the battalion commander is normally the mission commander. Whenever possible, the mission commander will be airborne in order to maintain communications with the helicopterborne forces, supporting arms, and their headquarters.

The helicopterborne unit commander is the commander of the ground force. His/Her unit makes up the helicopter landing force (LF) and he/she is re-sponsible for the accomplishment of the ground tactical plan.

As the commander of the aviation portion of the helicopterborne task force, the air mission commander is responsible to the mission commander that all helicopter and support operations are conducted according to the needs of the ground tactical plan. He/She is also responsible for establishing and executing the air movement plan.

At the company level, the marshalling area control officer (MACO) is normally the company first sergeant. During the planning phase, MACOs develop and coordinate the manifest and helicopter team wave and serial assignment table. During the extraction phase of the operation, they ensure the accountability of each wave and establish “the gate” (a control point). The MACO collocates with the FAC within the extract LZ and ensures full stick accountability prior to initiation of extract. Once extract begins, the MACO will coordinate the departure of various sticks through a control point. The MACO is the last to depart.

Manifest/Helicopter Team Wave and Serial Assignment Table

Building and maintaining the helicopter team wave and serial assignment table and manifest is one of the most demanding and tedious procedures in the planning process due to variations in aircraft availability and the METT-T impact on personnel requirements (see chap. 9 for examples). In general, as time passes, fewer aircraft

and more ground force personnel become available. Helicopterborne forces should prepare to land in two or more waves and create linkup plans accordingly. The command element and FST should land in the initial wave to take control of the fire plan. There are two types of manifest building procedures: deliberate and hasty. The load plan should—

- Maintain unit integrity as much as possible.
- Spread load crew-served weapons (CSWs).
- Spread load the command element.

Supporting Fires

Initial fires may begin as early as the loading phase to shape the battlespace, such as by destroying or suppressing enemy air defenses. They may continue during the air movement phase in support of the movement itself, while continuing in the objective and landing areas. During the landing phase, fires address the areas immediately around each LZ and any threats that might influence the arrival and departure of aircraft from those LZs. Fire plans address the entire landing phase (multiple waves), the execution of the ground tactical plan, planned re-embarkation, and any contingency plans, such as immediate extract. Fire support plans developed to support the landing plan must address the following:

- Will fires support a deception plan?
- Will the helicopterborne task force use surprise fires or is the enemy threat robust enough to dictate a more deliberate approach?

The fires plan addresses proper weaponeering to avoid creating obstacles to landing and maneuver through collateral damage to the LZ and the immediately surrounding area, such as undesirable cratering, knocked down trees, and fires and obscuration. During planning, evaluation of the fires plan against the elements of BSG is continuous to ensure uninterrupted suppression during insertion of friendly forces.

Fires planning includes avoiding task saturation of escort aircraft or determining a requirement for more escorts. Common tasks for escort aircraft are employment during air movement, fires in support of LZ preparation, and the possibility of use as CAS for the ground tactical plan. Escorts that must conduct engagements during air movement and LZ preparation may not have enough ordnance left to support the ground force.

Fires planning also includes battle handover drills and rehearsals between various observers throughout execution of the plan. Someone forward, such as a FAC (airborne) or qualified ground based observer, conducts initial shaping fires in the battlespace, to include such things as refinement and BDA. Soon after the arrival of the initial wave, the helicopterborne unit commander will take charge of the fires plan from that forward positioned observer. During extract, this process is reversed.

Landing Zones/Pickup Zones

Landing zones and pickup zones (PZs) share many characteristics. The actual definitions indicate that an LZ is any designated zone in which an aircraft actually lands; whereas, a PZ is a place where troops or equipment are picked up. As seen in figure 6-13, on page 6-28, a PZ may consist of one or more LZs.

Landing Zone Considerations

The ground force provides security to LZs until abandoned. Preplanned landing patterns should support the mission commander's designated scheme of maneuver and possess easily identifiable and accessible staging points. If required, LZ selection should include suitability for establishing CSS functions, defensive positions, and similar ground requirements. Control of the LZ and PZ occurs over primary and secondary frequencies.

Pickup Zone Considerations

The ground force provides security to PZs until abandoned. Planning of PZs is critical, to include the location of AAs and easily identifiable and

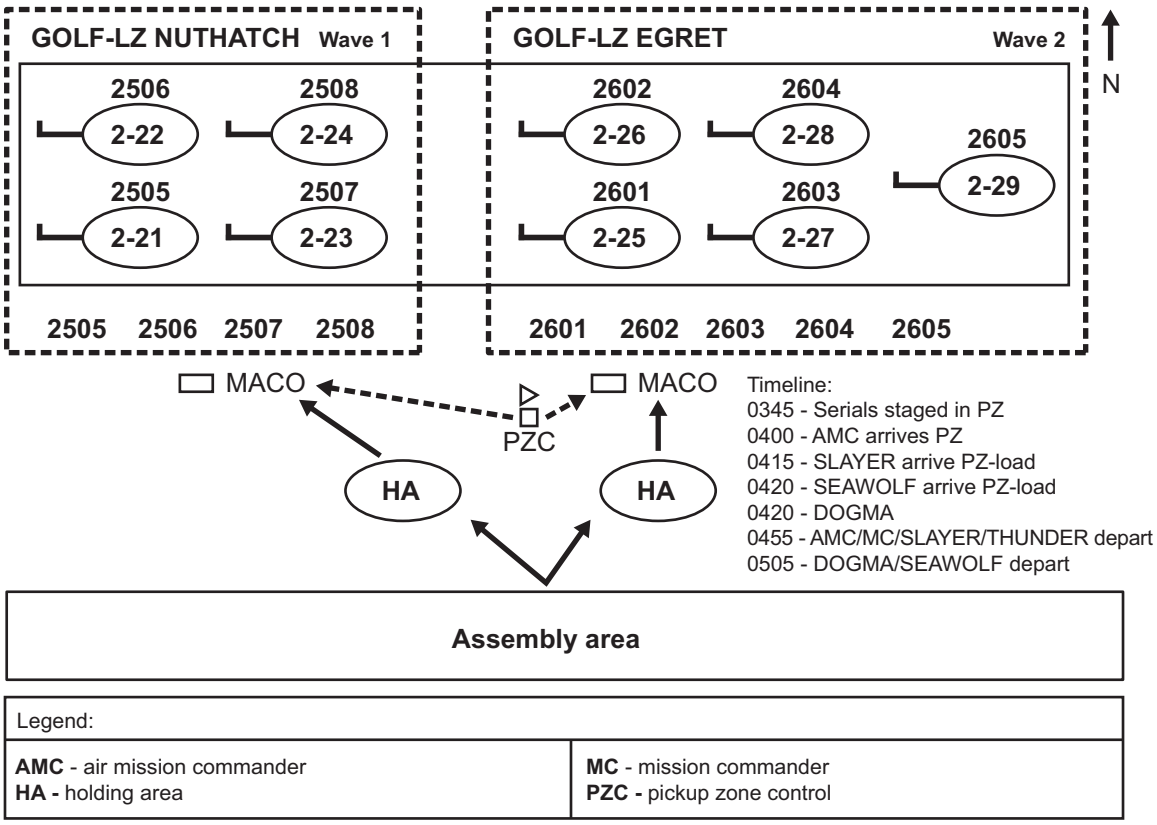


Figure 6-13. Pickup Zone Example.

accessible staging points. The MACO establishes PZs as planned, aided by a PZ control party that—

- Prepares, maintains, and marks landing sites and removes or marks obstacles.
- Is prepared, trained, and equipped to mark and provide initial terminal guidance at night, which includes proper selection of marking material for pilots with NVDs.
- Is prepared, trained, and equipped to direct and control helicopter operations within the PZ and support helicopter units landing in the zone.

Mounted Operations

Marine infantry companies are foot mobile by design. When required, task-organized infantry companies may execute tactically across a range of military operations mounted in vehicles that are wheeled or tracked, armored or unarmored, or some combination thereof. The following subparagraphs address mounted operations with armor in high intensity environments, such as general war. Many techniques associated with mounted operations, such as movement techniques and techniques associated with the task organization of tank and mechanized units, are applicable across a broad range of operations (see chap. 11 and chap. 13 for more discussion of mounted operations in other environments and operational areas). Regardless of the vehicles used, the current family of Marine Corps vehicles in which an infantry company may be mounted are not infantry fighting vehicles and should not be employed as such. They lack the armor protection, stabilized weapons station, low silhouette, and means for the infantry to fight from the vehicle without exposing themselves to direct fire.

Mission requirements, length of an operation, logistical support, and other considerations drive the methods by which infantry companies receive vehicular support. Such support can be internal, external, or by cross-attachment.

When employing the internal support method, the infantry company physically possesses a suite of vehicles that may or may not be suitable to mount the entire company simultaneously. Internal support usually requires the infantry company to train and provide its own drivers; conduct its own basic maintenance; and conduct other logistical operations, such as fueling, maintenance tracking, and accountability.

When employing the external support method, a vehicular unit, such as a truck or assault amphibian platoon, supports the infantry company. In general, enough vehicles arrive with the supporting unit to accommodate the entire company. The support unit may be attached depending on the length of the operation. While the vehicular unit provides the personnel, vehicles, and maintenance needs for the vehicles, the infantry company can expect such increased logistical requirements as life support and fuel. Regardless of the length of the operation or the command relationship between the vehicular unit and the company, it is critical that the company commander set an appropriate tone and take positive action to develop teamwork between both units.

Cross-attachment refers to the task-organization methodology that, though normally conducted at the battalion level, directly affects the infantry company. In this method, battalions will often trade units to increase the lethality and capability of both of the parent battalions. The most common variation of cross-attachment that infantry companies will experience is that of infantry and armor companies between infantry and tank battalions, resulting in a tank heavy battalion task force and an infantry heavy battalion task force. Within the infantry battalion, the cross-attachment of tank and infantry platoons results in tank heavy and infantry heavy company teams—also known as team tank and team mech. Company commanders in command of team mech wield significant combat power, but must also prepare for and mitigate the changes in cohesion brought about by the arrival of a tank platoon and the introduction of vehicular support units to mount the company.

Planning Considerations

The creation of mission-specific task forces provides exceptional flexibility for commanders in battle. However, the ability for units to attach, cross-attach, and conduct successful operations together on short notice requires exceptionally mature and knowledgeable junior- and company-level leadership—maturity in dealing with new personnel and relationships and knowledge in understanding the capabilities and limitations of new units.

Task Organization

A mounted task force is created by task-organizing mounted infantry and/or tanks under the command of a single battalion or regimental commander. Air, artillery, light armored reconnaissance, motor transport, and other LCE units support the mounted task force. The fundamentals in the following subparagraphs apply to task organization.

Flexibility. When creating task forces, it is important that the resulting organizations possess similar degrees of mobility to allow those task forces to work together. For example, a battalion task force in which one company remains entirely foot mobile effectively removes it as a maneuver element. A second caution is to avoid frequent changes to task organization. Strive to establish habitual command and support relationships as much as possible. For example, it would be better for one company in a battalion to be vehicle mobile, remain vehicle mobile, and receive all missions that require that mobility vice moving a truck platoon around from company to company.

Unity of Command. Mounted forces normally operate at distances and at tempos that preclude centralized control of supporting units by the parent headquarters. Attaching support units, such as mortar sections, to base maneuver elements is a method that ensures positive control and unity of effort. To maximize the advantages possible on a mobile battlefield, maneuver commanders must

have the means and authority to control the employment of their combined arms force.

Self-Sufficiency. In a similar manner to maintaining unity of command on the mobile battlefield, HHQ should also assign sufficient LCE resources to accomplish the mission. The intent is to provide the maneuver elements with sufficient control of their own situations so that they can take advantage of battlefield opportunities as they present themselves.

Tactical Integrity. To facilitate and simplify command and control, the commander should maintain the tactical integrity of units when task-organizing. Maintaining tactical integrity of CS units is secondary to the tactical integrity of combat units.

Cross-Attachment. Task-organizing a force for a specific mission on a temporary basis uses the cross-attachment methodology mentioned previously. Since the company is the smallest element of a mounted force, its task organization using cross-attachment results in the creation of company teams. The mix of tank and mounted infantry define cross-attached units, but these units generally consist of a tank or infantry headquarters; a combination of several tank, infantry, and/or light armored reconnaissance platoons; and an attached assault amphibian unit supporting the infantry. It is possible, if the mission dictates, to cross-attach dismounted infantry platoons. Only rarely are assault amphibian units attached to units below the infantry battalion level. More often, battalions receive an assault amphibian platoon as an attachment and place it in direct or general support of one of the infantry companies. The company operationally controls the assault amphibian unit.

Assault Amphibian Platoon. Organized into four sections of three AAVs each, the assault amphibian platoon normally conducts operations attached to or in direct or general support of the infantry company. When attached to another organization or given a support mission, the assault amphibian platoon commander works directly for the supported company commander. The assault amphibian platoon commander directs the employment of the platoon according to the supported unit commander's CONOPS. The assault amphibian platoon employs AAVs to:

- Achieve mounted mobility.
- Negotiate obstacles.
- Support the commander's direct fires plan.
- Enhance the commander's communications capability.

See MCWP 3-13, *Employment of Amphibious Assault Vehicles*, for more information on AAV operations and capabilities.

Combat Support

Commanders must be aware of the combat assets available to them and their employment capabilities and limitations and consider that knowledge during the planning process.

Antiarmor. When augmented, the company likely receives TOW or Javelin antitank missile systems. These systems need to be coordinated with the use of company antiarmor weapon systems. The TOW missile engages enemy armor at ranges up to 3,750 meters and typically receives missions to overwatch lead units or to cover flanks. Commanders should take advantage of the TOW missile's range, penetration, and optical sight capabilities to engage the enemy at maximum allowable ranges. The Javelin engages enemy armor at ranges of 2,000 meters and more. The Javelin's lock-on-before-launch, fire-and-forget capability increases the probability of a hit because the gunner is not exposed to enemy threats while tracking the missile to its target.

Mortars. When augmented, the company receives 81-mm mortar support from the battalion (81-mm mortar can deliver immediate suppressive fires or target marking at ranges up to 5,800 meters and organic 60-mm mortars up to 3,500 meters). Mortar squads may depend upon supporting vehicles for transport during mounted operations. Because of their limited range, mortar squads normally

move well forward in the vehicle formation. If receiving the support of the entire 81-mm mortar platoon, the two sections will normally bound to alternating firing positions to keep the lead elements of the force within their firing fan.

Heavy Machine Guns. When augmented, infantry companies receive .50 caliber and MK19 HMGs. In their mounted role, and with ranges at 1,500 meters or more, HMGs may rapidly respond to enemy contact through the establishment of bases of fire, may cover withdrawals in a similar manner, and may cover flanks.

Artillery. Because towed artillery cannot displace as rapidly as the mounted force can move, artillery must echelon firing units forward to provide continuous coverage for an advancing mounted force. The artillery FO supporting the mounted force should maintain constant communication with it to remain aware of the exact status of artillery support. If mounted units advance while their supporting artillery is displacing, early coordination with other supporting arms can prevent gaps in fire support coverage.

Reconnaissance. Reconnaissance is one portion of intelligence collection and ground combat units provide reconnaissance support. In mounted operations, reconnaissance teams use air or mounted means for insertion. Patrols will normally patrol forward and to the flanks, not to exceed the supporting arms' umbrella provided by the MAGTF. Commanders should also consider the availability of organic and nonorganic UA system assets when planning their reconnaissance.

Combat Engineers. In mounted operations, engineers perform their traditional mobility, countermobility, and survival roles through significant breaching of and creation of obstacles, bridging, and other similar tasks. Combat engineers travel well forward in the mounted task force in order to take immediate action if chokepoints, obstacles, and minefields are expected. A company commander may be required to establish an obstacle clearing detachment. Commanders must make follow-on considerations for engineers during the exploitation phase.

Antiair. Air defense systems within a company's battlespace normally consist of low altitude air defense teams that provide point coverage and defense. Normally, these teams perform their duties as part of an integrated air defense network that may include the company team. Most possess their own transport and they must move on the battlefield to those positions that allow them to accomplish their mission. Regardless of their primary mission, the mere presence of antiair teams on the battlefield provides company commanders with significant air defense capabilities.

Air. Fixed- and rotary-wing aircraft provide CAS to the mounted force. While both platforms can provide overwatch and reconnaissance functions, rotary-wing aircraft generally have a greater loiter time. On the mobile battlefield, vehicle marking and friendly unit location information is at a premium. The company FST, to include attached FACs, travel forward in the formation to gain and maintain the greatest situational awareness of the company fire requirements and maneuver locations.

Execution Considerations

In many ways, mounted movement considerations do not radically differ from foot mobile considerations. Providing overwatch for cross-compartment bounding does not change, nor does providing security during movement through the selection of various formations. The differences company commanders must understand lie in the speed of operations, the increased distances over which engagements occur, the lethality of the weapon systems employed, the resulting increase in casualties and disruption caused by catastrophic hits on loaded vehicles, and the need for dismounted security.

Combat Formations and Movement

Within mounted operations, combat formations apply to movement and halts at both the platoon

and at the company levels. Platoons use five formations—column/staggered column, line, wedge, vee, and left/right echelon. The selection and change of formations depends on enemy threat, control requirements, and terrain. Interval varies according to visibility, terrain, or weapon ranges. Companies generally move in column or line formation and the platoons may or may not conform to the company's formation. When antiarmor, HMGs, or some combination of the two operate with a company, they provide front, flank, and rear security through continuous movement, overwatch, bounding, and other appropriate techniques. Light armored reconnaissance attachments execute any of the preceding roles.

When conducting a halt, platoons and companies use coil or herringbone formations. Longer halts normally dictate the use of the coil with its all-around security and defensive nature. Shorter halts normally dictate the use of the herringbone formation, which allows for rapid transition back to movement. Any halt lasting more than five minutes requires deployment of dismounted infantry to sweep the area to negate mine, IED, and enemy dismounted threats. The longer the halt, the more formal and robust the defensive posture to include such things as occupation of high ground, establishment of overwatch, and a local patrol plan.

Mounted Movement Techniques

Mounted infantry may move and fight both mounted and dismounted. When mounted, forces move into combat using techniques of movement known as traveling, traveling overwatch, and bounding overwatch.

Traveling movement uses formations that maximize speed and control. Units employ this method when speed is important and contact is unlikely. Units employ traveling overwatch when speed and massed movement are important and enemy contact is possible. A trail element provides continuous overwatch of a lead element while on the move. Depending on terrain, visibility, and weapon systems, the trail element remains close enough to the lead element to provide immediate support upon contact, but not so close as to risk decisive engagement and lose freedom of maneuver. The trail element has considerable flexibility to adjust speeds and conduct short halts and similar actions to maintain effective overwatch of the lead element without compromising the overall speed of the moving unit as a whole. Lead and trailing elements maintain good communication and are often subelements of the same tactical unit.

Units employ bounding overwatch when contact is expected and speed is no longer a factor. Bounding overwatch differs from traveling overwatch in two ways: first, movement is not continuous; second, lead and trail elements exchange roles with each bound, becoming an overwatch element and a moving element. When the overwatch element assumes a position with good observation and fields of fire, the moving unit then bounds past the overwatch unit to, in turn, occupy the next position with good observation and fields of fire. The length of each bound should not exceed two-thirds of the maximum effective range of the overwatching element's weapon systems. Overwatching elements must be able to react quickly to any enemy action against the bounding element. Company commanders should consider overwatch positions as intermediate objectives and focus combat power and fire support toward each. In case of contact, overwatch positions possess defensive characteristics as well. There are two types of bounding overwatch: bounding by platoon, which includes all platoons of the company, and bounding within the lead platoon, which generally indicates a main body traveling behind a lead element using bounding overwatch.

Mounted Movement Considerations

Mounted movement considerations are similar to foot mobile considerations in many ways, but commanders must remember that speed is often relative, and that dismounted infantry often play an integral role in mounted movement.

Antiarmor/Heavy Machine Gun Movement. Units designed around the CAAT model provide forward security through areas, such as danger areas, defiles, or built up areas. Additionally, their relative speed, versatility, and light weights make them ideal for contact point and guide missions and for linkups and passage of lines tasks. Commanders should be aware that wheeled vehicles cannot negotiate rough terrain at the same speed as tracked or light armored vehicles and so should plan accordingly.

Movement Across Open Areas (Danger Areas). Under the cover of overwatch, a platoon rapidly bounds across the open area to secure the far side. On signal, the rest of the company bounds across the danger area without stopping. The interval between vehicles may increase depending on terrain and situation.

Movement Through Wooded Areas. When moving through wooded areas, the infantry should dismount and move in front and on the flanks of the supporting vehicles. Vehicle intervals are close enough to ensure visual contact.

Movement Across Intervisibility Lines. Intervisibility lines are small terrain contours that prevent observation. While the obstruction of observation that occurs along fingers, hills, and ridgelines is obvious, intervisibility lines are less obvious until encountered. They are dangerous because they provide the enemy an opportunity to conduct antiarmor fires before friendly forces can observe or react. When enemy contact is probable or imminent, dismounted infantry or light vehicles should clear the intervisibility line before allowing armor to proceed.

Movement Through Defiles. A defile is a narrow gorge, pass, or similar manmade feature (frequently found on highways) that restricts lateral movement. If enemy contact is imminent or probable and bypassing the defile is not possible, then dismounted infantry clear the defile prior to the passage of vehicles.

Movement During Periods Of Limited Visibility. The company decreases speed and reduces vehicle interval to maintain visual contact between vehicles. The company dismounts infantry for security and guides if necessary. Optics proficiency will dictate additional measures required.

Movement Through Built-Up Areas. Built-up areas provide the enemy with excellent positions from which to engage a mounted force. If the company must move through a built-up area with an unknown enemy situation, the infantry dismounts and clears the area in advance of the vehicles. Company commanders should consider establishing dismounted overwatch positions along the route.

Passage of Lines. A designated unit representative conducts advanced coordination with the stationary unit for both forward and rearward passage of lines. Once vehicles enter the passage lane, they never stop and must bypass disabled vehicles to the best of their ability. The moving unit uses the traveling technique, moves through the passage lane in column, and continues to orient all weapon systems toward the enemy.

Checkpoints

Due to the speed, range, and length of a mounted column, extensive use of checkpoint control measures is essential. In addition to lead and rear trace elements, main body subelements should also report checkpoints to enable company leadership to maintain situational awareness of the column's speed, disposition, location, and overall status.

Mounted Immediate Action and Battle Drills

Like all immediate action drills, mounted immediate action drills allow units to make effective, immediate responses to enemy contact without hesitation. They are simple, well-rehearsed, usually event driven, and backed up by a simple signal plan that uses brevity codes. Immediate action drills are not set rules or maxims and company commanders can modify basic drills according to environment, formations, terrain, enemy threat, and company capabilities. Immediate action drills

do not exist to win the encounter, though poorly executed drills can certainly lose the encounter. Rather, immediate action drills exist to provide the opportunity for unit leadership to execute the basic steps in addressing any chance contact or meeting engagement, to deploy and report, to develop the situation, to determine a COA, and to execute the COA. Battle drills exist at the vehicle and crew level, and represent those basic actions needed for the vehicle to perform as an effective part of the unit.

Immediate action drills include the following:

- Actions upon contact.
- Antitank guided missile (ATGM) drill.
- Incoming artillery drill.
- Air attack.
- IED or possible IED.

Battle drills include the following:

- Dismount drill (normal and rapid).
- Disabled vehicle/roll over.
- Disabled weapon and reload drills.
- Incapacitated driver.
- Hasty roadblock set up.
- Destruction plan.
- Vehicle recovery plan.

Mounted Operations Planning Considerations

Planning mounted operations requires more energy and diligence than planning for other operations due to the likelihood of multiple attachments and differing command relationships, the possibility of company ownership of vehicles, the increased complexity of fire support planning, the greater impact of logistical limitations, and the employment considerations of a wide variety of weapon and vehicle systems.

The following factors should be considered when planning mounted operations:

- Vehicle maintenance responsibilities to include the assignment or allocation of maintenance personnel.
- Employment of combat engineers.
- Communication planning with multiple internal vehicle, subunit, and command nets.
- ROE limitations on weapon, ammunition, and pyrotechnic employment.
- Increased use of tactical control measures and enhanced planning and coordination to enable decentralized control over greater distances.
- Reserve decisions to include establishment, combat power, employment triggers, and reconstitution planning.
- Increased training requirements, such as communications, vehicle drivers, CSWs, counter-IED systems, and mounted land navigation.
- Terrain and weather limitations.
- Development of mounted operations SOP.
- Logistic planning for increased POL use and maintenance requirements to include organic refueling capability.

The capabilities of mounted units include the following:

- Speed/mobility.
- Increased firepower.
- Increased C2 capabilities.
- Enhanced FP.
- Increased lift capacity for self-sustainment.

The limitations of mounted units include the following:

- Dependency on fuel.
- Vehicle mishaps and recovery.
- Vehicle maintenance.
- Requirement for trained drivers.
- Decreased number of dismounts available.
- Limited mobility in restricted terrain.

Tank/Infantry Operations

The use of tanks in mounted operations maximizes the ground mobility, protection, shock action, and firepower of these armored vehicles to destroy the enemy's will to resist. Generation of combat power occurs through the massed employment of tanks and by enhancing the mobility of

infantry by mounting them on supporting vehicles. Refer to MCWP 3-12, *Marine Corps Tank Employment*, for more information on tank operations with infantry and safety precautions.

Task Organization

As discussed previously in this chapter, the use of cross-attachment at the company level results in the creation of team tank and team mech teams. While countless variations are possible, such as dismounted infantry receiving tank support or a tank company receiving a mounted infantry platoon, the general principles of tanks and infantry working together remain the same.

Coordination

Mounted operations demand effective coordination between the tank unit and the infantry unit it is supporting. The tank commander is responsible to advise supported unit commanders on the best employment of tanks in support of their schemes of maneuver. The infantry commander's plans should maximize use of a tank's firepower, enhanced target acquisition (including thermal sights), and effective armor protection capabilities. In addition to understanding a tank's capabilities and limitations, the tank unit leader must also understand the disparate capabilities of the mounted force and advise the infantry commander accordingly.

Mutual Support

To exploit the mounted force's capabilities, tanks and mounted infantry must work together in pursuit of a common goal. Each element of the mounted force provides a degree of support to the other elements. Tanks support mounted infantry by—

- Providing mobile, protected firepower.
- Neutralizing or destroying hostile weapons by fire and movement.
- Clearing paths for dismounted infantry through obstacles.
- Neutralizing fortified positions with direct fire.
- Supporting dismounted infantry by direct fire.
- Assisting in the consolidation of the objective.

Mounted infantry assists tanks and supporting vehicles by—

- Breaching or removing antiarmor obstacles.
- Assisting in the neutralization or destruction of enemy antiarmor weapons.
- Designating targets for tanks and supporting vehicles.
- Protecting tanks and supporting vehicles from enemy infantry and antiarmor weapons.
- Clearing bridges and fording areas.
- Clearing restrictive terrain, such as urban, swamp, or woodland areas.
- Conducting dismounted security patrols.

Employment Methods

There are three general methods to employ tanks and mounted infantry together in an attack: both arms together; the infantry supported by the fire of the vehicles; or a multiaxis attack, which is a combination of the two.

Tank and Mounted Infantry Attack Together. When both arms are employed collectively, tanks and mounted infantry advance together within mutually supporting distances of each other. Tanks normally lead the formation unless such factors as the terrain or the complexity of the enemy defenses and obstacles require an infantry lead. The infantry may remain mounted if the enemy's antiarmor threat is weak or easily mitigated, the terrain is open and obstacles easily bypassed, and terrain and weather could provide trafficability. If planning to dismount, the infantry remains in the vehicles as long as possible, balancing the desire to dismount close to the enemy with the enemy's antiarmor capability. The following are advantages of this method:

- Exploits the mobility, speed, armor-protected firepower, and shock action of the mounted force.
- Reduces enemy reaction time.

- Disorganizes the enemy's defense by using tanks to breach obstacles prior to the arrival of the infantry dismounts.
- Conserves the energy of the infantry by reducing the distance to travel on foot.
- Reduces the amount of exposure of the infantry to enemy fires.

The following are disadvantages of this method:

- There is a greater potential for casualties, especially among the infantry vehicles, if bypassing or suppressing enemy antiarmor fires fails.
- The entire mounted force can become vulnerable to enemy fires if obstacles are not breached quickly or bypassed.

Tanks and Vehicles Support the Infantry by Fire Only. Based on METT-T, commanders may decide to assault with dismounted infantry while using tanks and other vehicles in attack by fire or SBF methods. Leading with dismounted infantry is most applicable in restrictive terrain, in limited visibility, when bypassing or suppressing the enemy's antiarmor threat is difficult, when complex and significant enemy fortifications and obstacles exist, or when trafficability is poor. Contingency plans for all operations should include the possibility of conducting this method of attack; that is, the vehicles stopping well short of the objective and supporting the infantry with their fires. Causes for such contingencies may include unexpected enemy antiarmor assets, unidentified enemy positions, breaching failures, or unexpected obstacles. The following are advantages of this method:

- Increases vehicle survivability while still employing the positive characteristics of its primary weapon systems to compensate for the lack of infantry armor and mobility.
- Enables vehicles to bound forward and maintain effective support after the infantry clears areas during its advance.
- Potentially, increases infantry survivability in the face of significant antiarmor threats.

The following are disadvantages of this method:

- Communications difficulty increases between dismounted infantry and support vehicles.
- Maintaining positive control of direct fires in relation to maneuver becomes increasingly difficult as the infantry advances and the ability to see it decreases.
- Risk to infantry survivability due to lack of armor and mobility is greatly increased.
- Vehicle attack by fire and SBF positions risk becoming indirect fire targets the longer those positions remain occupied.

Dismounting

Security drives the basic decisions about how, when, where, and why to dismount infantry. Despite all of the various considerations and techniques, the infantry and its vehicles provide mutual support. When the vehicles are vulnerable, infantry dismounts to protect them and prosecute the mission, whether that is by conducting an IED sweep at a maintenance halt or by clearing bunkers and trenches in conjunction with vehicular firepower.

Dismounted infantry normally assigns squads to each tank section. The infantry moves a few meters behind and to the flanks of the tanks, overwatching the tanks and maintaining observation to the flanks and above. When necessary, the infantry moves forward of the tanks to clear specific obstacles, such as dead spaces or defiles. Movement speed decreases in direct relation to the amount of clearing required. In urban environments where infantry must clear buildings or in complex environments involving ridges and high fingers, movement slows considerably. When in contact, infantry marks targets for tanks using radio or tank-phone talk-ons; direct fire techniques, such as tracers or laser designators; or indirect fires, such as grenade launchers or mortars.

In the assault, dismount points may be short of the objective, on the objective, or after passing through the objective. Timing is critical because dismounting too early slows the force's momentum and

unnecessarily exposes the infantry to hostile fire, while dismounting too late exposes vehicles to that same hostile fire. Company commanders take into account the enemy threat, the function of speed providing security, and acceptable risk. Dismounted infantry should be aware of how to move in close proximity to tanks, under tank machine gun fires, and around the tank main gun danger area.

Dismounting on the Objective. Dismounting on the objective is a technique used when the mounted force has achieved surprise or when the enemy's antiarmor defense is weak. The following are advantages of dismounting on the objective:

- Greater speed and shock effect.
- Mounted infantry remains protected longer from the fires of enemy small arms.
- Supporting fires can continue while the mounted force approaches its objective since mounted infantry has greater protection against shell fragments and other small projectiles.

The following are disadvantages of dismounting on the objective:

- Difficulty orienting mounted infantry to specific objectives.
- Difficulty establishing control at the dismount point due to potentially close enemy fires.
- Difficulty in directing supporting fires against enemy positions in close proximity to friendly dismounted infantry.
- Vulnerability of infantry vehicles to short-range antiarmor weapons.
- High volume of accurate, suppressive fire is required to support dismounted infantry.

Dismount Short of the Objective. The following identifies advantages of dismounting short of the objective:

- Dismounted infantry is protected from small arms and indirect fires while dismounting.
- Infantry achieves better orientation on the objective.
- Unit cohesion is enhanced by establishing control in the relative protection of the dismount point before committing to the assault.
- Organic and supporting fires can suppress the enemy while the infantry is dismounting.

The following are disadvantages of dismounting short of the objective:

- Dismounted infantry is exposed longer to enemy small arms and indirect fire while moving forward in the assault.
- Suitable dismount points that are forward of enemy positions may be targeted by enemy direct and indirect fires.

Dismounting Beyond the Objective. Dismounting beyond the objective occurs when company commanders desire to use the speed and mobility of a purely mounted attack, most often when they achieve decisive surprise on an unprepared enemy. In this case, the dismounted infantry serves to "mop up" after the desired effects of the vehicles are produced. The enemy threat determines if dismounting beyond the objective is feasible. The following are advantages of dismounting beyond the objective:

- Dismounted infantry fights from an area and direction not expected by the enemy.
- Unit cohesion is enhanced by establishing control in the relative protection of the dismount point before committing to the assault.
- Infantry achieves better orientation on the objective.
- Shock effect on the enemy caused by a mounted force moving through its position is likely to be considerable.

The following are disadvantages of dismounting beyond the objective:

- Enemy reaction or unexpected defenses in depth may cause catastrophic failure.
- Unexpected enemy resistance may lead to a requirement to dismount the infantry on the

objective with associated lack of situational awareness.
- Enemy indirect and direct fires might still target suitable dismount points.

General Considerations for Tank/Infantry Integration

Tank platoons have two sections, each consisting of two tanks. Tanks fight as pairs and will only rarely entertain fighting as individual vehicles. A tank's greatest vulnerability is enemy infantry in restrictive terrain. Restrictive terrain provides enemy infantry the greatest opportunity to approach and destroy tanks, while severely limiting tank mobility, vision, and weapons effectiveness.

Company commanders should not plan to use tanks to haul personnel, equipment, or cargo; however, tanks can transport personnel short distances, if needed, and ride points exist for that purpose. The presence of passengers on a tank severely restricts the employment of the tank's weapon systems. Tanks can also recover other vehicles and even other tanks if a tank recovery vehicle is not available.

Consolidation and Reorganization

Like any other type of attack, consolidation and reorganization occur immediately after seizing the objective. The focus of consolidation and reorganization remains reconstitution of the force to repel an enemy counterattack or conduct exploitation and pursuit. While conducting the basic drills of consolidation and reorganization is more complex with the presence of vehicles, the classic memory aid SAFE—security, automatic weapons, fields of fire, entrenchment—still applies.

The mounted force consolidates the objective by positioning tanks and other vehicles in overwatch positions focused on likely enemy avenues of approach during the placement of antiarmor and CSWs and dismounted infantry. Vehicles seek concealment and hull-defilade positions when possible. Dismounted infantry normally designates targets for the overwatching vehicles and uses organic and supporting fires to destroy any enemy resistance. After consolidation, the infantry remounts and prepares to conduct follow-on missions.

The mounted force reorganizes by conducting logistical resupply operations, especially refueling of vehicles, which require the force to move back to a covered position. The mounted force also conducts reorganization by arranging for medical evacuation of casualties and conducting EPW handling operations.

CHAPTER 7
DEFENSIVE OPERATIONS

This chapter discusses the functional and detailed planning, preparation, and execution of defensive operations. These operations are temporary measures conducted to identify or create enemy weaknesses, protect the force, and create the opportunity to go on the offense. While properly conducted defensive operations can defeat numerically superior forces, the offense remains the form of decisive action. Infantry forces in the defense rely on terrain and surprise to support their defensive form of maneuver. They maintain an offensive focus and seek to avoid static defenses that surrender the initiative.

Purpose of the Defense

The purpose of the defense is to defeat an enemy attack, protect the force, stabilize a situation, gain time, economize forces and resources, and gain the initiative for offensive operations. As illustrated in figure 7-1, the defense and defensive functions are inherent parts of all operations across a range of military operations. While the defense may sometimes be stronger than the offense and it may sometimes prevent enemy victory, it rarely delivers victory on its own—the offense provides the decisive form of action. For example, in stability operations, company commanders may assign forces to defend critical infrastructure that enables normalcy for the populace, but they will rely on offensive action to support the competent functioning of local government.

In offensive operations, a portion of the force may defend an exposed flank in order to allow the main effort to continue to pursue an enemy. The defense denies key or vital terrain and infrastructure to a threat while retaining similar critical elements for friendly use. Defense operations seek to shape the situation for offensive action and victory either by attriting, canalizing, or fixing enemy forces, or by harboring resources, guarding the populace, and providing security. The defense demands that company commanders demonstrate flexibility, adaptability, and agility since the end purpose is always to regain the initiative. In conducting the defense, company commanders protect vital forces and assets, disrupt the threat, and generate the effects necessary to set the conditions for successful offensive action.

Types of Defensive Operations

In general, the infantry company, as part of any defense, may defend, disrupt, delay, withdraw, counterattack, or conduct any other defensive method as part of a larger type of defense. Indeed, company commanders may combine or phase between different types of defense as part of their overall plan for mission accomplishment. Within these options, there are three broad types of defensive efforts—mobile defense, area defense, and retrograde.

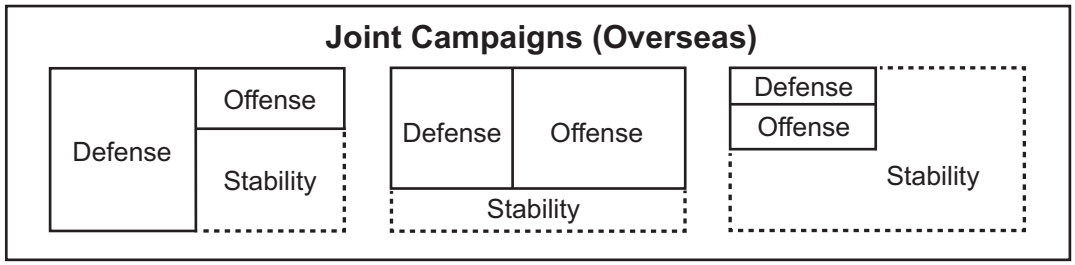


Figure 7-1. The Defense Across a Range of Military Operations.

Mobile defense orients on the destruction of the enemy by allowing them to become vulnerable in their attack and then defeating them through decisive offensive action by a striking force. The infantry company may use any number of defensive methods to create the environment necessary for the success of the offense.

Area defense concentrates on defeating the enemy by denying them access to designated terrain or infrastructure for a specified time. The infantry company may use any number of defensive methods to accomplish its mission.

Retrograde involves organized movement away from the enemy. A transitional operation, the retrograde defense occurs within a larger scheme designed to regain the initiative from the enemy. Three specific defensive methods—delay, withdrawal, and retirement—are associated with the retrograde.

Characteristics of the Defense

The characteristics of the defense are also defensive planning fundamentals for the infantry company. These characteristics include maneuver, preparation, mass and concentration of fires, flexibility, use of terrain, mutual support, depth, surprise, knowledge of enemy, and security.

Maneuver

Maneuver is as important in the defense as it is in the offense. While steadfastness and the tenacious holding of key terrain are essential in the defense, the defender must not become immobile. Defenders must maintain their freedom of maneuver. Maneuver is essential in generating the offensive power fundamental to a successful defense. Maneuver is essential to security operations, operations within the MBA, and rear operations. Units of all sizes maneuver in depth, taking advantage of terrain and tactical developments to concentrate, disperse, and occupy positions from which they can bring effective fire to bear on the enemy. Examples include the security force delaying from a series of successive battle positions (BPs) to disrupt the enemy prior to their arrival in the MBA or a supporting effort moving into an attack by fire position in order to provide suppressive fires for a planned counterattack.

Preparation

Defenders arrive in the battle area before the attacker, which remains true at the local level even within stability operations; hence, defenders must take advantage of this situation by making the most thorough preparations for combat possible in the time available. By analyzing the factors of METT-T, the infantry company commander gains an understanding of the tactical situation and identifies potential friendly and enemy weaknesses. Defenders then wargame friendly and enemy options and synchronize their CONOPS with all available combat multipliers. Such defensive planning, depending on the conditions, can be either hasty or deliberate. These terms refer to the manner in which the infantry company prepares the defense; they are not types of defense.

Hasty Defense

A hasty defense is normally organized while in contact with the enemy or when contact is imminent and time available for organization is limited. A hasty defense normally includes BPs, overnight perimeters, hasty vehicle checkpoints, and cordons. Reconnaissance of the sector ceases and units assume the defense directly from their current positions. Depending on the situation, it may be necessary for commanders to initiate hasty attacks to seize terrain suitable to their defense. Commanders may employ a security force to delay the enemy while deploying the bulk of their force to more suitable defensive terrain. Improvement of the hasty defense is continuous as the situation permits and may eventually become a deliberate defense.

Deliberate Defense

A deliberate defense is normally organized when out of contact with the enemy or when contact with the enemy is not imminent and time for organization is available. A deliberate defense normally includes fortifications, strong points, forward operating bases (FOBs), permanent vehicle checkpoints, extensive use of obstacles, and fully integrated fires. Company commanders are normally free to make detailed reconnaissance of their sectors, select the terrain on which to defend, and decide the best tactical deployment of forces.

Mass and Concentration

Successful defenders concentrate combat power at a decisive time and place. By massing fires, they obtain a local advantage at points of decision. Offensive action and the use of surprise and deception are often the means of gaining this advantage in the defense. Concentration refers to combat power and its effects, not just numbers of personnel and weapon systems. To concentrate combat power, the defender may economize in some areas, retain a reserve, and maneuver to gain local superiority. Indirect fire can shift to critical points to rapidly generate destructive effects.

Company commanders designate their main efforts based on their anticipation of the enemy's likely COAs and corresponding vulnerabilities. The defensive scheme of maneuver takes advantage of terrain essential to the integrity of the defense while the reserve occupies a position that allows it to intervene quickly in support of the main effort.

Since they usually cannot determine with certainty where the enemy will attack, commanders remain ready to rapidly shift their main efforts. The defender masses fires and concentrates combat power repeatedly to wrest the initiative from the attacker. Company commanders do this swiftly, since periods that allow them to develop superior combat power will be brief. The commander may have to surrender some ground to gain the time necessary to concentrate forces.

Flexibility

Successful flexibility lies in sound preparation and effective command and control. The defender must be agile enough to counter or avoid the attacker's blow and then strike back effectively. Flexibility results from detailed problem framing, understanding the unit's purpose, detailed planning for contingencies, aggressive reconnaissance and security, preplanned counterattacks, uses of offensive techniques, organization in depth, and retention or reconstitution of a reserve. Flexibility requires that the company commander "see" the battlefield, both physically and through timely and accurate reports. Supplementary positions on secondary avenues of approach may provide additional flexibility to the company commander. After proper analysis of the terrain and enemy situation, the commander can anticipate enemy actions and prepare to act through the positioning of maneuver units or a reserve.

Use of Terrain

Company commanders exploit every aspect of geographic terrain, human environment, and weather to their advantage. Terrain is only valuable if a force gains advantage from its possession or control. Through IPB, companies identify terrain that favors the attacker, such as covered and concealed routes, and seek to mitigate or neutralize the effects. When selecting friendly positions to generate decisive effects on the enemy, the defender seeks to defend on terrain that maximizes effective fire, cover, concealment, movement, and surprise.

Obstacle integration multiplies the effects and capabilities of firepower. The combination of firepower and obstacles causes the enemy to conform to the friendly defensive scheme of maneuver. Obstacles magnify the effects of firepower by increasing target acquisition time and by creating exploitable vulnerabilities. Obstacles not properly integrated with maneuver and the fire support plan inhibit friendly maneuver, waste resources, and have negligible effects on enemy maneuver.

Mutual Support

The company commander obtains mutual support in the scheme of maneuver by positioning units so they can reinforce each other by fire or movement. Mutual support strengthens any defense by preventing the enemy from isolating and massing on any one portion of the friendly defense. Mutual support forces attackers to disperse resources, fires, and effort away from their main objective.

Defense in Depth

A shallow defense is vulnerable to a concentrated attack at any point. Defense in depth uses mutually supporting defensive positions throughout the MBA to absorb and progressively weaken the attack, employs security efforts forward to defeat the enemy's synchronization and understanding of the defense, and establishes a maneuver area for the reserve. The greater the enemy's combat power and the wider the AO, the greater the depth of the defense must be.

Defense in depth is necessary to—

- Disrupt the momentum of the attack and prevent a breakthrough.
- Force the enemy into engagement areas (EAs).
- Allow the defender time to determine the enemy's main effort and to counter it.
- Force the enemy to commit their reserves at a nondecisive point.
- Disperse the effects of enemy fire.

Defense in depth is achieved by—

- Engaging the enemy at the earliest opportunity with security forces.
- Using combined arms.
- Employing weapons at maximum effective range.
- Using blocking positions, obstacles, and supplementary positions throughout the MBA.
- Positioning and moving reserves and fire support units.

Surprise

The attacker possesses the initiative and chooses the time and place of his/her assault. However, the defender achieves surprise with obstacles, fires, security forces, cover and concealment, mutually supporting positions, and defensive mobility to delay, disrupt, fix, and eventually defeat the enemy. Deception, discipline, camouflage, and use of cover and concealment protect the force and preserve combat power by misleading the enemy as to the true location of friendly positions and strength of forces. The keys to surprise are concealment, counterreconnaissance, OPSEC, and thorough preparation.

Knowledge of Enemy

The defense is largely reactive. What the attacker does or does not do dictates a company commander's options. When conducting problem framing, an understanding of the environment and a thorough knowledge of the enemy's capabilities, operational concepts and equipment, and weapons capabilities are essential to selecting a valid scheme of maneuver. For example, integrating water features into an obstacle plan is useless if the enemy possesses significant amphibious and bridging capabilities; whereas, positioning on the reverse slope might be appropriate in the face of a large enemy indirect fire capability.

Local Security

All units provide their own local security. Terrain, communications, target acquisition capabilities, and the enemy threat determine the depth of local security.

Passive Security Measures

All units employ passive security measures to reduce exposure to the enemy, to include observation, electronic exposure, and fires. Communications procedures, camouflage, movement control, and other individual continuing actions are strictly enforced.

Active Security Measures

Active security measures include combat patrolling, sensors, target acquisition radars, surveillance, and employment of false visual and electronic signatures. In addition, capability sets of certain units enhance the security posture of the organization. For example, engineers contribute to survivability, mobility, and countermobility—all of which contribute to security.

Organization of the Battlespace

The defensive sector in depth consists of three areas: the security area, MBA, and rear area (see fig. 7-2). These areas are equally applicable to linear and nonlinear battlespace environments.

For any echelon of command, the security area is forward of the forward edge of the battle area

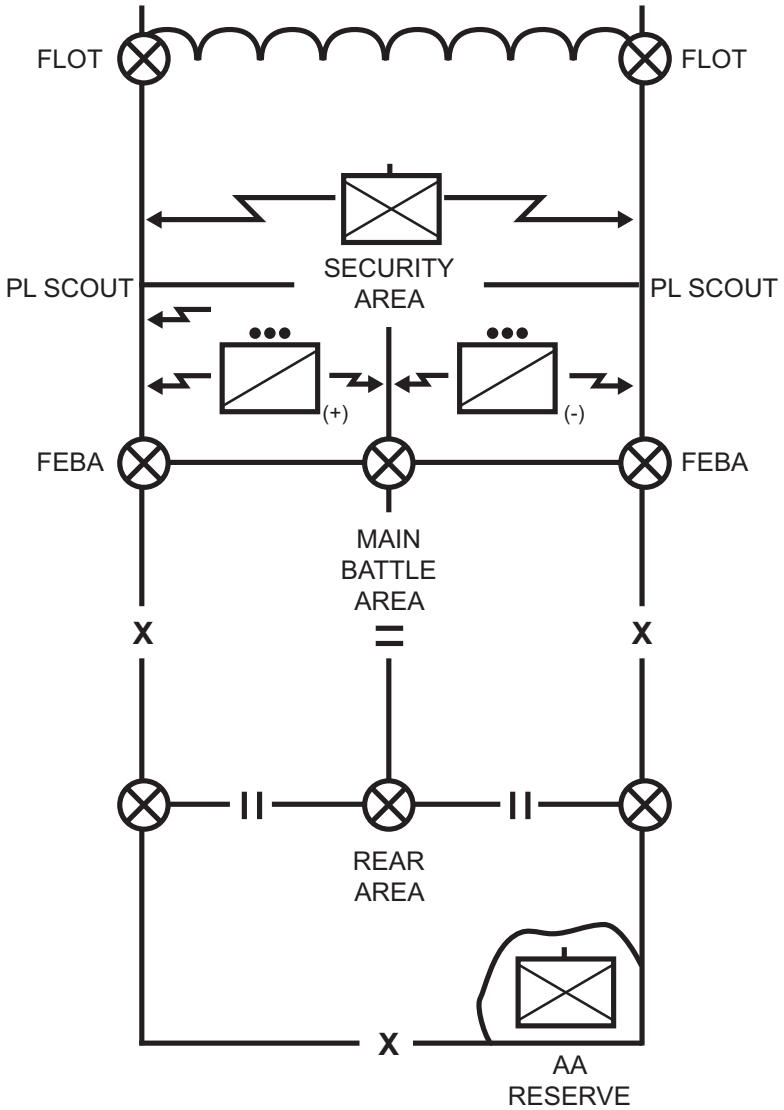


Figure 7-2. Organization of the Battlespace (Regimental Level).

assigned to the security forces. It is where security forces execute assigned tasks. The commander adds depth to the defense by extending the security area as far forward as is tactically feasible, which allows security forces to inflict the greatest possible damage and disruption to the enemy attack by the time the enemy reaches the MBA.

The MBA extends from the forward edge of the battle area to the rear boundaries of the forward subordinate units. The commander positions forces throughout the MBA to destroy or contain enemy assaults. Reserves in the MBA reduce penetrations, regain terrain, or destroy enemy forces. The greater the depth of the MBA, the greater the maneuver space for fighting the main defensive battle that is afforded to subordinate commanders. The decisive defensive battle usually occurs in the MBA.

The rear area extends forward from a command's rear boundary to the rear boundary of the MBA. This area exists primarily for CSS functions. Rear operations include those functions of security and sustainment required to maintain continuity of operations by the force as a whole.

Organization of the Force

In a similar manner to other functions across a range of military operations, conducting defensive action normally imposes multiple tasks on the commander. Such tasks may be phases, conditions, or elements that are particular to any type of defense or form of defensive maneuver. These requirements directly affect the manner in which the commander divides the available combat power and resources in organizing for the defense. The conduct of the defense is built around the concept of security, MBA, and rear area forces. Maneuver warfare doctrine dictates that the tasks associated with these elements be assigned doctrinally to them.

Main Effort

Company commanders weight the main effort to ensure success at the decisive point. In the defense, this role often lies with the tasks associated with the MBA force. This often means that the main effort contains the greatest concentration of combat power, but not always. The purpose of the main effort is to accomplish the company's mission, and the designation of a main effort allows the company to focus all of its energies, actions, and resources toward enabling the main effort to achieve success. As the element that achieves the company's mission, the main effort's task and purpose should nest directly with that of the company. For example, when conducting a sector defense, a company commander is likely to charge the company's main effort with tasks that will result in the achievement of decisive effects in the primary engagement area.

Supporting Efforts

Supporting efforts enable the main effort to achieve success at the decisive point. The completion of tasks associated with security and rear area forces most often involve one or more supporting efforts. For example, in conducting a sector defense, a company commander may task one of the company's supporting efforts with disrupting the enemy in the security area in order to allow the main effort to achieve success in an engagement area in the MBA. The mission assigned to supporting efforts must directly support the main effort's purpose. Such nesting allows supporting efforts to exercise initiative to react on the battlefield in ways to ensure the main effort's success, including being prepared to assume the main effort's mission. Supporting efforts receive the combat power, attachments, and any other enablers needed to accomplish their mission in support of the main effort. Across all types of the defense, supporting efforts may use BPs or successive BPs, delay and disruption,

deception, lane closures, suppressive fires, or other tactics to—

- Allow the main effort to maneuver to the decisive point.
- Prevent the enemy from reacting to the defense.
- Cause the enemy to dissipate their fire support, lose their formation cohesion, or prematurely commit their reserves.
- Prevent the enemy from surprising the main effort.

Reserve

The primary mission of the reserve is to conduct decisive action, take advantage of sudden opportunities, reinforce main effort success, and exploit main effort success. The reserve is normally associated with the MBA forces and its employment at the decisive moment is the commanders' principal means to influence the action. A reserve does not reinforce failure. The reserve must be large enough to exploit success, yet its size should not materially weaken the main effort. In a deliberate defense, the reserve might be a very small part of the company; whereas, in a mobile defense, the reserve may constitute the bulk of the company, ready for commitment as the main effort's counterattack. Company commanders consider the size of the reserve depending on the following:

- Contemplated missions of the reserve.
- Forces available.
- Type of maneuver planned.
- Terrain over which the reserve must travel.
- Possible hostile reactions.
- Clarity of the situation.

Defensive Methods

While the type of defense conducted—sector, BP, strong point, linear, perimeter, reverse slope, and retrograde—might be readily apparent, the time available to prepare for that defense represents the most significant criteria in determining which defensive methods the company commander selects, followed closely by such considerations as mission, enemy threat, terrain, and relative combat power.

Sector

A defensive sector allows a unit freedom of action to accomplish its mission within assigned boundaries (see fig. 7-3). This form of defense normally orients on the enemy force and not on retaining terrain. The size of the sector depends on the situation, but should generally be no larger than what can be influenced by the unit; the strength of the sector comes from its flexibility. The defensive sector is effective because as enemy forces penetrate into the depth of the defense, they expose their flanks and critical C2 and logistic assets to assault from a unit defending within the sector. Company commanders assign defensive sectors to platoons, giving them the flexibility to operate in a decentralized manner while using mission tactics to provide the control

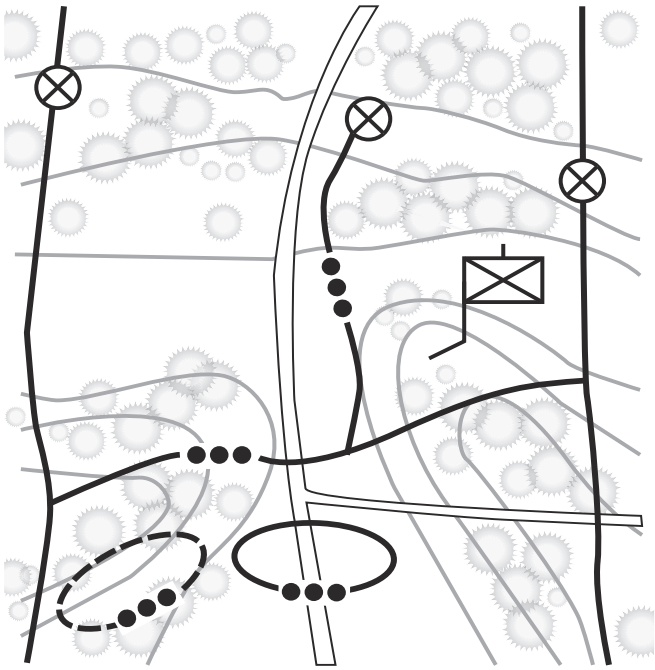


Figure 7-3. Sector Defense.

necessary to avoid confusion and synchronize the company's operation. Company commanders favor platoon sectors when they cannot effectively see and control the company fight, such as in restricted terrain where mutual support among the company's platoon BPs is difficult to achieve.

Battle Position

A BP is a defensive position oriented on the most likely enemy avenue of approach from which a unit may defend or attack (see fig. 7-4). It can deny or delay the enemy the use of certain terrain or an avenue of approach. It is a defensive method that is functional down to the squad level. A BP (as a graphic symbol) allows the commander to exercise more control over the force assigned the BP; however, the graphic itself does not dictate the physical boundaries of the BP, but merely depicts the general location and orientation of the preponderance of the assigned force. The size of a BP can vary with the size of the unit assigned to defend it and may, in turn, consist of a number of subordinate BPs. Occupation is usually hasty and improvements to the position are continuous. There are four types of BPs—primary, alternate, supplementary, and subsequent. The defensive method strong point bears many similarities with BPs and its relationship is shown in figure 7-5.

Primary

The primary BP is the best place to accomplish the assigned mission. It is frequently focused on the enemy's most likely avenue of approach.

Alternate

The alternate BP is where a unit can still accomplish its assigned mission, but that is occupied when the primary BP becomes either untenable or unsuitable. Viewed from a different perspective, alternate BPs can enable the use of maneuver within a defensive position by increasing survivability and allowing the defender to engage the enemy from multiple and varying positions.

Supplementary

A supplementary BP allows a unit to address branch plans or alternate enemy COAs. For example, a supplementary BP may cover the flank of the primary BP or cover an alternate avenue of approach into the AO.

Subsequent

A subsequent BP is a preplanned position to which a unit expects to move during the course of the defensive battle. A unit may have a series of subsequent BPs, each of which may have its own set of alternate and supplementary positions. A

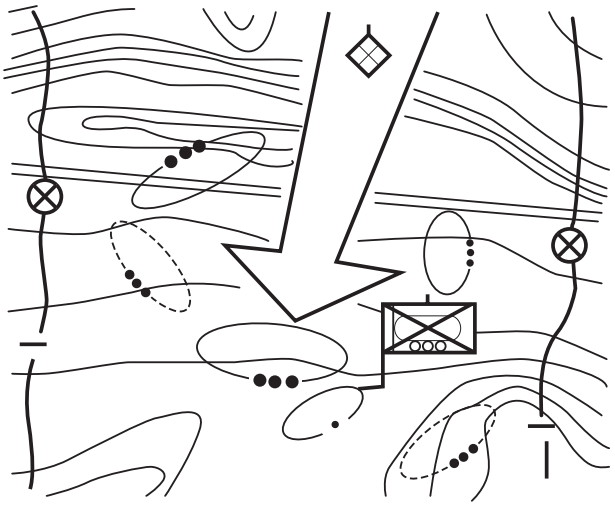


Figure 7-4. Battle Position Defense.

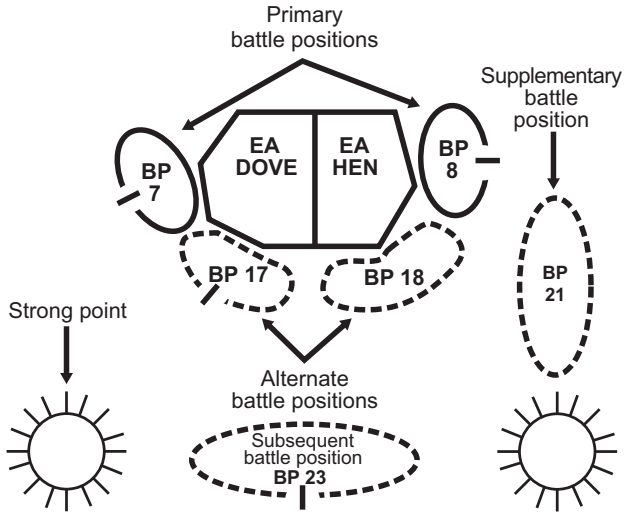


Figure 7-5. Battle Position Types.

company commander who executes a mobile type defense with a sector as his/her form of maneuver might choose to have a supporting effort use a series of subsequent BPs to set the conditions for a successful counterattack with the main effort.

Strong Point

A strong point is a fortified defensive position designed to deny the enemy certain terrain as well as the use of an avenue of approach. Unlike BPs, strong points are occupied for an extended period. Established on critical terrain, the strong point must be held for the defense to succeed. Strong points organize for all-around defense and should have sufficient supplies and ammunition to continue to fight even if surrounded or cut off from resupply.

Linear

The linear defensive method allows interlocking and overlapping observation and fields of fire across the company's front (see fig. 7-6). It is most normally associated with the area type of defense. The bulk of the company's combat power is well forward. Sufficient resources must be available to provide adequate combat power across the sector to detect and stop an attack. The company relies on fighting from well-prepared, mutually supporting positions. It uses a high volume of direct and indirect fires to stop the attacker. The main concern when fighting a linear defense is the lack of flexibility and the difficulty of both seizing the initiative and seeking out enemy weaknesses. When the enemy has a mobility advantage, a linear defense entails accepting extreme risk. Obstacles, indirect fires, and contingency plans are critical to this maneuver. The company depends upon surprise, well-prepared positions, and deadly accurate fires to defeat the enemy. The reserve is usually small, perhaps a squad.

Perimeter

Company commanders may choose a perimeter defensive method when conducting either area or mobile types of defenses. A perimeter defense focuses the energy of the defense in all directions (see fig. 7-7). The infantry company might be called upon to execute the perimeter defense under a variety of conditions, including the following:

- Providing FP.
- Conserving or building combat power to execute offensive or patrolling operations.

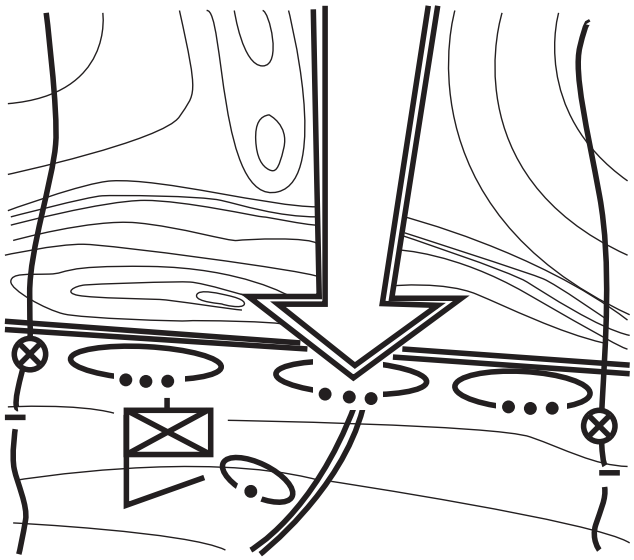


Figure 7-6. Linear Defense.

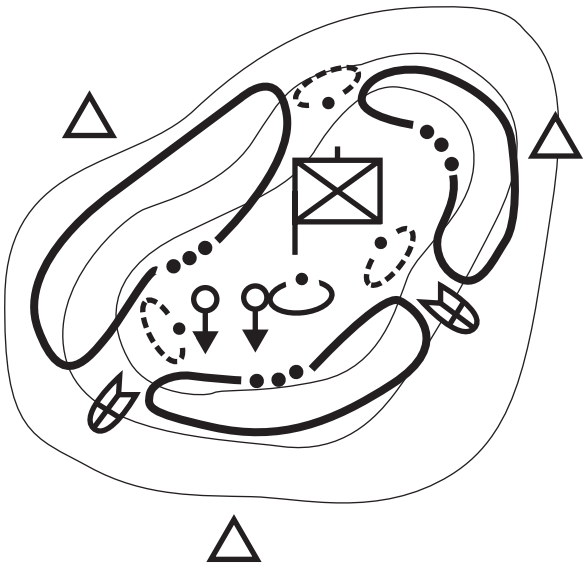


Figure 7-7. Perimeter Defense.

- Holding critical terrain in areas where the defense is not tied in with adjacent units.
- Having been bypassed and isolated by the enemy and must defend in place.
- Conducting occupation of an independent AA, bivouac, or reserve position.
- Beginning preparation of a strong point.
- Concentrating fires into two or more adjacent avenues of approach.

Reverse Slope

An alternative to defending on the forward slope of a hill or a ridge is to defend on a reverse slope (see fig. 7-8). In such a defensive method, the company deploys on terrain masked from enemy direct fire and ground observation by the crest of a hill. Although some units and weapons may emplace on the forward slope, the crest, or the counterslope (a forward slope of a hill to the rear of a reverse slope), most forces are on the reverse slope. When executing a reverse slope defense, the commander places special emphasis on—

- A fire support plan to prevent the enemy's occupation and use of the topographical crest.
- The proper organization of the forward slope to provide observation across the entire front and security to the main BPs.
- A counterattack plan that specifies measures necessary to clear the crest or regain it from the enemy.
- Fire support to destroy, disrupt, and attrit enemy forces on the forward slope.

Retrograde

The retrograde is a form of defensive method that involves organized movement away from the enemy. The enemy may force these operations or a commander may execute them voluntarily. In

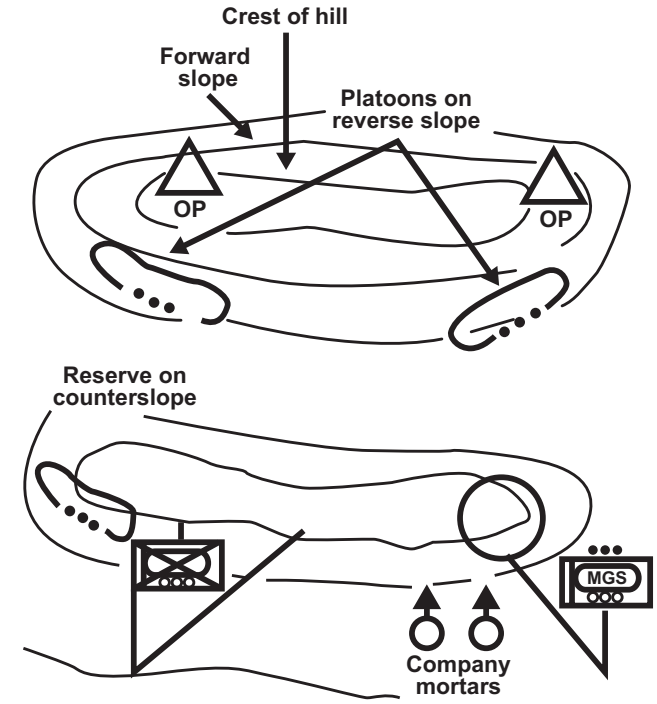


Figure 7-8. Reverse Slope Defense.

either case, the higher commander of the force executing the operation must approve the retrograde. Retrograde operations improve tactical situations, gain time, reposition forces or conform to other movements, create conditions for offensive action by drawing the enemy into an unfavorable situation, or prevent worse outcomes from developing. Companies normally conduct retrogrades as part of a larger force. There are three types of retrograde operations—delay, withdrawal, and retirement.

Delay

A delay is a retrograde in which a force under pressure trades space for time by slowing the enemy's momentum and inflicting maximum damage on the enemy without, in principle, decisive engagement. Delays gain time for friendly forces to establish defenses, cover defending or withdrawing units, protect friendly unit flanks, contribute to economy of force, draw the enemy into unfavorable positions, and determine the enemy main effort.

Withdrawal

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

Retirement

A retirement is an operation in which a force out of contact moves away from the enemy. Another unit between it and the enemy normally protects a retiring unit; however, the retiring unit must establish security. Often, a retirement immediately follows a withdrawal.

Sequence of the Defense

As part of a larger element, the infantry rifle company conducts defensive operations in a sequence of integrated and overlapping steps. Many of these steps, such as the use of a security force to counteract threat reconnaissance attempts, apply to any threat in any particular tactical environment across a range of military operations. The following paragraphs focus on the tactical considerations and procedures involved in each step. Though this discussion illustrates an attacking enemy that uses depth in its operations, there will be situations during which a company must defend against an enemy that does not have a doctrinal operational foundation. Such situations require more flexible plans that allow for more centralized combat power rather than spreading it throughout the company's AO. The infantry company may also conduct base camp or perimeter defense operations along with offensive and patrolling operations against terrorist, insurgent, or guerilla forces.

Reconnaissance, Security Operations, and Enemy Preparatory Fires

At the beginning of the defense, company commanders push a security force forward to immediately challenge the enemy's ability to determine or affect friendly actions. This security force normally works in conjunction with the security plan of the HHQ. Under the protection of this security force, company commanders conduct reconnaissance and begin developing the defensive scheme of maneuver. Most likely enemy actions during this period are aggressive reconnaissance, local attacks by enemy forward detachments and advance guard elements, enemy indirect fires to harass and interdict, and early attempts to breach or delay emplacement of obstacles. Security forces protect friendly MBA forces, counter the enemy's reconnaissance plan, and allow defensive preparations to continue undetected and unmolested by the enemy. The use of screen,

guard, or cover in a security force's mission statement determines the amount of resistance the security force will offer. Accordingly, the security force must receive the necessary resources to successfully accomplish its mission.

Security Force

The goal of the security force is FP for the main body, which is accomplished by providing early warning, destroying enemy reconnaissance units, and impeding and harassing enemy main body elements. The security force continues its mission until directed to displace. Battalion commanders also may use security forces in their deception efforts to give the illusion of strength in one area while positioning their true combat power in another. While conducting this type of security operation, the infantry company may have to prepare a defense within the MBA, such as creating BPs. Such preparations may result in time and resource management challenges for commanders and their subordinate leaders.

Rearward Passage of Lines

Since a security force is forward of the MBA, company commanders must make plans for a rearward passage of lines—whether the security force is a squad-sized element or a sister company within the battalion, or whether the company is the stationary or moving unit. Since the enemy has the initiative and will dictate the time and place of the attack, planning for the rearward passage of lines begins as the security force moves forward because the passage of lines could happen at any time. Planning and preparation includes liaison, route preparation and reconnaissance, passage point control measures, guides, and battle handover criteria.

Occupation and Preparation

During this step, the company begins to execute the defensive scheme of maneuver by reconnoitering and occupying its positions. This execution usually includes movement from tactical AAs to the actual defensive AO, is led by an advance guard that clears the defensive positions, begins the preliminary priority of work, and establishes security forward. Remaining forces begin to develop EAs, prepare BPs, rehearse routes, and take other steps appropriate to the choice of defensive method. Operational and tactical security is critical during the occupation to ensure the company can avoid detection and maintain combat power for the actual defense. Marines at all levels of the company must thoroughly understand their duties and responsibilities related to the occupation; they must be able to execute the occupation quickly and efficiently to maximize the time available for planning and preparing the defense.

Approach of the Enemy Main Attack

As this phase begins, the security force executes its mission by observing, reporting, and, if required, engaging the enemy with direct and indirect fires, EW, and CAS (deep fight). The goal is to use these actions along with disrupting obstacles to shape the battlefield, to slow the enemy's advance, and to disrupt the enemy's formations. As the enemy's main body echelon approaches the EA, the company may use supporting arms to further weaken it by attrition. As the enemy comes into close contact with friendly forces in the MBA, negating the use of some supporting arms, those assets shift their efforts to the enemy's second echelon forces. Friendly forces occupy their defensive positions before the enemy reaches direct fire range; they may shift positions in response to enemy actions or other tactical factors.

Enemy Assault

During an enemy assault, the enemy deploys to generate mass at a designated point, normally employing both assault and support forces. This action may leave them vulnerable to the combined effects of obstacles integrated with direct and indirect fires. The enemy may employ additional forces to attempt to fix friendly elements

and prevent their repositioning. Friendly counterattack forces may be committed against the enemy flank or rear, while other friendly forces may displace to alternate, supplementary, or subsequent positions in support of the commander's scheme of maneuver. All friendly forces should be prepared for the enemy to maximize employment of combat multipliers, such as engineers, to create vulnerabilities. If so capable, the enemy may also use artillery, CAS, and chemical weapons to set the conditions for the assault.

Counterattack

Like all attacks, counterattacks may be hasty or deliberate. They may be in response to unforeseen enemy actions or the appearance of sudden opportunities, or they may be preplanned as the decisive action that serves to defeat the enemy attack. Regardless, counterattacks are a type of attack and conducted accordingly to include planning, rehearsals, and well-understood commitment criteria (see chap. 6).

Consolidation and Reorganization

The company must secure its sector by repositioning forces, destroying remaining enemy elements, processing EPWs, and re-establishing obstacles. The company conducts all necessary CSS functions as it prepares to continue the defense. Even when enemy forces are not actively engaging it, the infantry company must maintain awareness of the tactical situation and local security at all times during consolidation and reorganization. The company then must prepare itself for possible follow-on missions.

Planning Considerations

The six warfighting functions provide a framework for addressing critical tactical considerations, reviewing plans, preparing for operations, and executing those operations. The synchronization and coordination of activities within each and among all are critical to the success of the infantry company. The following subparagraphs discuss planning considerations in the defense using selected warfighting functions.

Intelligence

The company commander's understanding of the environment and nature of the problem is an essential first step upon which all other planning hinges. When conducting the defense, company commanders must consider the following:

- Where is the enemy? How mobile is the enemy? What are the likely avenues of approach into the company's defensive sector?
- Where are the enemy's tanks, artillery, antitank systems, and other dangerous weapon systems?
- Where are the enemy's critical combat enablers, such as engineers, air defense, and bridging assets?
- How will I determine which COA the enemy has selected? What are the PIRs that will help determine the enemy's actions?
- Given the enemy's most likely COA and most dangerous COA, where is the best place to destroy them and what is the priority of destruction among their assets?

Maneuver

Maneuver is the foundation for the employment of forces on the battlefield. It is the use of movement in combination with fire (or fire potential) that is employed to achieve a position of advantage with respect to the enemy and to facilitate accomplishment of the mission. In the defense, effective weapons positioning is critical to the company's success. The goal of effective weapons positioning is to enable the company to mass fires at critical points on the battlefield and to enhance its survivability. To do this, company commanders must maximize the strengths of their weapon systems while minimizing the company's

exposure to enemy observation and fires. Planning factors include—

- The enemy's capability to prevent the company from disengaging, whether through superior combat power, greater mobility, or some combination of the two.
- The friendly capability to deliver direct and indirect fires to suppress the enemy and support the disengagement.
- Availability of cover, concealment, and obscuration effects to assist disengagement.
- Obstacle integration, including situational obstacles.
- Positioning of forces on terrain that provides an advantage to the disengaging elements, such as reverse slopes or natural obstacles.
- The time available to preplan and rehearse displacement routes, times, and sequences.
- The size of the friendly force that must be available to engage the enemy in support of the displacing unit.

Tactical considerations for weapons positioning include depth and dispersion, flank positions, and disengagement and displacement.

Dispersing positions laterally and in depth helps to protect the force from enemy observation and fires. In addition to maneuver space among positions, maneuver space should exist within each position to allow for in-depth placement of weapon systems and infantry elements. Engagement areas provide a method to mass the fires of different positions at critical points on the battlefield. Sectors of fire distribute and shift fires throughout the extent of an EA. The placement of positions supports the direct fire plan, sectors of fire, and EAs as appropriate.

Flank positions enable a defending force to fire on an attacking force moving parallel to the defender's forces. An effective flank position provides the defender with a larger and more vulnerable target while leaving the attacker unsure of the defense's location. Major considerations for successful employment of a flank position are the defenders' ability to accurately canalize the enemy into the proper area, secure the flanks of the defensive positions, and achieve surprise by remaining undetected. Effective fire control, fratricide avoidance, and BSG are critical to the success of flank positions.

Disengagement and displacement allow the company to retain flexibility and tactical agility in the defense. Disengagement refers to withdrawing from contact, such as when a security force achieves its mission, disengages from the enemy, and conducts a rearward passage of lines in the MBA. Displacement refers to maneuver internal to the defense, such as movement among alternate, supplementary, and subsequent positions. Both types of maneuver can be extremely difficult to execute in the face of a rapidly moving enemy force and, therefore, require substantial planning and rehearsal under varied conditions. Depending on the mission, the basic goals of disengagement and displacement are to enable the company to avoid being fixed or decisively engaged by the enemy. The overarching factor in the success of each is to maintain a mobility advantage over the enemy.

Disengagement criteria dictate to subordinate elements the circumstances in which they will displace to alternate, supplementary, or subsequent positions. Battlefield events and enemy action dictate the selection of criteria. For example, the enemy's selection of one of two possible avenues of approach may be the criteria to commit the reserve. Disengagement criteria are unique to each specific situation and are developed and planned accordingly. Disengagement criteria are never part of a unit's SOP.

In order to conduct a successful disengagement, the attacking enemy force cannot bring effective direct and indirect fires to bear on the friendly force. Direct fires from a defensive base of fire element, employed to suppress or disrupt the enemy, is the most effective way to facilitate disengagement. The company may receive base of

fire support from another element in the battalion; however, in most cases, the company establishes its own base of fire element. Having an internal base of fire requires careful sequencing of the displacement of company elements.

The company and subordinate platoons use covered and concealed routes when moving to alternate and supplementary positions. Regardless of the degree of protection the route itself affords, the company and platoons rehearse the movement prior to contact. Since rehearsals increase the speed at which units can conduct the move and provide an added measure of security, the commander must endeavor to allocate available time to rehearse movement in limited visibility and degraded conditions.

Fires

The defensive fires plan must support the defensive scheme of maneuver regardless of the operational environment in which a company finds itself. In the lethal fight, the fires plan supports the defense by reinforcing obstacle effects, delaying and disrupting the enemy, massing fires at the critical point, and other similar purposes. In order to generate these effects, considerable thought must accompany target selection and purpose. Such considerations as target placement and orientation, target engagement criteria, method of engagement, and weaponeering ensure that the right ordnance is delivered in the right manner at the right time, allowing the cumulative effect of various targets to achieve the purpose of the overall plan. Indirect fires serve a variety of purposes in the defense, including the following:

- Slow and disrupt enemy movement.
- Reinforce obstacle effects by preventing the enemy from executing breaching operations through destruction, disruption, or delay.
- Disrupt enemy SBF elements.
- Defeat attacks along infantry avenues of approach with the use of final protective fires.
- Disrupt the enemy to allow friendly elements to disengage or conduct counterattacks.
- Obscure observation to separate enemy echelons, to screen friendly displacement, or to silhouette enemy formations to facilitate direct fire engagement.
- When allowable, deliver scatterable mines to close lanes and gaps in obstacles, to disrupt or prevent enemy breaching operations, to disrupt enemy movement at chokepoints, or to separate or isolate enemy echelons.
- Provide illumination as necessary.
- Execute suppression of enemy air defenses.

In developing the fire plans, the company commander must evaluate the indirect fire systems available to provide support. Considerations include tactical capabilities, weapon ranges, and available munitions. These factors help the company commander and FST leader determine the best method for achieving the task and purpose of each target in the fire plan.

The company's fire support personnel not only contribute to development of the fires plan, but also are essential to its successful execution. Effective positioning is critical. The company commander and FST leader must select positions that provide fire support personnel with unobstructed observation of the AO. An FST vehicle should receive high priority for a position with enhanced survivability.

Force Protection

In addition to the other characteristics of FP, this warfighting function includes survivability, mobility, and countermobility. Regardless of whether friendly or enemy forces are mounted, engineering is an essential portion of the defense in order to increase the survivability of friendly forces while impeding the ability of the enemy to execute their plan of attack.

Survivability

Survivability positions are prepared to protect personnel and weapon systems. The longer friendly forces have time to prepare, the greater

the sophistication and effectiveness of these positions. Positions can be constructed and reinforced with overhead cover to provide infantry and CSWs with protection against shrapnel from air bursts. In addition, the company may use digging assets for ammunition caches at alternate, supplementary, or subsequent positions. All leaders must understand the survivability plan and priorities. Company commanders should designate one individual, such as the XO, to supervise and enforce the plan and priorities and to report and track completion status.

Mobility

Mobility operations in the defense ensure the ability to reposition forces, delay, and counterattack. Initial mobility efforts focus on the ability to resupply, reposition, and conduct rearward and forward passage of forces, material, and equipment. The initial efforts then transition to supporting the company reserve, local counterattacks, displacement plans, and route development for the execution of HHQ-required maneuver. For the company commander, most engineer assets work initially on survivability and countermobility requirements. At a set time or trigger, engineers disengage from obstacle and survivability construction and focus on mobility operations. The commander analyzes the scheme of maneuver, obstacle plan, and terrain to determine mobility requirements. Critical considerations may include—

- Lanes and gaps in the obstacle plan.
- Lane closure plan and subunit responsibility.
- Route reconnaissance, improvement, and maintenance.

Countermobility

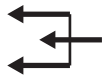
For the company commander, countermobility addresses two aspects: obstacles that protect friendly forces in defensive positions and obstacles integrated into a larger plan that seek to influence enemy actions. Intent and desired effect are critical first steps in obstacle placement. In order for both types to produce their intended effects, company commanders integrate them into both direct and indirect fire plans. Obstacles cannot meet a commander's intent unless covered by some means of friendly observation and fire. Obstacle intent includes the target and desired effect (clear task and purpose) and the relative location of each obstacle within a larger group of obstacles (see table 7-1). For example, the amount and type of engineering effort required to disrupt enemy dismounted infantry versus enemy armored vehicles is significantly different. Obstacle purpose influences many aspects of the operation, from selecting and designing obstacle sites to conducting the defense. Planners must also consider time and resources available in developing the countermobility plan. Company commanders do not designate obstacle groups, though they may be the beneficiary of such a decision. Decisions on requirement, placement, and purpose of obstacle groups and effects occur at the battalion level. It is normally the mission of the company commander to conduct the execution of these decisions, such as siting the individual obstacles of an obstacle group with an EA.

Tactical Obstacles. The battalion assigns obstacle groups. Battalion commanders tell company commanders and engineers what they want to do to the enemy, and then resource both groups accordingly. Scatterable minefield systems and submunitions are the preferred means of constructing tactical obstacles since their self- and command-destruct capabilities offer flexibility, aid in the transition from the offense to the defense, and are less resource and time intensive to construct. When ROE or other considerations rule out the use of this asset, battalions normally request engineer and resource augmentation for

the emplacement of conventional mines and constructed obstacles. Obstacle intent includes the following elements:

- Target: the enemy force, by such characteristics as size, type, echelon, and avenues of approach, that the commander wants to affect with fires and tactical obstacles.

Table 7-1. Types of Obstacles and Effects.

Obstacle Effect	Purpose	Fires and Obstacles Must:	Obstacle Characteristics
 DISRUPT	Breakup enemy formations Interrupt the enemy's time table and C2 Cause premature commitment of breach assets Cause the enemy to piecemeal the attack	Cause the enemy to deploy early Slow part of the formation while allowing part to advance unimpeded	Do not require extensive resources Difficult to detect at long range
 FIX	Slow an attacker within an area so he/she can be destroyed Generate the time necessary for the friendly force to disengage	Cause the enemy to deploy into attack formation before encountering the obstacles Allow the enemy to advance slowly in an EA or AO Make the enemy fight in multiple directions once he/she is in the EA or AO	Arrayed in depth Span the entire width of the avenue of approach Must not make the terrain appear impenetrable
 TURN	Force the enemy to move in the direction desired by the friendly commander The arrow points in the direction the obstacle should force the enemy to turn	Prevent the enemy from bypassing or breaching the obstacle belt Maintain pressure on the enemy force throughout the turn Mass direct and indirect fires at the anchor point of the turn	Tie into impassable terrain at the anchor point Consist of obstacles in depth Provide a subtle orientation relative to the enemy's approach
 BLOCK	Stop an attacker along a specific avenue of approach Prevent an attacker from passing through an AO or EA Stop the enemy from using an avenue of approach and force the enemy to use another avenue of approach	Prevent the enemy from bypassing or penetrating through the belt Stop the enemy's advance Destroy all enemy breach efforts	Must tie into impassable terrain Consist of complex obstacles Defeat the enemy's mounted and dismounted breaching efforts

- Obstacle effect: how the commander wants to affect enemy maneuver, such as through block, turn, fix, or disrupt actions.
- Effect location: where the commander wants the effect against the targeted enemy force.

EXAMPLE: A battalion commander might direct, "Deny the enemy access to our flank by turning the northern mechanized infantry battalion into our engagement area. Allow companies B and C to mass their fires to destroy the enemy."

Protective Obstacles. Protective obstacles are local works, such as tactical wire, tanglefoot, or modular barriers, that protect and increase the effectiveness of the immediate defenses of the company by disrupting, blocking, or canalizing an attacker closing on the company's positions. Infantry companies generally plan and construct their own protective obstacles. For best effect, companies tie protective obstacles into existing or tactical reinforcing obstacles. The company can use

mines and wire or it might receive additional materiel, such as man-portable submunitions systems. Protective obstacle planning considers time and resources available and the overall priority of work. The company keeps detailed records of protective obstacle emplacement for reporting to HHQ, for assistance in RIPs, and to aid in safe and effective obstacle recovery. Chapter 11 discusses more references on planning guidance for protective obstacle emplacement.

In a manner similar to tactical obstacles, company commanders position protective obstacles to achieve obstacle intent. Company commanders determine if the enemy threat to any particular defensive position will be mounted, dismounted, or both and they plan for mines, mine types, and wire accordingly. Company commanders also consider enemy weapon systems and their possible effects on friendly positions. For example, in addition to targeting the enemy with supporting fires, a company may choose to disrupt or delay an enemy's ability to occupy a possible SBF position using wire and mines.

The result of the enemy threat analysis drives obstacle effect and location. Despite the local, protective nature of these obstacles, they still serve to execute doctrinal effects, such as block or disrupt. A HESCO [Hercules Engineering Solutions Consortium] barrier may block possible egress into a company FOB; whereas, mines and wire may turn the enemy away from a BP's exposed flank and back into its fires. Generally, protective obstacles are usually located beyond hand grenade distance and may extend out many hundreds of meters to tie into tactical obstacles and existing restricted terrain.

Obstacle Lanes. The company might be responsible for actions related to lanes through obstacles. These duties can include marking lanes in an obstacle, reporting locations of the start and end points of each lane, operating contact points, providing guides for elements passing through the obstacle, and closing the lane.

Situational Obstacle. A situational obstacle is planned and possibly prepared before an operation, but is executed only if specific criteria are met. It gives the commander the flexibility to emplace tactical obstacles based on battlefield development. Due to their "on order" nature, situational obstacles usually depend upon the use of such weapons as submunitions and scatterable minefields, though scenarios in which the use of demolitions to drop trees or rocks along canalized routes would also serve as examples of situational obstacles. Due to many variables beyond a commander's control, defensive schemes of maneuver should not rely upon the use of situational obstacles for their success.

Logistics

Logistics often drives the "art of the possible" within any operation plan. Prepositioning caches and the positioning of company trains are logistic considerations in the defense that company commanders should make in addition to those normal sustainment functions that apply to all operations.

If the defensive scheme of maneuver is likely to require more ammunition than is available and the ability to resupply while conducting the defense is suspect, then companies preposition ammunition in caches. The caches, positioned to support the execution of the defense (such as at alternate and/or subsequent positions), are dug in for protection and guarded.

The company's trains normally operate one terrain feature to the rear of the company in a covered and concealed position. They are close enough to the company to provide responsive support, but not exposed to risk of destruction. The company trains conduct evacuation of personnel, weapons, and equipment and conduct resupply as required. The company gunnery sergeant or XO positions the trains and supervises sustainment operations. The company commander ensures all elements know locations and routes to the company trains.

Engagement Area Development

The EA is where the company commander intends to contain and finish the enemy force using the massed fires of all available weapons. Depending on the size of the enemy force, company commanders may reasonably expect to destroy the entire enemy force in their EA. If the likely size of the enemy force is greater than the company can reasonably expect to finish, then the company must either receive additional resources or the company commanders must construct a defensive scheme of maneuver that allows for attrition of the enemy prior to their arrival in the EA. The success of finishing effects depends on how effectively the commander can integrate the obstacle plan, indirect fire plan, direct fire plan, and the terrain within the EA to achieve the company's tactical purpose. Beginning with evaluation of METT-T and continuing throughout the IPB process, EA development follows these steps, which are amplified in the subsequent paragraphs:

- Identify all likely enemy avenues of approach.
- Determine likely enemy schemes of maneuver.
- Determine where to destroy the enemy.
- Emplace weapon systems.
- Plan and integrate obstacles.
- Plan and integrate indirect fires (organic/non-organic).
- Rehearse execution of operation in the EA.

Identify Likely Enemy Avenues of Approach

The following procedures and considerations apply when identifying the enemy's likely avenues of approach (see fig. 7-9)—

- *Conduct initial reconnaissance*. If possible, this should be done from the enemy's perspective along each avenue of approach into the sector or EA.
- *Identify key and decisive terrain*. This includes locations that afford positions of advantage over

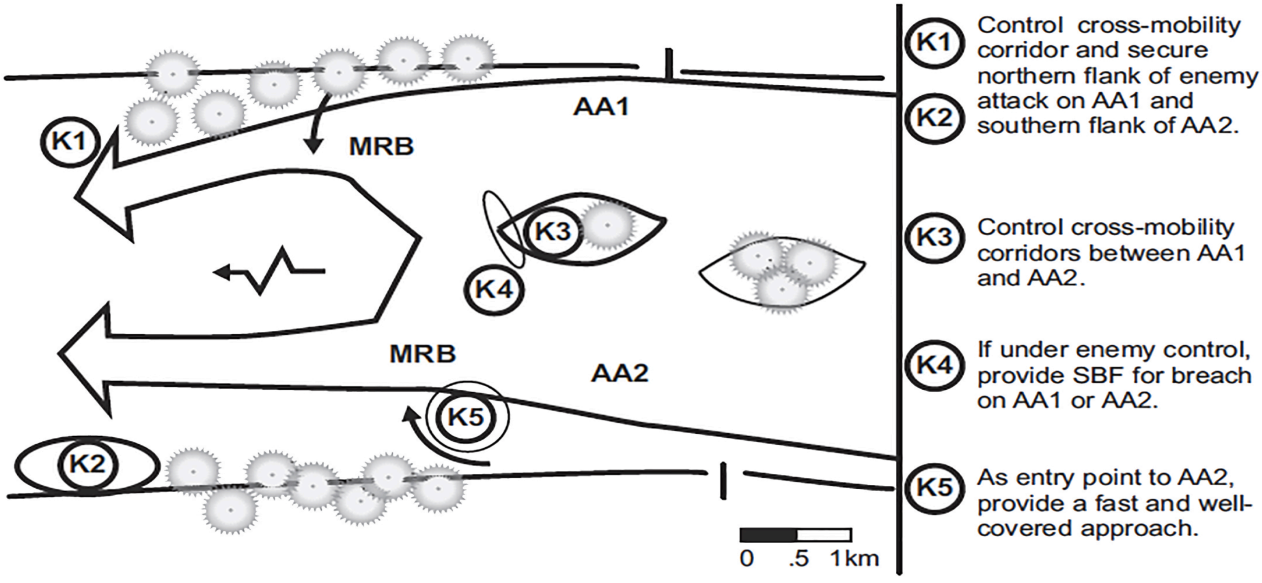


Figure 7-9. Identify Likely Enemy Avenues of Approach.

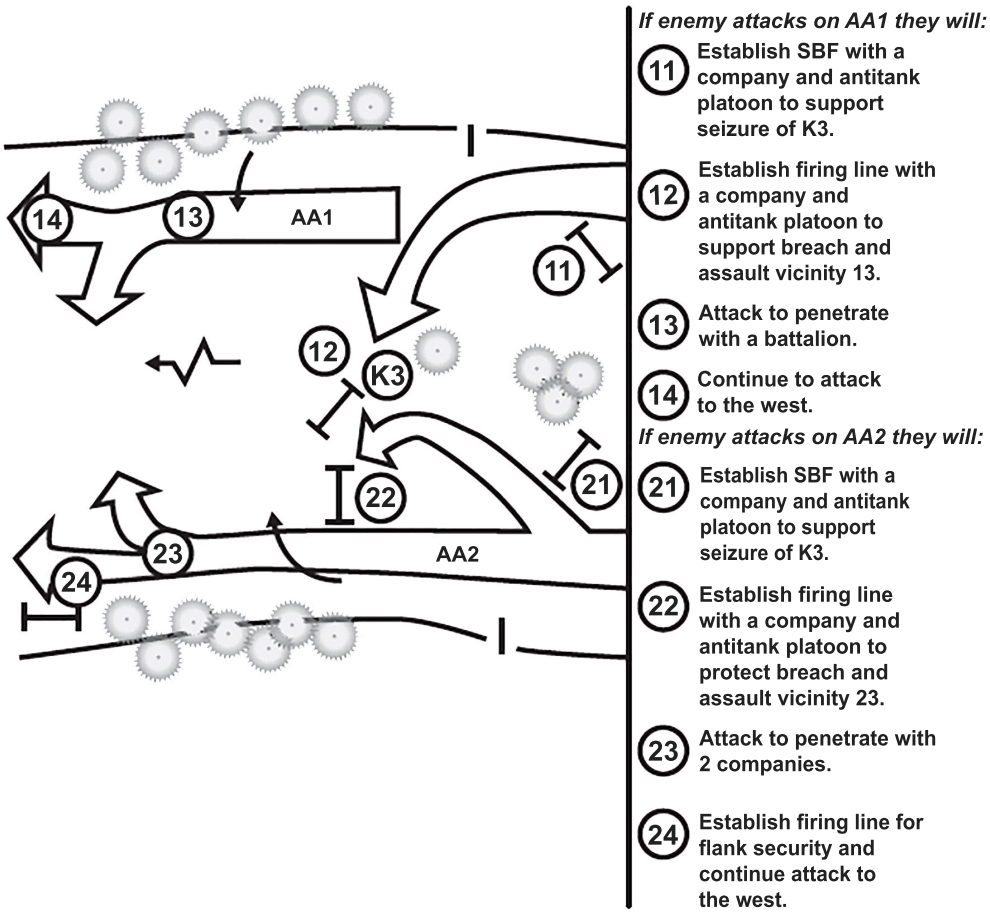
the enemy; positions the enemy may use to establish overwatch, base of fire, and OPs in support of their attack; and natural obstacles and chokepoints that restrict forward movement.

- *Determine cover and concealment*. Determine which avenues of approach will provide cover and concealment for the enemy while allowing them to maintain their tempo. Determine what terrain the enemy is likely to use to support each avenue.
- *Evaluate lateral routes*. Evaluate lateral routes adjoining each avenue of approach that the enemy may use to enhance their flexibility.

Determine Enemy Scheme of Maneuver

When continuing IPB within COA development to determine relative combat power analysis and to develop most likely and most dangerous ECOAs (see fig. 7-10), the company commander must—

- Determine how the enemy will structure the attack in terms of speed, formations, sequencing, and placement of combat multipliers, such as engineering assets.
- Determine how the enemy will use its reconnaissance assets to include infiltration efforts and OPs for supporting arms.



Legend:	
AA - avenue of approach	K - key (terrain)

Figure 7-10. Determine Enemy Scheme of Maneuver.

- Determine where and when the enemy will change formations and establish SBF positions.
- Determine where, when, and how the enemy will conduct their assault and breaching operations.
- Determine where and when the enemy will commit follow-on forces and reserves.
- Determine likely enemy reactions to friendly counteractions.

Determine Where to Destroy the Enemy

After determining the enemy's most likely COA, company commanders determine the place where the company's combat power has the greatest opportunity to finish the enemy (see fig. 7-11) and accomplish the following:

- Identify and mark where the company will mass its fires on the enemy.
- Identify target reference points (TRPs) that match the place where the company seeks to create the desired effect through the massing of fires.
- Identify secondary TRPs to allow the company to rapidly mass fires elsewhere in the EA should the enemy seek to maneuver in a different manner than expected.
- Record the name and location of all TRPs.
- Determine how many weapon systems must focus fires on each TRP to generate the desired effects.
- Determine which platoons will mass fires on each TRP.
- Develop the direct fire planning and control measures necessary to focus fires at each TRP.

Emplace Weapon System

After determining where to destroy the enemy, planners address weapon system placement to enhance weapon strengths while minimizing weaknesses. Long-range antitank missile systems might seek positions at a distance from and on the enemy's flank; whereas, tank attachments may focus their fires on the enemy's front. Friendly positions are built around the placement of weapons. The following steps apply in selecting and

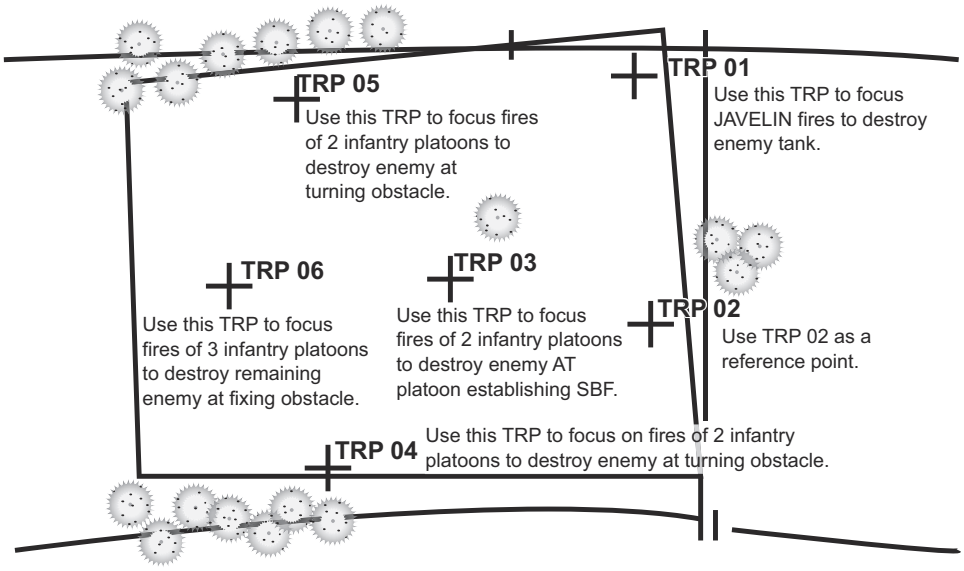


Figure 7-11. Determine Where to Destroy the Enemy.

improving BPs and emplacing CSW systems and infantry positions (see fig. 7-12):

- Select tentative weapon positions with regard to the enemy's most likely COA, the intent of the company commander to destroy the enemy, and the terrain available.
- Select subunit BPs to support weapon emplacement.
- Conduct a leader's reconnaissance of the tentative BPs.
- Traverse the EA to confirm that selected positions are tactically advantageous.
- Confirm and mark the selected BPs.
- Conduct BSG analysis to ensure that BPs and their fires do not conflict with those of adjacent units and that positions are mutually supportive.
- Select primary, alternate, supplementary, and subsequent fighting positions to achieve the desired effect for each TRP.
- Ensure that platoon commanders, platoon sergeants, and squad leaders position weapon systems so that the required number of weapons and platoons effectively covers each TRP.

When creating the direct fire plan, company commanders consider the following questions:

- Which enemy weapon and warfighting systems should be engaged first?
- How will the company initiate fires?
- Which company weapon systems will fire first?
- What are the target priorities for the various company weapon systems?

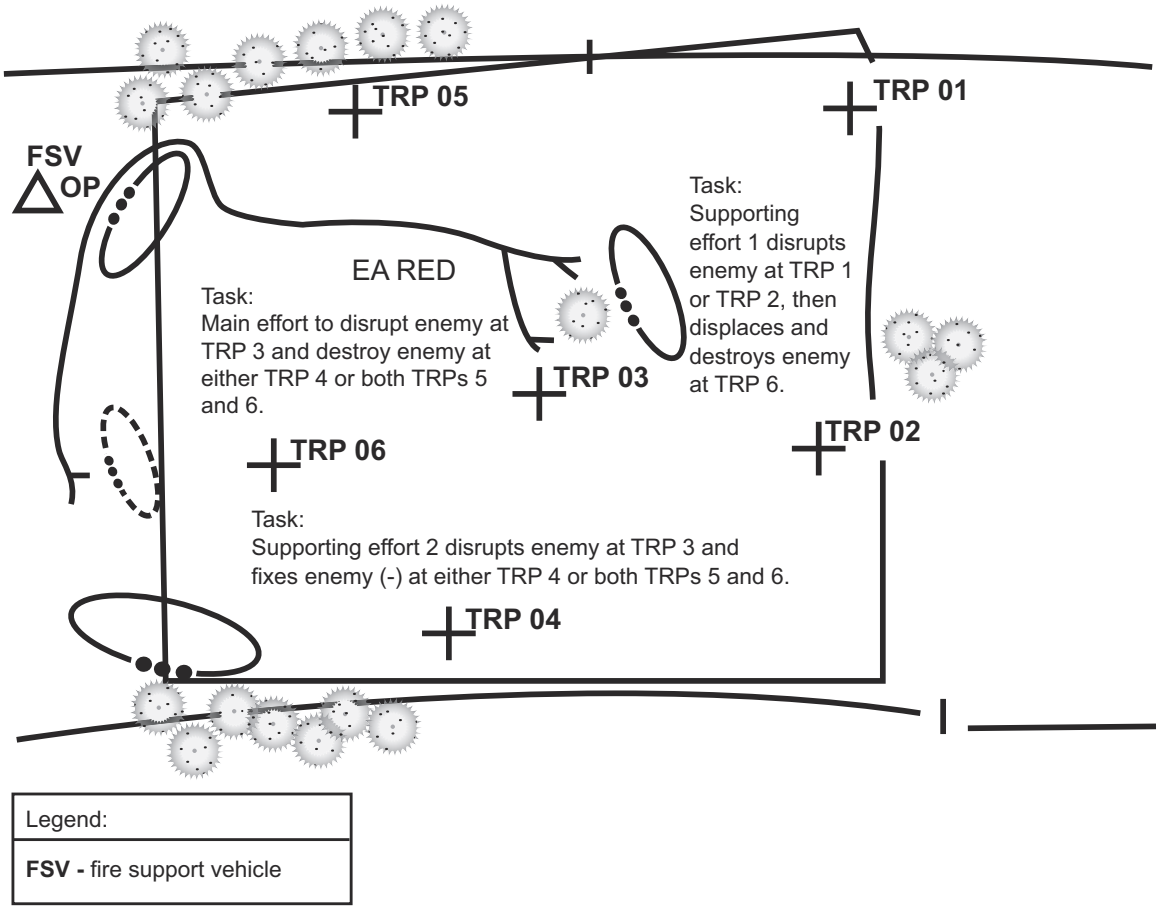
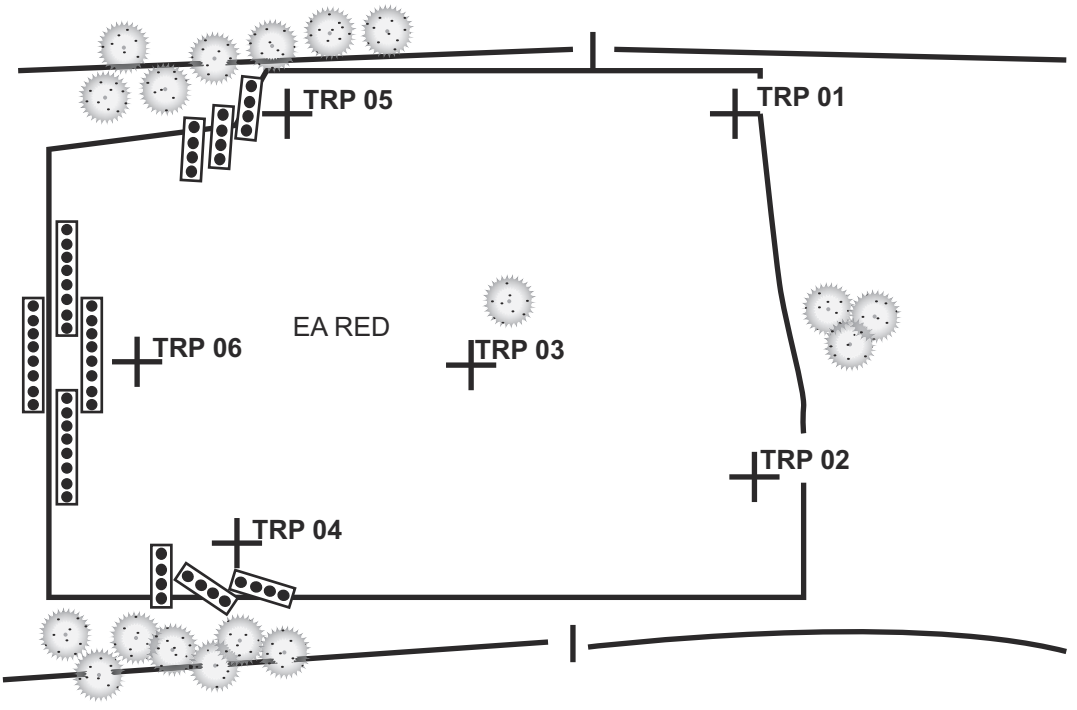


Figure 7-12.Emplace Weapon Systems.

- What is the desired effect of fires from each platoon (platoon missions)?
- How will the company distribute the fires of platoons to engage the enemy laterally and in depth?
- On what will platoons focus their fires? How will platoons know where to engage? Will they be able to see and understand the control measures?
- How will the company mass fires to deal with multiple enemy threats and achieve the desired volume of fire?
- How will company commanders position themselves to effectively control fires?
- How will the company shift fires when necessary? How will the company focus fires on new targets?
- How will the company address likely enemy reactions to company fires?
- How will the company administer weapons control statuses?
- Does the plan avoid overkill?
- Is each company weapon system employed in its best role?
- Are targets engaged when there is a high probability of hit?

Plan and Integrate Obstacles

The goal of obstacle planning within the EA is to support the commander's intent through optimum obstacle emplacement and integration with fires at the point when the company commander seeks to finish the enemy (see fig. 7-13). Obstacles must allow the enemy into the EA and then contain them there. The focus at the battalion level and below is the integration of fires and obstacles. At the battalion level, obstacle planning is very directive and detailed and it centers on



Legend:	
FSV - fire support vehicle	**MGS** - machine gun system

Figure 7-13. Plan and Integrate Obstacles.

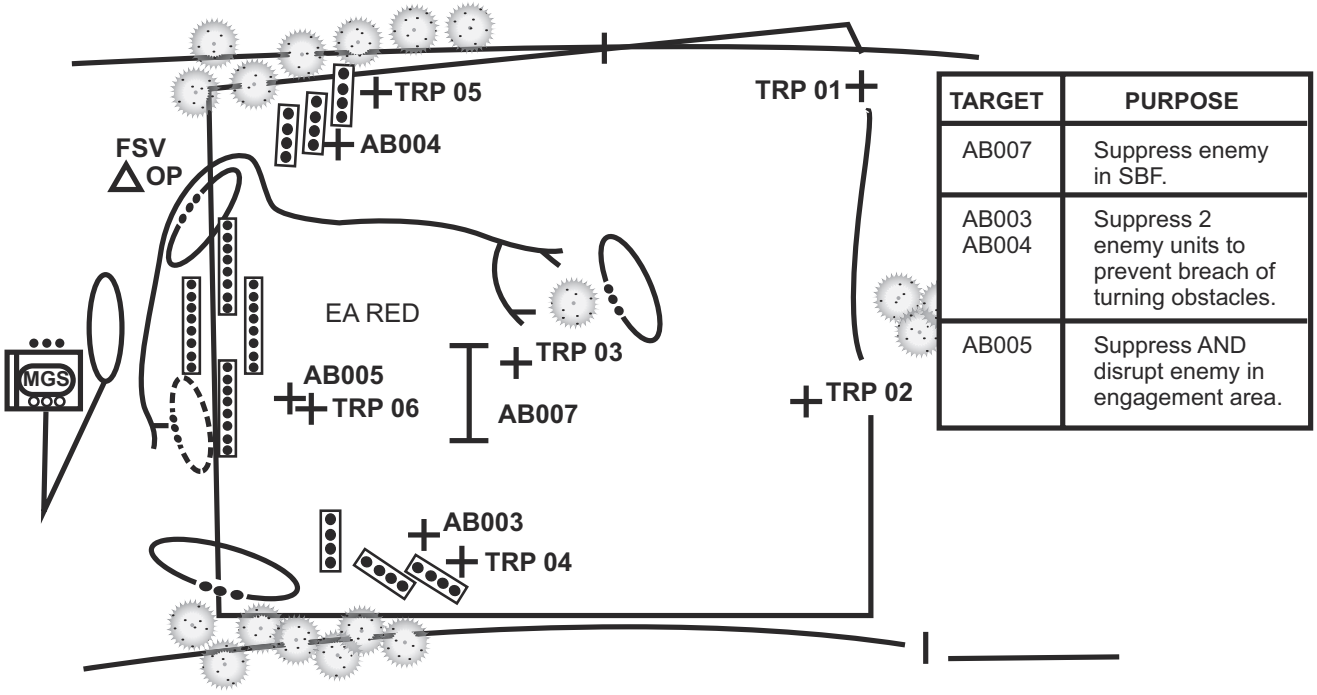
obstacle groups. At the company level, obstacle planning deals with the actual sighting and emplacement of individual obstacles within the groups. The following steps apply in planning and integrating obstacles in the company defense:

- Site and mark individual obstacle locations in coordination with the engineers.
- Provide security for the engineering effort, which first marks the trace of the obstacles and then begins emplacement at points closest to the enemy first.
- Verify that the marked trace of the obstacles meets the commander's intent and is covered by fire.
- Create and mark fire control measures, such as TRPs, in the EA.
- Collocate the engineer squad/platoon leader and company commander in the defensive positions covering the obstacle.
- Refine direct and indirect fire control measures.
- Identify lanes and gaps.
- Report obstacle locations and gaps to HHQ.

Plan and Integrate Indirect Fires

While fires planning is integral to development of the defensive scheme of maneuver, fires planning is proofed and refined within EA development (see fig. 7-14). The following steps apply in planning and integrating indirect fires:

- Determine the purpose of fires throughout the battle, from initial actions in the security area to destruction of the enemy at the point of decision in the EA.
- Develop EFSTs that support the purpose of fires.
- Determine the places to accomplish the EFSTs.
- Establish the observation plan with observer redundancy for each target.
- Establish triggers and assessment criteria.



TARGET	PURPOSE
AB007	Suppress enemy in SBF.
AB003 AB004	Suppress 2 enemy units to prevent breach of turning obstacles.
AB005	Suppress AND disrupt enemy in engagement area.

Legend:	
FSV - fire support vehicle	**MGS** - machine gun system

Figure 7-14. Plan and Integrate Indirect Fires.

- Obtain accurate target location and conduct refinement by fire if possible.
- Plan final protective fires.
- Establish fire support coordination measures, such as RFAs and no-fire areas.

Rehearse Execution of Operation in Engagement Area

The purpose of an execution rehearsal is to ensure all company personnel understand the plan and all elements are prepared to cover their assigned areas with direct and indirect fires. Although the company commander has several options, the most common and most effective type of rehearsal is to replicate the enemy force. One technique for the rehearsal in the defense is to have the company trains, under the control of the XO, move through the EA as the enemy force allowing the commander and subordinate leaders to rehearse the battle in "real time." The rehearsal should cover the following actions:

- Rearward passage of security forces (as required).
- Closure of lanes (as required).
- Movement from hide positions to the BP.
- Use of fire commands, triggers, and maximum engagement lines to initiate direct and indirect fires.
- Shifting of fires to refocus and redistribute fire effects.
- Triggers for emplacement of scatterable mine systems.
- Preparation and transmission of critical reports.
- Assessment of the effects of enemy weapon systems.
- Displacement to alternate, supplementary, or subsequent BPs.
- Cross-leveling or resupply of ammunition.
- Evacuation of casualties.

Adjacent Unit Coordination

The ultimate goal of adjacent unit coordination is to ensure unity of effort across the companies so that the battalion accomplishes its mission. Items that adjacent units must coordinate include the following:

- Unit positions, including locations of C2 nodes.
- Locations of OPs and patrols.
- Overlapping fires to ensure that direct fire responsibility is clearly defined.
- TRPs.
- Alternate, supplementary, and subsequent BPs.
- Indirect fire information.
- Location and type of obstacles.
- Air defense considerations, if applicable.
- Routes to be used during occupation and repositioning.
- Sustainment considerations.

Mounted Operations

Chapter 6 discussed considerations, planning, and employment of Marine infantry with various types of tracked and wheeled vehicles. Here, the focus is narrowed to address only the unique considerations when conducting mounted operations in the defense. Regardless of the vehicles used, the current family of Marine Corps vehicles in which an infantry company may be mounted are not infantry fighting vehicles and should not be employed as such. They lack the armor protection, stabilized weapons station, low silhouette, and means for the infantry to fight from the vehicle without exposing themselves to direct fire.

When mounted infantry plan the defense, company commanders seek the best way to maintain the inherent advantage of vehicle mobility, the best way to employ vehicle mounted weapon systems, and the best way to maintain the survivability of their vehicles. Just as in the offense, vehicles and infantry work together. Infantry accompanies vehicles conducting offensive operations as part of the defense and infantry occupies defensive positions to both receive the protection of and provide protection to vehicles.

Company commanders strive to maintain one of the primary advantages of vehicles on the

battlefield—mobility. Even within strong point or BP defenses, providing a vehicle with a hide position and two or three firing positions allows that vehicle to respond flexibly throughout the defensive position in a manner that both sup-ports the company commander and enhances vehicle survivability. In a similar manner, units, such as a tank platoon, can conduct multiple missions within a defense based upon their mobility. Tanks and antiarmor vehicles could assist the security force forward, conduct a rearward passage of lines and occupy positions to support an EA, and conduct multiple displacements within the company's battlespace as needed. While there are always instances that could require vehicles to occupy fixed positions in a defense, these should constitute exceptions vice the rule.

With few exceptions, vehicle mounted weapon systems represent significant combat power additions to what is normally available to the infantry company. Depending on the enemy threat and the defensive scheme of maneuver, company commanders seek to position these weapon systems in such a manner that they cover suspected enemy avenues of approach, are able to deliver decisive effects in an EA, and play to the strengths of that particular weapon system (such as flank shots for antiarmor weapon systems).

No vehicle is invincible. In order to use the flexibility, mobility, and lethality offered by vehicle mounted firepower, vehicles and their crews must remain healthy. Company commanders maintain vehicle survivability by assigning reasonable missions, enabling mobility within the defense to allow vehicle displacement, creating survivable positions from which vehicles and their crews fight, and ensuring adequate dismounted infantry support.

Planning Considerations

When planning a mounted infantry defense, company commanders consider the same organization issues that face them during the offense. Company commanders may receive vehicles that they need to operate and maintain; they may receive units in DS, such as a truck or an AAV platoon, with their own organic personnel structure that requires integration into the company; or they may receive orders to cross-attach one of their platoons for an armor platoon. Some additional considerations include the following:

- Increased use of tactical control measures and enhanced planning and coordination to enable decentralized control over greater distances.
- Reserve decisions to include establishment, combat power, employment triggers, and reconstitution planning.
- Terrain and weather limitations, which affect vehicle operations and task organization of subunits for assigned defensive tasks.
- Defensive task priorities for limited amounts of dismounted infantry to include retention of key terrain, protection of vehicles in restricted terrain, personnel for defensive labor tasks, and the counterreconnaissance effort.
- Plans for and rehearsals of communications between dismounted infantry and vehicles and signaling methods in the defense to include such items as target designation and displacement.
- Conduct of logistical functions and movement, to include engineering, within a company's defensive battlespace about which the enemy is actively seeking information and the opportunity to employ indirect fires.
- Establishment of plans and triggers for rearward passage of lines to include vehicle mishap and recovery criteria.

Task Organization

As in the offense, there are some general principles that company commanders consider when using the infantry and vehicle team in the defense. Regardless of the manner in which the infantry company is mounted, company commanders work to create company teams that are flexible, self-sufficient, and maintain the unity of command.

Company commanders ensure that their company and platoons maintain similar degrees of mobility and that their task organization supports the defensive scheme of maneuver. In the defense, the less movement the enemy can observe, the better the chances of maintaining surprise. Company commanders seek to answer the greater logistical demand of their vehicles in the following ways:

- By providing self-sufficiency through a combination of prepositioning and assignment of logistical assets, such as refuelers, to subunits.
- By masking movement by route and time.
- By conducting resupply during times of limited visibility.

As in the offense, mounted forces may conduct defensive schemes of maneuver that require subunits to operate at distances and at tempos that preclude centralized control. Company commanders assign and equip subordinate units accordingly. Antiarmor and tank forces, which operate in the security area to attrit an advancing enemy before they reach the MBA, may work for one platoon commander who possesses an FO and JTAC to prosecute the fire plan. This unity of command provides the company commander with the ability to affect the fight while allowing the units in the security area the flexibility needed to accomplish their missions.

Combat Support

Company commanders will most likely receive many of the same combat assets when conducting the defense with mounted infantry as they do when conducting offensive operations, such as assault amphibian platoon, CAAT, supporting arms, security, and combat engineers.

Assault Amphibian Platoon

Infantry company commanders remain aware that assault amphibian platoons normally work for the company commander in a DS relationship and that they possess their own internal organization that must be integrated into the company. In the defense, AAVs offer the company greatly increased HMG firepower and offer significant increases in communication flexibility by using the multiple radios on each vehicle. Due to the light armor of the AAV and the lack of a stabilized gun system, company commanders weigh AAV employment and survivability against the priority of work in the defense. Employment of AAV firepower requires static firing positions, which may need to be dug before firing positions of more survivable armor, such as tanks. If using AAVs in conjunction with defensive maneuver, such as a counterattack or moving infantry in a sector defense, the considerations addressed in chapter 6 apply.

Combined Antiarmor Team

Mounted antiarmor assets, such as antiarmor and HMGs, often arrive as part of a CAAT that marries ATGM systems with mounted HMGs. As part of CAATs, vehicle mounted TOW or Javelin missiles greatly assist the mobile defense and offer company commanders further flexibility since their long ranges help to maintain surprise. Like other armor-destroying systems, such as the tank, mounted ATGM systems can fight throughout the defensive battlefield to accomplish multiple missions and tactical tasks. Survivability of both the weapons and the light armored vehicles that mount them remains a concern. Though these systems are ideal for moving around the battlefield, dismounting or placing these systems in defensive positions requires the same attention to survivability and the priority of work as applies to AAVs. In EAs, company commanders integrate the effects of these weapon systems with the rest of the antiarmor assets available to them.

The HMGs provide the CAAT increased flexibility to engage different types of targets while providing security for the ATGMs. With ranges of both HMGs and ATGMs in excess of 1,500 meters, CAATs may attrit enemy forces in the security area, create effects in EAs, cover displacement, and screen flanks.

Supporting Arms

Supporting arms are critical to such functions as destroying the enemy where designated by the company commander, delaying and disrupting the enemy, screening friendly displacements, and providing aerial reconnaissance and observation. When planning the defensive fight, the company commander ensures that qualified air controllers, artillery controllers, and/or UA systems and similar assets are positioned to conduct the company's fire plan.

While chapter 5 addresses many defensive artillery fires techniques, company commanders must properly plan and phase defensive fires against a mobile and moving enemy. Since artillery cannot "chase" a moving target, the company commander ensures that proper triggers are a part of the fires plan and that the FST remains disciplined in staying ahead of the enemy.

In the defense, fixed- and rotary-wing aircraft CAS remain important combat multipliers for the company commander. As in the offense, vehicle marking and friendly unit location information is critical for combat identification by friendly forces to reduce potential for fratricide. The company FST, to include attached FACs, travel forward in the formation to gain and maintain the greatest situational awareness of the company fire requirements and maneuver locations.

Security

The requirement for an aggressive security effort forward is the same for mounted or dismounted operations—just the methods differ. Depending on the terrain and enemy threat, the security fight may consist of mounted operations, dismounted operations, or a combination of both. The company commander ensures that the leadership designated to conduct security operations possesses the maturity and judgment to operate alone. The company commander ensures that the security effort can sustain itself, control the fires of supporting arms, and support the overall defensive scheme of maneuver. Company commanders do not limit themselves to organic ground reconnaissance assets, but seek additional sensor support and integrate into HHQ security efforts as required.

Combat Engineers

In mounted operations, engineers perform their traditional mobility, countermobility, and survival roles through obstacle emplacement, lane closing, route improvement, and survivability measures. Determining the engineer priority of work in the defense begins with a decision whether the company will conduct a hasty or deliberate defense; however, regardless of the type of defense, the company commander will face a time constraint that will dictate prioritization of the engineer effort. In the defense, general guidance is not enough.

> **EXAMPLE**: The company commander cannot merely dictate *that* entrenchment will occur before obstacle emplacement, he/she must also ask more specific questions: Will all entrenchment occur before obstacle emplacement, to include individual fighting positions? If only vehicle entrenchments, which types first? Have the vehicle positions been marked for entrenchment? Who is guiding the engineers?

While some mechanics of execution can rely on company SOP (of which engineers must be made aware), most guidance must be passed in some detail by the company commander and specific leadership, such as the XO.

Defensive Planning Considerations for Forward Operating Bases and Combat Outposts

When conducting stability operations, US forces operate from bases within the HN. All bases must be secure and defendable. Depending on the requirements of an operation, the presence of an enemy threat, and the nature of that threat, base

security may range from basic FP measures to the ability to withstand direct assault and indirect fire. The size of any given base varies in accordance with the size of the unit occupying the base and the mission of the units using the base. All types of bases require clear command relationships. In counterinsurgencies, FOBs and combat outposts (COPs) are two types of bases.

General Base Defense

Regardless of the ongoing operation, the type of base, or the location of a base, the characteristics of the defense do not change. The best technique for base defense is the perimeter defense.

Terrain

Proper evaluation and use of the terrain in the area is essential to hold down the number of additional forces required for base defense. Key terrain factors to consider include the following:

- Use of the terrain's natural defensive characteristics.
- Use of artificial obstacles to enhance the terrain's natural defensive characteristics.
- Control of all roads and waterways leading into the base.
- Control of military LOCs and civilian commerce routes.
- Control of land areas surrounding the base to a range beyond that of enemy mortars and rockets.

Host Nation Security Forces

The base commander should consider the integration of HNSF in the overall base defense effort. Particular emphasis is on integration of host country forces in patrolling and populace control activities. Both host and third country forces provide local security for their own units. To ensure maximum benefit, efficiency, and avoidance of unnecessary redundancy, all such local plans should be coordinated and integrated with the base master defense plan.

Communication

Control is the key to a successful base defense. To achieve the necessary control, a communication capability must be established between the base defense operations center and sector commanders and between sector commanders and their bunkers, towers, and reserve. Bunkers or towers within each section can communicate laterally within the sector: flank bunkers of one sector can communicate with flank bunkers of adjacent sectors.

Sustainment

Depending on the mission and status of the battalion, the type of transport available, the weather, and the terrain, resupply may be by air, water, or ground. The availability of LZs, drop zones, beach landing sites, or docks protected from the enemy's observation and fire is the main consideration if selecting/organizing aerial or water resupply.

Protection

All units in the base area are responsible for preserving its fighting potential. Protective measures reduce the probability (and the effects) of damage caused by hostile action. Responsibility for the conduct of protective measures is assigned to firefighting, chemical, medical, and other units. In addition, all units assigned to the base conduct passive defense activities, such as dispersion, camouflage, blackout, field discipline, and use of shelters.

Security

Early warning of pending enemy threat actions gives the base commander time to prepare and react. Outposts, patrols, ground surveillance and countermortar radar, military working dog teams, and air reconnaissance and surveillance can provide early warning. Information provided by civilians and actions of indigenous persons near the base are excellent indicators of pending

enemy actions. All around security is essential and may require the following actions:

- Declaring certain areas prohibited and restricted for civilian movement.
- Stopping all movement except patrolling within the base after dark in some circumstances.
- Screening, supervising, or escorting local labor, which always constitutes a major security risk.
- Varying the timing and methods of patrolling, changing guards and detachments, and other routine matters.
- Fully using all forms of illumination, including floodlights; searchlights, if available; and illumination provided by mortars, artillery, or aircraft depending upon the nature of the enemy threat.
- Providing earthwork protection for vulnerable equipment and stores.
- Using harassing fire to disrupt the activities of insurgents under certain conditions.

Defense in Depth

Alternate and supplementary positions, OPs, and mutually supporting strong points in front of the base forward defense area extend the depth of the defense. The commander plans fires throughout the defensive area up to the maximum range of available weapons. Portable obstacles placed around critical targets during reduced visibility disrupt the enemy's plan and add depth to the defense.

Patrols

Base defense operations to counter small groups of enemy forces include aggressive, frequent patrolling by squad- and platoon-sized forces to detect, capture, or destroy small enemy threat groups. Military working dogs, if available, may be used to add security and additional detection ability to patrol operations. Patrols should operate within the range of indirect fire support and be easily reinforced. Dismounted and mounted patrols should extend their operations out to the range of enemy indirect fire capabilities. Populated areas near the base are searched as necessary, surprise checkpoints established, and known or suspected enemy positions raided.

Maximum Use of Offensive Action

Since the objective of base defense is to maintain a secure base, the defender maximizes the use of offensive actions to engage enemy forces outside the base. On initial occupation of the base site, friendly forces take offensive actions to destroy enemy forces in the immediate area. The area commander employs patrols, raids, ambushes, air attacks, and supporting fires to harass and destroy any remaining enemy force. Once complete, a smaller force can defend the base. The base commander maintains constant liaison with major tactical unit commanders in the area to stay abreast of efforts to remove the enemy threat.

Mutual Support

Defending forces use fires, observation, and maneuver to ensure mutual support. Positioning for mutual support requires careful planning and coordination since an outwardly focused perimeter base defense makes mutual support more difficult. Surveillance, obstacles, prearranged fires, and maneuver control gaps in support.

All-Around Defense

In defensive planning, the base commander must be prepared to defend against enemy attack from any direction. Therefore, defense plans must be flexible enough and reserves positioned to react to any enemy threat. Base defense forces use primary and alternate positions and sectors of responsibility. All personnel are assigned duty stations or shelters and defensive measures are rehearsed.

Responsiveness

Attacks against a base may include long-range sniper, mortar, ground, or rocket fire, or suicide

bomber attacks. The enemy threat has the advantage of deciding when, where, and with what force they will attack. Defenders position their forces and plan fires and movement so they can respond to the widest possible range of enemy actions. The defender prepares plans, to include counterattack plans, and rehearses, evaluates, and revises those plans as necessary.

Reserve

The base reserve is a designated organization for any immediate response requirement that occurs in a designated AO. A reserve increases the overall flexibility of a base defense and is available for contingencies.

Forward Operating Bases

Normally, each AO possesses at least one FOB. The size of the area, its physical characteristics, and the number and size of the units operating within the area often require additional operating bases. The FOBs established by a regiment or battalion are often semipermanent and provide deployed units with C2 and communications system facilities, sustainment, personnel systems support, staging areas, and intelligence activities. They provide units with relatively secure locations from which to plan and prepare for operations. During COIN operations, they also aid in limiting insurgent mobility nearby and providing security to the local population. Some differences exist between regimental and battalion FOBs. Regimental FOBs are larger than battalion FOBs and they provide a rear location for larger and more complex logistic and maintenance support functions. A battalion FOB contains the minimum personnel needed to operate and provide security. It maintains at least two methods for sustainment—road and either air or water.

Combat Outposts

A COP is a reinforced OP that can conduct limited combat, stability, or other operations. In COIN operations, COPs are often company- and platoon-sized bases inside insurgent-influenced territory where they enable friendly forces to challenge insurgent influence and power directly by providing a means to secure the population. A COP provides security to its immediate area and enables direct contact with the local populace. These benefits are unavailable from remote bases. The strategy carries with it potential downsides, such as increased FP concerns and decreased operational flexibility; however, these weaknesses are acceptable in light of the significant increases in population contact and security. Emplacing a company or platoon COP in sector is a deliberate operation that requires detailed problem framing, site selection, and the expectation of requirements for additional logistical support.

Outposts may be employed to—

- Secure key LOCs or infrastructure.
- Secure and influence the local populace.
- Gather intelligence.
- Assist the government in restoring essential services.
- Force insurgents to operate elsewhere.

Priorities of Work

Since COPs, by the nature of their presence among enemy threat elements, face increased risk, consideration of placement, timing, and security throughout planning, construction, and occupation is critical. The following are some considerations:

- Ensure the position is free of noncombatants. Avoid displacing people when possible and, if unavoidable, ensure that they receive timely and proper restitution. If necessary, place appropriate signage in local language to direct, redirect, warn, and provide any other guidance necessary.
- Emplace key weapon systems. Select key weapon and CSW positions covering likely mounted and dismounted avenues of approach.
- Create and support a direct fire plan. Company personnel clear fields of fire by removing obstacles and creating loopholes and similar measures while preparing fire control measures, such as range cards, aiming stakes, sector stakes, and TRPs.

- Construct positions with overhead cover and use camouflage to break up outlines. Make target acquisition harder and counter sniper threats.
- Identify and secure supersurface and subsurface avenues of approach, such as rooftops, sewers, basements, and stairwells.
- Construct barriers and emplace obstacles to deny the enemy any access to streets, underground passages, and buildings that provide an advantage over the COP. Obstacles should delay and disrupt enemy threat attempts to approach the COP.
- Integrate barriers and obstacles with key weapons.
- Improve and mark internal movement routes between positions as well as alternate and supplementary positions.
- Stockpile ammunition, food, firefighting equipment, and drinking water.

Counterinfiltration and Early Warning

The key to any defense is detecting a threat before it becomes a danger. Effective COP defense lies in identifying threats—the most dangerous threat is infiltration. The best defense against these threats is the population that surrounds the COP. Internally displaced people, merchants, or shopkeepers are potential sources of intelligence about insurgent attacks on bases. One of the purposes of a COP is to place the company in direct contact with the populace; company personnel must take advantage of such proximity and talk with their neighbors.

Combat Outpost Construction Considerations

Building a COP is a complex task that must be well thought out, with a clear vision from the beginning for expansion and development. It is always best to have trained engineers, either military or civilian construct the base. If the threat environment supports it, use of local companies and population is preferred. The following subparagraphs discuss critical considerations.

Force Protection. All elements of COP construction, whether occupying and modifying an existing structure or building a brand new position, take into account enemy threat capabilities and internal security considerations.

Enemy. Construction, modification, and renovation ensure the following:

- Adequate coverage of dead spaces.
- Creation of a safety zone to prevent rocket attacks.
- Overwatch of potential IED emplacement.
- All around observation.
- Vehicleborne IED prevention measures.
- Ability to deliver direct and indirect fires effectively.

Security. Security measures augment survivability and FP and disrupt threat capabilities. Security measures include the following:

- Concrete "T" walls, prefabricated barriers, and earthen berms for perimeter protection.
- Concertina wire, both within the position (similar to strong points) and outside the position, for canalization and disruption of dismounts.
- At least two entry control points with signage and kits for such actions as enforcing traffic patterns, conducting escalation of force continuum procedures, and searching vehicles.
- Guard towers at each corner that are reinforced with sandbags, ballistic glass, and sniper screens.
- Ground sensors and surveillance systems.
- Chain link screens to protect positions from rocket-propelled grenades and hand grenades.
- Counterbattery and countermortar radars.

Work and Sleep Areas. Separate work areas from sleeping and eating areas should be designed and constructed for sanitation and health concerns. The potential for future expansion is part of COP design and construction, especially if HNSF will occupy part of the COP. In this case, separate, culturally-sensitive arrangements may have to be made. Depending on the size of the COP, the size of the occupying force, and the potential for expansion, planners make the

following considerations for facilities and then enable logistic and operational functions:

- Medical treatment facility (MTF).
- LZ.
- Designated drop zone.
- Detention facility.
- Weapons range.
- Local national meeting room.
- HN force sleeping, eating, and hygiene facilities.
- Vehicle staging/maintenance area.
- Orders briefing area.
- COC.
- Sleeping quarters.
- Laundry area.
- Chow hall.

Combat Outpost Equipment. Standard equipment for the base includes the following:

- Kitchen sets.
- Motor pool assets.
- First and second echelon maintenance enablers and parts.
- Power generators.
- Earth-moving equipment.
- Refrigeration equipment.
- Communication equipment.
- Morale, welfare, and recreation equipment.
- Air conditioner/heater units.
- Prefabricated barriers.
- Barriers.
- Bulletproof glass.
- Kevlar blankets.
- Entry control point kits.
- Pest and rodent control.
- Burn barrels.
- Building material and tools.
- Camouflage netting.
- Maintenance tools.
- Firefighting equipment.
- Sound/alert system (indirect fire).
- Clearing barrels.
- Signs.

Storage. Storage space is created by building appropriate structures, such as prefabricated storage containers. Despite operating in a tactical environment, commanders may not ignore the rules and regulations governing storage of ammunition, hazardous waste, and other items. Storage considerations include the following:

- Waste storage.
- Armory.
- Ammunition.
- Fuel.
- Chow.
- Water.
- Supply.
- Unexploded ordnance.
- Valuables.

Electrical. When developing the plan to power a COP, planners rely first on local power (main), second on generators (backup), and third on power converters off vehicles (tertiary backup). Poor electrical planning and shoddy wiring present a substantial risk to FP due to fires and electrocution. Electrical considerations include the following:

- Hire contract electricians or use qualified combat engineers.
- Envision the proper wiring and layout of zone power grids.
- Use generators for backup and ensure they are safely and properly linked into the power grid.
- Create a proactive sustainment and maintenance process.

Plumbing. Improper field sanitation presents a substantial risk to FP due to the risk of disease. Plumbing considerations include the following:

- The hiring of contract plumbers or use of qualified combat engineers.
- Bulk water from locally drilled wells is typically the main source of water.
- Proper cleaning and maintenance of portable toilets and disposal of waste bags.

- Proper cleaning and maintenance of shower trailers and laundry facilities.
- The creation of an effective sustainment and maintenance process.

Fuel. Proper storage of fuel and protection of fuel assets against enemy action mitigate both operational and FP risk. An additional consideration is fuel handling—the transfer of fuel from its storage container to the container or vehicle for use. Fuel considerations include the following:

- Elevated fuel tanks for gravity-fed fueling.
- Fuel pumps (manual or electric).
- Fuel filters.
- Hoses.
- Required lubricants (transmission, steering, brake, and coolant).
- Fuel cans.
- Fire suppression assets.
- Room to provide for separation of living and working spaces from fuel storage locations.

CHAPTER 8
PATROLLING

This chapter discusses the aspects of patrolling as they pertain to company commanders and their staffs. It further describes the characteristics of patrolling across a range of military operations and establishes guidance for the effective use of patrolling as an integral component of offense, defense, and stability operations. This chapter provides guidance and addresses certain patrolling characteristics; roles and responsibilities; as well as considerations for the planning, preparation, and conduct of a patrol and postpatrol actions at the company level.

Purpose of Patrolling

A patrol is a detachment sent out to gather information and carry out a destructive, harassing, or security mission. The purpose of a patrol is to provide a commander the organic means of managing the battlespace and gathering information. The patrol is a tool used across all three operational areas of a range of military operations (see fig. 8-1); that is, they are equally critical to offense, defense, and stability regardless of where or at what level a conflict or crisis occurs. Commanders create patrolling plans to meet their requirements and they are limited only by the ingenuity with which they employ their patrols and the skill and aggressiveness of patrol members.

Purpose and mission requirements dictate patrol techniques, not vice versa. Patrols may be mounted, dismounted, or both. Though they may serve defensive purposes by using offensive techniques and may possess the means for violence, they provide stability in a peacekeeping environment. Patrols may employ any number of techniques and variations of techniques, from police-like community action to ambushing enemy units, to meet their assigned purpose. They may seek to fulfill reporting requirements or none at all; they may require extensive additional skill sets and enablers or none at all. Managing their battlespace and gathering information remains the purpose of commanders' patrolling plans.

Tenets of Patrolling

Patrols fall into categories defined by objective and method of conduct. All patrols must have clearly defined objectives and with each objective comes a specific focus. Patrols may focus on the enemy, the security of the unit, or on the security of the population. Regardless of the objective and focus of individual patrols, the tenets of successful patrolling endure and apply across a range of military operations. Company leadership at all levels must conduct focused training, inspect preparations, judge operational effectiveness, and base corrections on the tenets of successful patrolling.

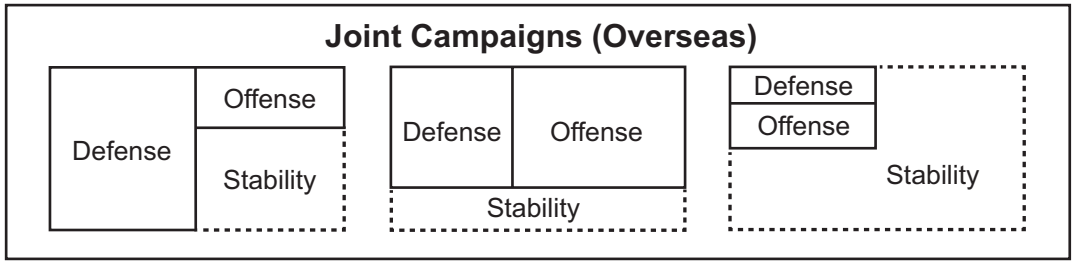


Figure 8-1. Patrolling Across a Range of Military Operations.

Detailed Planning

Every portion of the patrol must be planned, individual and subelement tasks assigned, special equipment identified, and all possible contingencies considered. At the company level, commanders must develop a comprehensive patrolling plan that addresses the multiple tactical and informational demands within the battlespace while maintaining the capability and capacity to respond to contingencies. Commanders must capitalize on the efforts within the CLIC and company COC to manage and prioritize collection and targeting efforts and apply these same functions to the development of a deliberate patrolling plan. Planning prioritizes specific informational and tactical demands and aligns priorities with available forces, the amount of battlespace requiring patrol coverage, and the resources available to respond to contingencies. Patrol planning and contingency considerations are discussed later in this chapter.

Productive Rehearsals

Patrol members rehearse each phase of the patrol, beginning with actions in the objective area and working backward toward departing from friendly lines. Whenever possible, patrol rehearsals occur on terrain and under environmental conditions similar to that of the objective area. Contingency rehearsals must be detailed and thorough enough to ensure universal understanding within the patrol as well as within the supporting HHQ. At the company level, commanders must also rehearse contingency plans within the company COC. Watch officers and company COC personnel must develop battle drills for contingency responses that include known roles and functions, required HHQ and adjacent/supporting unit coordination, and tactical nets/systems required to affect coordination.

Thorough Reconnaissance

Ideally, the patrol leader conducts a physical reconnaissance of the patrol route and objective; however, this is not always possible. Maps, imagery, photographs, recent patrol debriefs, and intelligence briefings from HUMINT, SIGINT, and any other organic or nonorganic intelligence sources supplement the reconnaissance effort prior to executing a patrol.

Positive Control

The patrol leader must maintain positive control of the patrol. For small detachments operating alone, planning and executing well-rehearsed battle drills are keys to a successful mission. Control of the patrol is equally important during patrol preparations. It is important to "isolate" patrol members, removing them from their normal duties or other demands so as to allow them to concentrate on patrol preparation. During the execution of a patrol, the company COC maintains continuous awareness of patrol location, actions, and intentions in order to ensure an accurate CTP and streamline contingency response times. The primary means of enabling control is through detailed planning (appropriate overlays and fires/contingency plans), timely reporting, and efficient battle tracking. Manual and technical processes support the control effort.

Manual Control Procedures

The company COC conducts control through the timely posting of patrol overlays, manual updates of patrol positions as reports are received, updates of priority targets and associated supporting/firing agencies, and updates of the current situation maps and the CTP.

Technical Control Procedures

Technical means, such as satellite-enabled positioning and communications systems, can assist in control, but require maintenance of redundancy through manual updates to ensure the company COC is capable of timely response to all contingencies.

All-Around Security

Security is continuous throughout the life cycle of a patrol. During mission preparation, security of

information regarding size, route, and purpose reduces risk to the patrol. During execution, the patrol maintains all-around security, varies routes, and avoids patterns while the company adopts necessary procedures and contingencies to assist the patrol if needed. Upon completion of the patrol, security of patrol results reduce the ability of the enemy to predict future friendly action.

Every Marine a Collector

The ability to maximize the observation and reporting skills of the individual Marine is critical to successful patrol execution. Every patrol member observes critical information during every patrol and successfully captures those observations because of proper training and disciplined debriefing techniques. It is the responsibility of the company commander to ensure the integration of all information gleaned from patrols into the company's collection plan and common operational picture.

Patrol Types

Although mission requirements determine the type of patrol conducted, every patrol has the secondary mission of collecting information about the enemy, the operational environment, the human environment, and physical terrain. The two main types of patrols are reconnaissance and combat. The patrolling unit requires a clear task and purpose and the patrol's mission must support the overall company patrol plan.

Reconnaissance Patrols

A reconnaissance patrol collects information and can either confirm or disprove the accuracy of information previously gained. Problem framing and the resulting collection plan normally drive the requirement for a reconnaissance patrol. Depending on the mission and the operating environment, reconnaissance patrols may be covert or overt. When facing a substantial enemy threat, covert reconnaissance patrols use as few personnel and as little equipment as possible with regard to survivability, while seeking to avoid enemy contact and close combat. In other operational environments, overt reconnaissance patrols serve secondary purposes, such as security and presence. There are three types of reconnaissance patrols—route, zone, and area.

Route Reconnaissance

A route reconnaissance gathers detailed information on the physical terrain and human environment, capabilities and capacities, and potential areas of threat influence along a designated route. Route reconnaissance might be oriented on a specific area of movement (such as a section of road or trail) or on a more general area (such as an axis of advance). Route reconnaissance patrols should receive specific guidance on fulfilling information requirements. When information requirements are technical in nature, patrols receive enablers (such as engineers) for specific purposes (such as bridge and road surface stability and applicability).

Zone Reconnaissance

A zone reconnaissance is a directed effort within specified boundaries to gain information about routes; human environment and physical terrain; enemy forces; and obstacles, including areas of chemical and radiological contamination. The reconnaissance unit receives maximum freedom of action within the boundaries. Its efforts may focus on multiple, specific locations within the zone or it may seek information across the entire zone. The company normally conducts a zone reconnaissance when the situation is vague or when trying to determine the size and scope of mission requirements. Time is the only limiting feature in the amount and detail of information collected. Critical tasks of the operation normally include the following:

- Find and report all enemy or potentially hostile forces within the zone.
- Reconnoiter specific physical terrain and human environment within the zone.
- Reconnoiter status of critical infrastructure and trafficability.

Area Reconnaissance

An area reconnaissance gathers detailed information about the physical terrain and human environment or enemy activity within a prescribed area or point. The area can be any location critical to the unit's operations and is different from a zone in that it is more specific and directed. Examples include easily identifiable areas covering fairly large spaces, such as towns or military installations; terrain features, such as ridge lines, wood lines, or chokepoints; or single points, such as bridges or buildings. The critical tasks of an area reconnaissance are the same as those for a zone reconnaissance.

Combat Patrols

Combat patrols provide security to both friendly forces and local populations; maintain contact with friendly and enemy forces; and harass, destroy, or capture enemy troops, equipment, or installations. Depending on the mission and the operational environment, combat patrols may be covert or overt. Covert combat patrols are normally preferred when seeking an enemy and engaging in close combat. Overt patrols tend to be more appropriate when conducting operations in permissive environments in which factors, such as presence and contact with the local population, are mission critical. Because contact with an enemy is either the mission of the patrol or likely to occur, combat patrols task-organize personnel to include unit patrol members, mission enablers, and weapons and equipment required to perform expected and potential tasks. Combat patrols may carry specialized munitions specific to the mission, such as demolitions and explosives. Since all patrols by their nature serve as the company commander's intelligence collection assets, combat patrols also collect and report any information gathered during the mission, whether related to the combat task or not. The four types of combat patrols are raid, contact, ambush, and security.

Raid Patrol

The primary differences between the raid as a type of attack (see chap. 6) and the raid as a type of patrol are size and scope. For example, a company-sized or greater raid force generally has an attack objective, while raids conducted by forces smaller than a company normally occur as part of a patrol. Examples of raid patrols are the capture of local enemy personnel or documents for intelligence purposes; destruction of small enemy outposts and LPs; and the demolition of small portions of enemy infrastructure, such as a bunker or footbridge. Like its attack counterpart, a successful raid relies on detailed planning, to include in-depth consideration of contingencies. Raid patrols may or may not make use of cordons or supporting arms to isolate the objective area. The raid patrol is a useful infantry company tool to achieve specific results, but requires significant supervision of the orders preparation and rehearsal processes to ensure success.

Contact Patrol

Contact patrols establish/maintain physical or visual contact with friendly or enemy forces to the front, flanks, or rear of the parent unit. In many operational environments, contact with friendly forces could refer to engagement with local civic leadership, foreign NGOs, and a host of similar entities. The purpose of the patrol and any potential enemy threat dictate a contact patrol's organization and combat power. A contact patrol between friendly positions might require a small and relatively lightly armed force. A patrol tasked to establish contact with an enemy force might require the personnel, armament, and equipment to fight through an enemy screening force to locate their main body. A contact patrol conducting discussions with local leaders may require various enablers. Since all of these types of patrols often entail mature decisionmaking about how and where to move, what and what not to say, when to fight, and how to avoid decisive engagement, company commanders choose patrol leadership and conduct the orders process accordingly. Regardless of purpose and operational environment, the tenets and principles of patrolling remain the same.

Ambush Patrol

An ambush is a surprise attack from concealment on a moving or temporarily halted enemy target. It may consist of closing with and destroying the enemy (near ambush) or an attack by fire (far ambush). Ambushes occur with ferocity and violence of action, seeking decisive effects in the opening moments of the engagement. Size of the enemy, orientation of the ambush site, BSG, security, and the size of the ambush element generally dictate what means of employment patrol leaders choose. While ambushes do not seize or hold ground, information gathering constitutes an important secondary mission requiring appropriate planning and security measures. Company commanders and their staffs take into account all of these requirements when allocating combat power to an ambush patrol. Ambushes allow—

- Smaller forces to generate decisive effects against superior, larger enemy forces, to include use of supporting arms.
- The reduction of the enemy's effectiveness through the destruction and harassment of their forces.
- The reduction of enemy morale and effectiveness as they suffer casualties at little cost to the ambushing elements.

Security Patrol

A security patrol fulfills offense, defense, and stability functions across a full range of military operations. Just as the nature of security requirements can be different in each of the operational areas, so can the manner in which security patrols are employed. Across all of the operational areas, security patrols meet classic internal requirements of the parent unit by screening flanks, areas, and routes; protecting static positions from infiltration; providing early warning of enemy attacks; disrupting threat reconnaissance efforts; and preventing surprise.

In the offense, security patrols protect moving units by screening flanks, the area through which the unit will pass, and the route over which the unit intends to move. In the defense, security patrols protect friendly positions and seek to deny the enemy's reconnaissance efforts. In stability operations, security patrols reduce the enemy's freedom of movement, disrupt their operations, and weaken their influence on the local population while securing critical infrastructure. Security patrols are always prepared to fight, but avoid decisive engagement with units larger than themselves, seeking rather to disrupt and delay vice destroy. Security patrols normally operate away from other friendly forces for only limited periods, returning frequently to coordinate and rest. They do not operate beyond the range of communications and supporting fires from the main body, especially mortar fires. Like contact patrols, personnel, armament, equipment, and enablers are determined according to mission requirements.

Patrol Planning and Preparation

Detailed planning is the first tenet of patrolling. Company commanders use a company patrol plan, driven by the requirements and results of problem framing, as the primary tool to enable successful patrol planning and execution. The design and problem framing processes determine patrolling priorities within the commander's battlespace. Information requirements and the resulting intelligence collection plan, the intelligence collection requirements of HHQ, and the company's targeting requirements focus patrolling priorities on specific areas. Operations and security requirements determine the number, routes, and frequency of security patrols. A company commander's failure to address these fundamental planning steps results in an ineffective patrol plan devoid of purpose and focus and easily exploited by the enemy. After establishing the size and scope of the patrol requirements, company commanders then balance those requirements against the resources available.

Considerations for Developing a Company Patrol Plan

The company patrol plan begins with determining the nature of the problem and understanding the environment and the corresponding intelligence collection requirements and operational necessities to realize the patrol's goals.

Problem Framing

The task and purpose of the company provide the foundation for all other planning. An analysis of friendly and enemy centers of gravity and critical vulnerabilities helps determine what patrols should look for and what patrols should guard against. Problem framing allows commanders to establish priorities for the patrolling effort—What must be known first? What must be guarded against immediately?—to avoid loss of focus in the patrol plan.

Intelligence Preparation of the Battlespace

The IPB process helps commanders to accomplish the following:

- Identify and prioritize PIRs and associated NAIs for inclusion in the intelligence collection plan.
- Identify resource shortfalls and seek augmentation or support from other intelligence collection platforms to cover gaps in the collection plan.
- Integrate and reinforce external intelligence collection resources in the patrol and operation plans.
- Conduct continuous pattern analysis in terms of friendly forces, enemy actions, and geographic terrain and human environment.
- Locate and plot the proximity of indigenous boundaries to the patrol, such as tribal, ethnic, religious, and HNSF.

Development of the Patrol Plan

Having established where patrols should go, when they should go, and what they should be doing, a patrolling concept becomes a patrolling plan. The following are considerations regarding the patrol plan:

- Balance the patrol plan against other operational priorities and resource demands, such as construction of the defense.
- Determine patrol limitations in terms of size, frequency, duration, and range based on the company's maneuver, fires, and logistic capabilities.
- Conduct a risk assessment based on the company's ability to accomplish such tasks as maintain a reserve, conduct CASEVAC and vehicle recovery, and maintain communications. The assessment does not preclude patrols, but only indicates those circumstances in which the company may have to take additional steps to support patrols operating in certain areas at certain times.
- Conduct a time-space analysis to support risk assessment and determine patrol limitations.
- Identify and prioritize gaps in personnel and material assets.

Fires Planning

Fire support for patrols includes delivering not only supporting arms, but also nonlethal fires (such as IO themes) that support the presence of patrols among the populace. Chapter 5 contains more information on fires planning. Fires planning in preparation for a patrol helps to accomplish the following:

- Determine fires limitations in the battlespace, including ROE, risk estimate distances, collateral damage estimate methodology, the impact of physical terrain, and the human environment.
- Determine potential fire support gaps in patrol coverage by analyzing and assessing current fires support in the battlespace in terms of organic fire support range fans, external fire support range fans if available, fire support procedures, and FSCMs.
- Plan fires to cover movement along the entire patrol route, to cover gaps in organic fires with external agencies, and to establish trigger lines

that assist the company COC in tracking what fire support agencies are available at any given time as a patrol moves along its route.
- Determine, establish, and rehearse fire control procedures, including which units may clear and deny fires within the patrol area.
- Ensure individual patrols have the ability to direct and control fires in terms of both communications and the presence of enablers, such as qualified air and artillery observers.

Maneuver Planning

The actual execution of the patrol, both during movement and in the accomplishment of its task and purpose, requires some thought regarding what steps and resources better enable its success. The following are considerations in maneuver planning:

- Depending on task and purpose, request additional personnel and enabler support, such as engineers, military working dog teams, and a CI/HUMINT team.
- Depending on task and purpose, request additional resources and equipment, such as troop lift, biometric systems, communications platforms, and emergency aerial resupply or extract capabilities.
- Consider adjacent and higher unit coordination requirements for patrols in contact with or in proximity to other friendly, partnered nation, and coalition units.
- Consider EPW and detainee handling and evacuation plans and procedures.
- Establish predeparture requirements, such as rehearsals and backbriefs, overlays and patrol plans, manifests and equipment density lists, PCCs, and PCIs.
- Establish postreturn requirements, such as debriefs and AARs, PCCs and PCIs, and reconstitution.

Contingency Plan Considerations

Planning for contingencies is critical to patrol planning. Identifying and rehearsing actions from individual patrols through company headquarters during contingencies will highlight critical gaps and friction points in both the patrol's plan of action and the ability of the company to effectively support patrol actions. Effective planning for contingencies also enables the company commander to identify risk and apply deliberate mitigation measures. Underlying the effectiveness of reactions to contingencies is effective communications and accurate and timely reporting. Planning for contingencies should include individual patrol actions and company COC actions.

Patrol Actions

Patrols establish and rehearse immediate action drills for unit responses (such as a reaction to a far ambush) and battle drills for internal actions (such as vehicle recovery and CASEVAC).

Company Combat Operations Center Actions

The company COC anticipates contingencies and remains prepared to effectively deal with them by maintaining communication and enforcing reporting discipline among patrols; by accurately tracking patrol location and information requirements; and by coordinating with higher, adjacent, and supporting units to reduce response time.

Additional Considerations

The company COC cannot allow itself to be overcome by any single event or contingency. Rehearsals and well-understood procedures allow the company COC to handle contingencies effectively while continuing to manage the rest of the battlespace. The existence of tools, such as priorities, reserve committal and reconstitution criteria, information requirements, and resource triggers, allow the company COC to make sound and mature decisions about the priority of effort required by any particular contingency in light of the company's other operations.

Considerations for Mounted Patrols

Vehicle considerations within mounted patrols are similar to those considerations that apply to

all mounted infantry operations. Company commanders consider METT-T, mobility versus survivability, task organization and load planning, communications, logistics, and maintenance.

Patrol Purpose

When conducting problem framing, company commanders balance the advantages available when mounting infantry, such as speed, mobility, and survivability, with the patrol's purpose. Proper understanding of the environment and problem reveals that missions may support mounted patrols, dismounted patrols, or both. Mounted patrols provide the increased flexibility, speed, and mobility that are appropriate for large distances; multiply the effects of a small force; and occur in terrain that supports vehicle operations. Dismounted patrols enable stealth, are more capable of providing detail on specific areas and routes, operate effectively in complex terrain, and provide superior contact with the local population. Combining mounted and dismounted methods within a patrol is appropriate in instances when vehicles serve an approach march function that enables dismounted operations at the objective—whether the objective is an ambush, a meeting, or an area reconnaissance. Company commanders are careful to avoid allowing their companies to fall into the worst habits associated with vehicular movement, such as disinclination to dismount, tactical discipline laziness, and tendency to leave mission critical gear on vehicles when dismounting. Mission accomplishment takes precedence over troop comfort, welfare, and FP.

Armor and Force Protection Versus Maneuverability

A key factor when considering armor versus maneuverability (discussed in detail in chap. 6) is that the increase in FP available through armor naturally affects some of the infantry's basic strengths, such as all around observation and the ability to maneuver through restrictive and complex terrain. Balancing considerations for the protection of vehicles and crews, observation, the employment of weapons, and maneuverability is critical. Normally, heavily armored vehicles, especially wheeled vehicles with extra mine-resistant armor, can limit crew and passenger observation in complex terrain. Reduced observation can also limit weapons employment at close ranges. Both rocket-propelled grenades and IEDs can defeat many armored vehicles and may defeat any wheeled vehicle, with or without an armor package, at the point of detonation. Enemy forces often target vehicles with poor security, because these vehicles can appear easier to destroy and less likely to respond effectively. Commanders must analyze mission demands, enemy trends, and recent events in their AOs before deciding on an appropriate level of armor protection. Depending on the threat, heavier armor protection can provide for enhanced crew and vehicle survivability. Lighter armor protection can often provide more vehicular speed and mobility resulting in greater offensive capability. In some situations, speed and mobility can offer a degree of protection itself. Other considerations include the following:

- Can the vehicle crew and passengers provide security for themselves?
- Can the vehicle crew self-secure the vehicle if the passengers dismount?
- Can the vehicle crew and passengers quickly and safely mount or dismount? Can they do so under fire?
- If the vehicle has a turret-mounted weapon system, does the gunner have enough protection? Does the turret afford the gunner adequate observation?
- What are the enemy's primary weapon systems and does the vehicle offer protection from them? Can vehicle crews and passengers respond effectively to those weapon systems? What is the net effect for that protection in light of mission accomplishment?

Task Organization and Vehicle Load Planning

Even though mounted, patrols must still have the ability to accomplish all the internal and external tasks associated with reconnaissance and combat patrols. Many of these tasks, such as security, are

more difficult due to the larger number of patrol personnel tied to the vehicles as crew. When planning to conduct operations in a mounted environment, planners apply considerable effort to manifesting and troop to task. The ground tactical plan serves as a starting point in determining the number of personnel required, which indicates the number, type, and organization of the vehicles required. Further modification occurs as vehicles available, element integrity, bump plans, and cross-leveling of personnel and equipment are integrated into the plan. In all cases, commanders must balance vehicle and crew survivability, vehicle weight and payload, the offensive capabilities of the crew and passengers, and their ability to quickly and efficiently mount and dismount the vehicle. The development and use of company SOPs aid this process. The company commander modifies these basic operating procedures as necessary to accomplish specific patrol missions. Additional considerations for task organization and vehicle load planning follow:

- What types and numbers of vehicles are available?
- Are vehicle capabilities and limitations appropriate to the mission?
- Will the vehicles have organic crews or will the infantry platoon or company provide drivers and crews?
- What types of weapons will the vehicles mount? Are outside resources, such as HMGs required?
- Does the commander anticipate dismounting the crew-served or automatic weapons from the vehicles at the objective or if in contact?
- Will the unit maintain team and squad integrity within vehicles and vehicle sections or will the unit dedicate an element to vehicle crews and maintain squad and team integrity only when dismounted?
- Will assistant gunners travel with their gunners in the same vehicle or in the same section?
- Is the mission a mounted patrol in which dismounting is a battle drill or is the mission a mounted approach march supporting dismounted operations, such as a search?
- Does the commander anticipate using the vehicles' CSWs as a base of fire or as an SBF element?
- Do the vehicle recovery and emergency maintenance battle drills support the mission driven bump plan priorities?
- Does the load plan for personnel and equipment, especially mission-specific special equipment, use spread load and redundancy methodologies?

Communications

Vehicle crew communication is paramount to smooth vehicle operation. Commanders must consider how dismounts will communicate with the mounted or dismounted crew. Drivers and troop commanders can normally communicate by voice in most wheeled vehicles, but might not be able to do so if in contact. Passengers and gunners have a hard time communicating with the driver/troop commander under normal operating conditions and most likely cannot do so during contact. Once passengers dismount, voice communications are nearly impossible. Commanders should consider the following:

- If intercom systems are not available, equip the driver, troop commander, and gunner (if applicable) with headset radios for internal and external vehicle communication.
- Use redundant hand and arm signals, flags, and pyrotechnics for basic critical signals, such as mount, dismount, shift and cease fire, and target designation.

Considerations for Patrol Bases

A patrol base is a temporary position set up when the patrol unit halts for a period longer than a security halt, but shorter than what is necessary for a permanent position such as a COP or FOB. The patrol base is a defensive position and, as such, the fundamentals of perimeter defenses apply (see chap. 7). When the unit must halt for a long time in a place not protected by friendly troops, active and passive security measures are required.

Mission and enemy capabilities determine whether a patrol base is overt or covert. Covert patrol bases are occupied in stealth and are located in areas that are difficult to access, provide no tactical value to the enemy, are easily defendable, and from which hasty egress can occur if compromised. Conversely, overt patrol bases are readily visible. Their visibility is often a portion of their mission, such as an overt patrol base among the population. Patrol bases are occupied only as long as necessary, but not for more than 24 hours—except in an emergency. The unit should not use the same patrol base more than once.

Key Leader Responsibilities

The company commander, XO, first sergeant, gunnery sergeant, fire support team leader, and WO each have specific responsibilities with regard to patrol planning and conduct.

Company Commander

Company commanders may be involved in patrolling in one of three ways: they may lead a company-sized patrol; they may provide small patrols from their company as directed by battalion; or they may send out patrols on their own initiative as a component of the overall company patrolling/battlespace management effort. Regardless of the type of involvement company commanders have in individual patrols, the priority of their efforts are dedicated to setting the right conditions for success through detailed planning, coordination, rehearsals, and supervision. When company commanders plan to use a patrol to support a company operation, they identify its mission, organization, key times and places for departure and return, and possibly its routes. Depending on the mission, commanders may assign the task, give their intent, and allow the platoon leader to plan the patrol. The company commander and members of the company headquarters assists in planning fire support, logistic support, and communications. Commander-specific responsibilities include, but are not limited to, conducting problem framing, conducting IPB, and developing the patrol plan.

Conduct Problem Framing

The company commander conducts problem framing, which serves as the foundation for developing a patrol plan. He/She determines mission, end state, and essential tasks of the patrolling effort; assesses and mitigates operational risk; and identifies personnel and resource limitations.

Conduct Intelligence Preparation of the Battlespace

The company commander uses the company intelligence specialist to assist in the development of PIRs, an intelligence collection plan, and in obtaining intelligence support for the conduct of patrols. Commanders supervise and approve the development of company essential elements of information and CCIRs, the synchronization of patrolling requirements with the intelligence collection plan, and the prioritization of patrolling efforts in conjunction with the intelligence collection plan and operational requirements.

Develop Patrol Plan

Company commanders may use planning support from within the company leadership and the company COC, but they remain responsible for creating a patrol plan that meets their intelligence collection and operational requirements. The commander also has the following associated responsibilities:

- Develops company patrol plan and associated OPORDs.
- Issues WARNORDs to the designated patrol unit.
- Initiates appropriate troop leading procedures.
- Coordinates and assists in the development of detailed individual patrol plans.
- Ensures the tasked element prepares, properly organizes, and equips itself for the mission.

- Ensures critical contingency plans are thoroughly planned, briefed, and rehearsed from the patrol through the company COC.
- Assists the patrol leader with preparations, coordination, and final inspections before the patrol departs.
- Assesses operational readiness (personnel, equipment, logistics).
- Coordinates with higher, adjacent, and supporting units.
- Maintains and updates the CTP throughout the course of the patrol and ensures higher, adjacent, and supporting units are informed.
- Ensures patrol reports are properly received, recorded, and routed.
- Supervises the coordination and execution of contingency plans.
- Coordinates supporting arms in accordance with mission requirements.
- Ensures that the appropriate PCCs and PCIs have been conducted prior to patrol departure.
- Ensures that patrol debriefs occur upon the return of the patrol and information gleaned from patrols is properly integrated into the overall intelligence effort and disseminated internally to higher, adjacent, and supporting units as required.

Executive Officer

The XO possesses the authority to act in the company commander's name and is frequently expected to exercise that authority during the development, execution, and support of the company's patrol plan. He/She has the following duties:

- Executes designated patrol-related duties as assigned by the company commander.
- Develops and oversees execution of the local security plan.
- Develops and enforces battle drills/battle rhythm.
- Participates in planning efforts.
- Supervises the company COC's timely and accurate updates of friendly and enemy situations.

First Sergeant

As the senior tactical and administrative advisor to the company commander, the first sergeant supervises patrol preparation and isolation, discipline, accountability, and postoperational actions. He/She has the following responsibilities:

- Supervises tactical discipline.
- Supervises personnel and equipment accountability of each patrol.
- Tracks CASEVAC operations and casualty status.
- Assists in development, coordination, and rehearsal of contingency plans.
- Participates in planning efforts.
- Supervises the handling and tracking of EPWs and detainees.
- Supervises the conduct of IO.

Gunnery Sergeant

The company gunnery sergeant oversees patrol preparation, logistical support, and efficient company COC operations. His/Her responsibilities follow:

- Oversees company COC operations to include management of company communications assets.
- Supervises patrol preparation to include rehearsals and PCC/PCIs.
- Directs supply and resupply.
- Supervises the local security plan.
- Supervises the operations chief and WO in tracking logistic operations and reporting.
- Participates in planning efforts.
- Coordinates company reserve support requirements.
- Plans, coordinates, and supervises CASEVAC.
- Plans, coordinates, and supervises EPW and detainee handling.

Fire Support Team Leader

The FST leader assists patrol leaders in fire support planning, integrates patrol fires with the

company fires plan, and conducts coordination with organic and nonorganic fire support agencies. His/Her responsibilities follow:

- Develops targets and FSCMs for the company battlespace.
- Integrates patrols into the company fire support plan.
- Develops the company level attack guidance matrix (lethal and nonlethal).
- Coordinates and clears supporting arms in accordance with mission requirements.

Watch Officer

Watch officers are normally sourced by the platoon commander and platoon sergeant responsible for COP or FOB security. The WO is the senior Marine in the company COC and maintains awareness of all activity taking place in the company battlespace to include AIs and AOIs. The watch officer must be prepared to update the company leadership at any time. Some of the WO's responsibilities follow:

- Supervises all personnel in the company COC.
- Supervises current operations and initiates appropriate action as the commander's senior representative.
- Ensures all missions are briefed and debriefed.
- Conducts cross-boundary coordination.
- Provides situational updates and briefings for key personnel.
- Controls entry and exit of friendly lines.
- Obtains situational updates from company COC personnel.
- Maintains situational awareness of all friendly and enemy activity.
- Obtains information from appropriate subordinate and supporting units.
- Disseminates information to appropriate subordinate and supporting units.
- Notifies the commander of any CCIR event.
- Ensures all status boards in the company COC are current.
- Commits the company reserve in accordance with unit SOP.
- Coordinates and clears supporting arms in accordance with appropriate documentation.
- Adjusts and disseminates FSCMs based on the tactical situation.
- Coordinates the movement of ground-based fire support.
- Updates the situation map with regard to friendly patrols and enemy activity during the last 48 hours.

Postpatrol Actions

After the patrol has been completed, leadership must account for all personnel and equipment, debrief patrol members, and conduct an AAR.

Accountability

Accountability is an important component of FP. Leadership at all levels must know the location and status of their personnel and equipment. Accountability also enforces discipline within a unit. Upon returning from a patrol, the element does not return to its billeting or similar facilities. Accountability, postcombat care of personnel and equipment, and debriefs occur prior to releasing the patrol members.

The commander verifies the location and status of all patrol members, attachments, EPWs, and detainees. He/She verifies accountability of all weapons, ammunition, munitions, and equipment. In the case of missing personnel, the company immediately institutes its missing Marine procedures. In the case of lost or missing equipment, reports and appropriate investigations occur in a timely manner.

Debriefs

A Marine patrol is still the best means to build the company commander's situational awareness, providing that all relevant and significant information from the patrol is captured during the debrief. The commander must conduct a thorough debrief with all members of the patrol.

Checklists of the material to be covered in debriefs are important and should align with the prepatrol brief and assigned IR/PIRs. To conduct a meaningful and detailed debrief, commanders should ensure the following:

- Establish debriefing procedures in company SOPs and update as needed.
- Isolate the patrol from distraction so members can be debriefed without interruption.
- Establish a "no rank" debrief atmosphere and avoid discouraging patrol member input.
- Ensure that all relevant billet holders, such as the platoon commander, platoon sergeant, platoon/squad intelligence representative, element leaders, and recorder, are present.
- Ensure that all items of interest collected by the patrol are present and displayed, such as pictures, recordings, sketches, and map improvements.
- Avoid a "story telling" atmosphere (objective versus subjective) and maintain the focus on drawing information from the individual or group being debriefed. Focus on the information requirements that formed the patrol's tasking.
- Avoid asking leading questions, searching for preconceived answers, or trying to confirm prepatrol assumptions.
- Ask questions that require a detailed response and do not accept simple "yes" or "no" answers.
- Track all "atmospheric" changes in the AO, such as new construction, new signs, things no longer present, and population traffic pattern changes.
- Save after action comments (critiques of the patrol) for the AAR.

After Action Reviews

No operation ever occurs perfectly. There is always room for improvement. An important component of postpatrol actions is a meaningful AAR, especially after patrols involving contact or other significant events. The AAR normally occurs after completion of formal postpatrol requirements, such as debriefs, but before patrol members become absorbed in postcombat checks and equipment maintenance. Unit leadership should supervise AARs to ensure that appropriate information is incorporated into SOPs, lessons learned, and sustainment training plans. The company commander is responsible for the technical and tactical proficiency of the company and takes appropriate personal interest in the validity of the AAR process within the company. Company commanders have a responsibility to ensure they accomplish the following:

- Establish AAR procedures in company SOPs and update as needed.
- Isolate the patrol from distraction so members can conduct the AAR without interruption.
- Establish a "no rank" atmosphere and avoid discouraging patrol member input.
- Ensure that all relevant billet holders, such as platoon commander, platoon sergeant, and element leaders, are present.
- Avoid a "story telling" atmosphere (objective versus subjective) and maintain the focus on an item-discussion-recommendation format.
- Record any debrief comments that might occur during the AAR and forward to the company commander for appropriate inclusion into the intelligence collection plan.

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CHAPTER 9
AMPHIBIOUS OPERATIONS

If historical migration patterns hold, most of the world's population will soon live within 100 kilometers of a coastline. As long as the United States remains a maritime nation and possesses the requirement to engage the nations of the oceans' littorals, it will need an amphibious force (AF) projection capability. This chapter provides a basic orientation for the infantry company and company commander tasked to conduct an amphibious operation or deployment. It addresses: amphibious doctrine and platforms; command relationships; training tactics, techniques, and procedures; phases of an amphibious operation; and considerations specific to shipboard life—all from the infantry company perspective. Fundamental principles and guidance on the planning and execution of amphibious operations are contained in JP 3-02, *Amphibious Operations*. That publication states that an amphibious operation is a military operation launched from the sea by an amphibious force, embarked in ships or craft with the primary purpose of introducing a landing force ashore to accomplish the assigned mission.

In addition to the JP 3-02, the following references will complete the essential compendium of amphibious operations-related doctrine: JP 3-02.1, *Amphibious Embarkation and Debarkation*; MCRP 4-11.3G, *Unit Embarkation Handbook*; and MCRP 4-11C, *Combat Cargo Operations Handbook*. For ship-to-shore movement planning refer to MCWP 3-31.5, *Ship-to-Shore Movement*.

While the phases of amphibious operations—planning, embarkation, rehearsal, movement, and action (PERMA)—are not necessarily successive, they always occur. For example, forward deployed AFs, such as amphibious ready groups, use the following sequence: embarkation, movement, planning, rehearsal, and action. Table 9-1 shows the various phases of an amphibious operation, a description of each, and considerations for the infantry company.

Table 9-1. Phases of an Amphibious Operation.

Phase	Description	Company Level Perspective
Planning	Continuous, concurrent process involving bottom-up refinement. Begins at the receipt of initiating directive and terminates with the completion of operational objectives Products that emerge from the planning phase are the LF CONOPS ashore, landing plan, loading plan, and AF tasking order	Predeployment training Identify load out/cube requirements Generation of deliverables for use in constructing the landing plan Generation of SOPs/briefing shells
Embarkation	Embarkation of LF troops and equipment aboard amphibious ready group shipping	Inspection of vehicles and containers Identification of troop spaces Loading of troops and equipment Stowage of equipment
Rehearsal	Conducted during movement to ensure feasibility, adequacy, and timing of the landing plan and readiness of the AF; test communications; and validate procedures/assumptions	Shipboard training Call aways Shipboard safety drills CARs Confirmation briefs
Movement	Amphibious force departs port of embarkation and proceeds to the amphibious objective area	Troop regulations Shipboard life Inspections of troop spaces Maintenance Training
Action	Amphibious force is in position to initiate ship-to-shore movement and terminates upon completion of mission objectives. This phase includes supporting arms, ship-to-shore movement/ship-to-objective maneuver (via surface, air, or a combination of both), logistics, and patient movement	Assault support/landing craft considerations Establishment of beachhead/LZs Rearm/refit/refuel

Types of Amphibious Operations

Amphibious operations include assaults, withdrawals, demonstrations, raids, and amphibious support to other operations. Amphibious assaults involve introducing a LF on a hostile or uncertain shore. Using seabasing, fire support, and logistic functions, AFs can gain a foothold on a hostile or uncertain shore by forcible entry. For example, when conducting Operation Chromite during the Korean War, sea-based mobility was used to execute a turning movement against North Korean forces and establish a LF at Inchon, deep behind the North Korean lead elements.

An amphibious withdrawal is the extraction of forces by sea in ships or craft from a hostile or potentially hostile shore. For example, during the Korean War, after the 1st Marine Division successfully extracted itself from a Chinese counterattack at the Chosin Reservoir, it executed an amphibious withdrawal from the port of Hung-Nam.

An amphibious demonstration is a show of force conducted to deceive with the expectation of deluding the enemy into a COA unfavorable to it. As a form of MILDEC, it uses the threat posed by an AF to accomplish this purpose. During Operation Desert Storm, the 4th Marine Expeditionary Brigade and ships of an amphibious strike group conducted such measures as raids, fire missions, mine and lane clearance, and beach reconnaissance to successfully convince Iraqi commanders that the coalition's main effort would be an amphibious assault against Kuwait City. This decision resulted in the Iraqis weakening their southern defenses to reinforce the seaward defenses of Kuwait City, making them vulnerable to the true, land-based coalition main effort.

An amphibious raid is a type of amphibious operation involving the swift incursion into or temporary occupation of an objective followed by a planned withdrawal. Sea-based landing craft and aircraft execute the surface and air movement necessary to support this and the other types of amphibious operations.

Amphibious support to other amphibious operations contributes to conflict prevention or crisis mitigation. Amphibious forces routinely conduct amphibious support to other operations, such as security cooperation, foreign humanitarian assistance (FHA), civil support, noncombatant evacuation operations (NEO), peace operations, or recovery operations. Examples include the Liberia NEO and the foreign disaster relief effort in Bangladesh.

Characteristics of Amphibious Operations

Regardless of the type of amphibious operation, the characteristics discussed in the following subparagraphs apply to all.

Integration Between Naval and Landing Forces

Close coordination is required among naval forces, the LF, and other supporting forces. This coordination is critical because of the host of special skills and equipment associated with the complex nature of amphibious operations. If the forces involved in the amphibious operation do not synchronize their efforts and understand each other's contributions, then the AF possesses a significant risk of failure.

Rapid Buildup of Combat Power From Sea to Shore

Gaining and maintaining access is key, particularly in the conduct of amphibious raids and/or amphibious assault forcible entry operations. Continuous support to the LF ashore is critical for mission accomplishment. For example, during the World War II invasion of Guadalcanal, the decision for naval shipping to retire in the face of an enemy naval threat led to insufficient logistical support and NSFS, stranding the LF for a long period of time.

Task-Organized Forces

Amphibious forces task-organize based on a specific mission or, in the case of forward deployed AFs, a series of most-likely contingencies. The inherent restricted lift capacity of amphibious shipping precludes carrying equipment and personnel for every conceivable mission. For example, during an amphibious-based FHA to typhoon ravaged Indonesia and Thailand, the AF task-organized to address the requirements of ship-to-shore (STS) movement in a disaster area, specific humanitarian-related classes of supply, medical capabilities, and LCE forces.

Unity of Effort and Operational Coherence

Closely related to the need to integrate naval and LFs is the need for all components to fully understand their roles within the larger task and purpose of the AF. The naval force cannot be concerned only with transporting the LF just as the LF cannot *only* focus on operations ashore. The two components must operate as one whole—success during all PERMA phases is important to both components and requires mutual support.

Readiness

Readiness is determined by the maintenance level of the skills and equipment necessary for successful amphibious operations and by the status of forward deployed AFs that maintain a constant state of preparedness for employment. The first requires continual coordination between the Marine Corps and Navy to maintain joint training standards. The second recognizes that reaction times to crises are measured in hours and days not weeks. The requirement for a NEO can come suddenly, as can a natural disaster, and fully prepared AFs can react immediately.

Flexibility

Amphibious forces are inherently flexible due to their ability to reconfigure and reposition. Given that much of the world's population, political power, and critical infrastructure lie within 100 kilometers of the oceans, the AFs are ideal response platforms that possess significant capability to loiter. From forcible entry to show of force operations, AFs provide national leadership with a scalable force capable of a wide array of military operations across the range of military operations.

Self-Sustainment

Due to the ability of the AF to conduct underway and on-station replenishment of personnel and certain supplies and equipment, they are less reliant on land-based logistical infrastructure. Amphibious forces also possess the organic capability to project forward logistic capabilities ashore, facilitating throughput for follow-on operations.

Mobility

The ability to conduct strategic, operational, and tactical mobility allows AFs to position themselves to overwatch rapidly degrading situations and respond swiftly to contingencies when called upon.

Roles, Responsibilities, and Relationships

Amphibious operations include the marriage of naval and ground forces to achieve a military objective. Orders to conduct amphibious operations will establish commanders and command relationships, while identifying available forces and tasks. The following subparagraphs will provide information about those Navy and LF personnel with whom company personnel will interact aboard ship. More detailed information may be found in MCRP 4-11C and MCRP 4-11.3G.

Shipboard Command Structure

The command structure consists of those key individuals aboard ship—commanding officer (CO), commanding officer of troops (COT), XO, and ship's operations officer—who either exercise command authority or directly assist in its implementation within the ship's company and embarked forces.

The CO is a ship's highest authority, responsible for the portion of the LF embarked aboard his/her ship. Both the ship's company and embarked personnel are subject to the CO's authority. The CO's orders to embarked personnel are transmitted via the COT.

The highest-ranking officer of embarked LF personnel assumes the additional role of COT. On smaller amphibious ships, this individual could be a company commander. The key task of the COT is to facilitate integration of the LF into the ship's functions and routines. Such integration includes coordinating embark and landing plans; assigning LF personnel to secondary duties, such as messing and laundry; and assisting the efficiency of shipboard life. The COT works closely with the CO to build the ship and LF into a cohesive military team through the following methods:

- Using internal ship's communications systems to promulgate briefings and all hands messages.
- Integrating LF personnel into the ship's workforce, to include fire fighters, damage control, flight deck crew, combat cargo, messing, maintenance, and underway replenishment.
- Integrating LF units into shipboard routines through such actions as joint berthing inspection processes, training meetings, reporting processes, and published plans.
- Integrating LF units into the social cohesion of the ship through such activities as recreation and competition.
- Developing and implementing LF internal approval and control processes for operations and training so that the LF can speak effectively with one voice with naval counterparts.

The second in command of the ship—the XO—is the direct representative of the CO for daily operations aboard the ship. The XO is specifically concerned with the organization, health and sanitation, discipline, employment, and efficiency of the crew and LF. Commanders of troops ensure that all troop spaces inspections, such as armory, berthing, offices, staterooms, and washrooms, are coordinated with the XO. If possible, COTs should use their XOs to serve as XOs of troops who can work directly with the ship's XO. On smaller amphibious ships, the XO may also serve as the debarkation control officer during offload operations.

The ship's operations officer is responsible for plans regarding the employment of the ship both externally and internally. The operations officer is responsible to the CO for developing plans relating to maneuvering and positioning the ship and landing and recovery operations. The operations officer is also responsible to the XO for the coordination, deconfliction, and publishing of the ship's daily, weekly, and long-range schedules for both the ship's company and LF. The COT implements an internal approval process for all LF training and operations requirements to preclude the ship's operations officer having to assume LF deconfliction duties.

Other Shipboard Personnel

The chief engineer, ship's first lieutenant, air boss, combat systems officer, and supply officer are other key shipboard leaders.

The chief engineer is the naval officer who heads the engineering department. The chief engineer and the engineer department exercise responsibility for all matters pertaining to propulsion, auxiliary/ancillary ship systems, and damage control. The COT engages with the chief engineer in two ways: identifying embarked personnel requirements for support of repair and damage control parties and coordinating work requests for berthing spaces and heads.

The ship's first lieutenant is a traditional title that applies in modern practice to the officer in charge of the deck department. The deck department exercises responsibility for all activities and maintenance involving cargo, cargo spaces, deck seamanship, the ship's exterior, and ship's boats. For embarked troops, the deck department and the first lieutenant are the primary points of contact for

such activities as starting and moving vehicles, accessing embarked cargo, and all embarkation and debarkation requirements.

The ship's air officer, or air boss, is responsible to the ship's CO for the safe conduct of air operations, specifically launching and recovery, servicing, and handling of all aircraft and UA. The air boss is assisted by the flight deck officer, hangar deck officer, aviation fuels officer, aircraft handling officer, and aircraft ordnance officer.

The combat systems officer is responsible to the ship's CO for the supervision, direction, and training of shipboard weapon systems. The combat systems officer's duties include operation, care, maintenance, and training of personnel on the ship's weapon systems and all matters pertaining to the stowage and inspection of ordnance. The combat systems officer often serves as the embarked unit's point of contact for use of flight decks for live fire training. In addition, many ships expect to or can use embarked Marines and CSW systems for ship defense. The combat systems officer integrates these Marines into the ship's defensive plans.

The supply officer is responsible to the ship's CO for the procurement, receiving, stowage, and issuance of ship's stores. These duties encompass the wardroom, general mess, barbershop, ship's store, disbursing, and post office. Embarked units coordinate with the supply officer for such things as special meals, personal demand items, and embarked personnel support to the barbershop.

Embarkation and Landing Personnel

The embarkation and landing personnel consists of the combat cargo officer (CCO), team embarkation officer (TEO), LF air officer, and assault amphibian officer.

The CCO is a Marine Corps officer or chief warrant officer permanently assigned to the ship's company. He/She is often assisted by a permanently assigned Marine Corps SNCO who serves as the assistant CCO. The CCO is directly responsible to the ship's CO for all issues pertaining to the embarkation of personnel, LF supplies, and equipment. He/She advises the CO and COT on plans for loading and offloading of troop cargo, embarkation, communications requirements, and the billeting and messing of troops. The CCO oversees the work of the TEOs. The CCO provides direction and guidance regarding the ships loading characteristics, embarked troop regulations, cargo capacities and inventories, and management of the LF operational reserve material. In conjunction with the ship's first lieutenant, CCOs and their assigned personnel directly supervise the onload and offload of LF personnel, supplies, and equipment.

An embarkation team is a temporary, administrative term that refers to a group of personnel, supplies, and equipment either embarked or to be embarked. The COT appoints a TEO to handle all matters pertaining to cargo loading/offloading. The demands of the TEO are such that this should constitute the primary duty of the officer assigned. The TEO's duties include preparation of load plans for assigned shipping, coordination and execution of the load plan, and assistance in offload planning. The TEO must be familiar with the ship's loading characteristics, troop regulations, and the contents of the LF's embarked material.

The LF air officer is a Marine Corps officer attached to the ship's company and responsible for overseeing the coordination of naval air operations. When addressing air-related matters, the first point of contact for embarked units is the LF air officer.

When embarked, the senior assault amphibious unit leader also serves as a special staff officer who provides subject matter advice to both the ships company and embarked personnel on all matters pertaining to AAVs. In this role, the assault amphibian officer's duties include providing supported commanders with estimates of supportability, coordinating launch and recovery operations with applicable naval personnel, overseeing safety considerations and emergency

procedures, developing AAV-specific communication plans, and assisting in the planning of subsequent operations ashore.

Planning

Amphibious operations require detailed planning—from the approval of the CONOPS ashore to mission execution. The tenets of the MCPP, top-down planning, single battle concept, and integrated planning are essential for managing complex amphibious operations and specialized skill sets across the warfighting functions. The length and requirements of the planning process relate directly to the nature of the AF. A forward-deployed Marine expeditionary unit (MEU) that has mastered the basics of amphibious operations may more easily focus planning on a specific mission. A Marine expeditionary force preparing for an amphibious operation would need to devote considerable planning time to actual training and embarkation in addition to planning for actions ashore.

Predeployment Training

Whether preparing to participate in a forward-deployed MEU or a large scale amphibious operation, company commanders must understand the special billets, individual skills, and collective skills their companies must master to execute successfully. Table 9-2 provides some insight into the many training requirements the infantry company must address. For additional information refer to MCRP 4-11C and MCRP 4-11.3G.

The Load Plan

The mission ashore drives all planning. Without a valid concept of operations, it is impossible to determine resource requirements such as amphibious ships, landing craft, and aircraft. This is precisely why amphibious embarkation planning begins in the first planning stage to identify possible limitations and to begin making determinations of what and where personnel, vehicles, and equipment will be loaded, so that they can be transported ashore in the proper sequence to support the CONOPS (i.e., the landing plan).

Embarkation planners must familiarize themselves with a host of issues—the capabilities and limitations of ships, aircraft, and seaborne craft; their naval counterparts; and the personnel, supplies, and equipment to be embarked aboard naval shipping. Close, continuous coordination throughout planning and execution is required between operational planners and those responsible for the embarkation and offloading of personnel and materiel. For additional information on air and surface load planning considerations, see MCRP 4-11.3G, MCRP 4-11C, and JP 3-01.2.

Infantry company commanders should familiarize themselves with the loading characteristics of the ships upon which they will be embarking. They should ensure that TEOs visit the ships regularly, attend all embarkation conferences, and regularly brief embarkation team commanders. Planning for embarkation requires the submission of deck diagrams from the TEO to the COT for approval, then to the ship's CO via the CCO. As with any other amphibious planning, the load plan must be

Table 9-2. Amphibious Related Training.

Embarkation	TEO course Embarkation representative training Gripe/ungripe training Combat cargo personnel training Embarkation conference Embark point staging rehearsals
Shipboard Life	Firefighting training Damage control training Water survival training
Helicopterborne Operations	Helicopter egress training HRST training HEED bottle training Dry drills/rehearsals
Small Craft Operations	Navigator training HRST training Assault climber's course Coxswain's course Small craft mechanic/maintenance training

Legend
HEED helicopter emergency egress device
HRST helicopter rope suspension techniques

cross-walked through the ship's department heads, such as the first lieutenant or the chief engineer, prior to submission to the ship's CO for final approval.

The Landing Plan

The landing plan addresses the organization and sequence of placing the LF ashore based on commander's guidance and assigned tactical tasks (see app. D). The landing plan integrates naval and LF surface and airborne STS movement and platforms for two purposes—rapidly building up LF assets ashore and conducting necessary logistical sustainment of forces ashore.

Naval Planning

Naval planning for STS movement focuses on availability of landing craft, hydrography, control of seaward/beach approaches, and the geography of beaches being considered for use by the LF.

Landing Force Planning

Landing force planning for STS movement begins with receiving key outputs from the naval planning process, such as landing craft availability, and then focuses on sequencing and organizing for landing so that those assets needed first arrive ashore first and that the buildup of combat power and material occurs as rapidly as possible. In STS movement, the landing plan is composed of certain specific documents that detail the numbers of landing craft, aircraft, and other surface craft available for use and the exact personnel and equipment that will be loaded on each, along with embarkation and landing times. Some of these documents are applicable to amphibious operations of any size. Table 9-3 lists landing plan documents and responsibilities. While several of the documents listed in Table 9-3 are more applicable to Marine expeditionary brigade-sized amphibious operations, all are valuable tools for any size mission. The creation of and details in

Table 9-3. Landing Priority Table.

CATF's Responsibility	CLF's Responsibility
Naval Landing Plan	LF Landing Plan
Landing Craft Availability Table	Amphibious Vehicle Availability Table
Landing Craft Employment Plan	Landing Craft and Amphibious Vehicle Assignment Table
Debarkation Schedule	Landing Diagram
Landing Control Plan	Landing Force Serial Assignment Table
Medical Regulating Plan	Landing Priority Table
Amphibious Assault Bulk Liquids System and Offshore Petroleum Discharge System Plan	Landing Force Sequence Table
Approach Schedule	Assault Schedule
Assault Wave Diagram	Amphibious Vehicle Employment Table
Landing Area Diagram	Helicopter Availability Table
Transport Area Diagram	Heliteam Wave and Serial Assignment Table
Beach Approach Diagram	Helicopter Enplaning Schedule
Sea Echelon Area	Helicopter Landing Diagram
	Helicopter Employment and Assault Landing Table
	Ground Combat Element Landing Plan
	Consolidated Landing and Approach Plan
	Aviation Combat Element and Landing Force Aviation Landing Plan

these documents depend on the landing plans, CONOPS ashore, and the guidance provided by the amphibious task force and LF commanders.

Detailed information about development of a landing plan, including serials and landing priorities, along with all the form, diagrams, and tables (with examples) depicted in Table 9-3 can be found in MCWP 3-31.5.

Operational Risk Management

In addition to the purpose, means, and methods of ORM (discussed in chap. 12), company commanders must be aware of specific hazards associated with shipboard life and amphibious operations. Many of these matters are addressed in the troop regulations issued by the CCO, which are often ship specific with respect to restricted spaces, activities, and safety requirements.

Shipboard Safety Considerations

Living and working aboard ship is similar to living and working on a factory floor. Unlike on cruise ships, utilities, pipes, control boxes, and a host of other systems are exposed for ready access by the crew. Therefore, in addition to expected controls on, for example, restricted or smoking spaces, company commanders and COTs can expect shipboard safety considerations to focus on electrical and deck safety.

Electrical Safety. Electrical safety will restrict what types of electrical items the embarked troops can use, how many they can use at any one time, and where they can use them. Rigorous inspections and controls are a part of most shipboard electrical safety programs.

Deck Safety. As naval ships are designed for utility and fighting first and creature comforts second, the areas in which crew and embarked units function, eat, and sleep are characterized by hard surfaces and steep angles. In addition to expected slip and fall hazards, company commanders should ensure that all company personnel understand the safety issues surrounding the following:

- Moving on wet decks.
- Moving heavy equipment through ship's spaces.
- Operating around vehicles and heavy equipment on well decks.
- The extra hazards associated with "wet well" operations, such as moving around the well deck during times of embarkation and debarkation.

Waterborne Safety Considerations

Basic safety measures, such as proper manifesting, that apply to all types of movement and conveyances from busses to helicopters also apply on the water. Similar to helicopters, landing craft of various types possess their own sets of safety considerations, such as briefs regarding emergency procedures, use of life jackets, use of scuttles and escape hatches, and Marine overboard drills. When conducting an amphibious operation, members of the LF should also know "down boat" procedures and signals, the location and methods of rescue and casualty collection boats, and the location of safety and recovery boats along approach lanes.

Embarkation Planning Considerations

The success of the amphibious operation depends upon the manner in which troops, supplies, and equipment are loaded aboard ships. Embarkation plans begin at the battalion or higher level, but require bottom-up input and refinement from the infantry company. Company commanders ensure that the battalion embarkation plan provides for the rapid and orderly buildup of forces ashore in support of the landing plan and scheme of maneuver. Successful integration of the company's priorities for embarkation requires the constant involvement of the company gunnery sergeant with the battalion S-4; shipboard combat cargo personnel; and, when appropriate, the

supporting combat logistic battalion. Understanding ship designs and configurations will greatly influence successful integration of company priorities into the overall embarkation plan.

It is essential that the infantry company's embarkation process be organized and smooth. This occurs through proper coordination with appropriate agencies in a timely and organized manner and a rigorous pre-embarkation inspection process at the company, battalion, and higher levels. Indeed, maintaining embarkation readiness in garrison is foundational to embarkation planning. See MCRP 4-11.3G for more information on unit embarkation programs and further details to support surface, amphibious, and air deployment preparations and execution.

Storage and Shipping Containers

Often called QUADCONs [quadruple containers] and PALCONs [palletized containers], the infantry company will receive some allocation of standardized embarkation containers from the battalion, which directly affects what the company will bring and how it will organize and conduct business aboard ship. What is in these containers and how it is safely stored are initial concerns. Beyond these concerns is that, if properly planned, many of these containers can serve as shipboard storage and work spaces. For example, upon approval, an infantry company might choose to use some of its storage containers as armory spaces. In addition to storing armory gear, the infantry company will seek to have these containers embarked in such a manner that they are easily accessible as workspaces.

Packing Lists and Labeling

Proper packing and labeling of all embarked containers ensures accountability, assists in inspections, aids in embarkation, and ensures proper access upon stowage. The battalion S-4 distributes packing guidance and formats as part of the pre-embarkation process.

Security

It is normal for the ship to require and the COT to mount an internal guard force on LF cargo. How robust this guard is depends largely on the nature of the cargo being stored.

Weatherproofing

An amphibious environment is, by nature, a wet environment. Containers stored on exposed decks will be subject to sun and water and infantry companies need to carefully select what is stored and how it is stored accordingly. Containers on well decks are exposed to the water and spray generated by "wet well" operations in the well decks. Containers in "dry" areas may be temporarily stored elsewhere as cargo is moved around the ship. In sum, the infantry company should never assume that cargo will remain dry because it is in a container.

Hazardous Materials

Appropriately, ship crews ruthlessly address anything that poses a significant fire hazard to their ship and this scrutiny applies as much to hazardous materials as to electricity and other matters. During embarkation planning, infantry companies must identify hazardous materials to the S-4 and follow their guidance, in coordination with the CCO, on where and how to store such materials. Use of hazardous materials aboard ship, such as those used for vehicle maintenance, is also a source of concern and accessing, using, and restowing the materials requires coordination with the ship's crew.

Armory

One of the first questions requiring an answer during pre-embarkation is the method the infantry company will use to store and access weapons. There are two concerns: first, CSWs, armory gear, tools, and parts; second, personal weapons. Early ship visits should be arranged or information requests sent to that battalion concerning expected armory capabilities. If a ship's armory

spaces prove unsuitable for storage requirements, companies must plan for alternatives, to include procuring and bringing along such items as padlocks, using seals on certain armory spaces, and establishing an interior guard.

Communications Equipment

Communications equipment storage requires its own unique considerations that are similar to those experienced ashore: climate-appropriate storage spaces, security of sensitive communications equipment, and hazardous material handling in the form of batteries. More than many other types of equipment, communications gear requires cool and dry storage. This necessity is complicated because most amphibious ships do not have designed spaces set aside for this purpose. Like armory storage, communications storage needs to be weatherproof, secure, and easily accessible. An obvious technique is to combine armory and communications storage.

Vehicles

The number and type of vehicles potentially assigned to a company vary widely depending on the mission and their most likely means of employment. Vehicles represent one of the major items the company possesses that will end up going ashore as a stand-alone asset. The storage container holding the company's weapons may be buried deep within the ship because the container is not going ashore in an assault wave, but the radios are. On the other hand, company vehicles will be stowed in a manner that allows them to be placed upon appropriate landing craft per the landing plan. Consequently, the infantry company embarkation personnel must pay particular attention to the storage of company vehicles to ensure that such storage meets the access requirements mandated in the landing plan.

Because of their unique place in the load and landing plans, vehicles are often among some of the last items embarked. Company gunnery sergeants, in their embarkation roles, closely supervise the preparation, preventive maintenance checks and services (PMCS), labeling, and staging of the company's vehicles. Infantry companies should expect that the movement, staging, and loading of embarked unit vehicles present a significant endeavor. Since the standard is that each vehicle is ready to move at any time in the embarkation process, each company vehicle must have its own driver and assistant driver who must remain with the vehicle until embarkation is complete. Depending on the load and landing plans, vehicles are stowed in the well decks, vehicle-turning areas, or are sometimes "preboated" aboard landing craft.

Maintenance Assets

Companies do not normally possess the authority or resources to conduct their own maintenance. However, when required to do so, the infantry company must consider the needs and requirements applicable to their parts, tools, and the conduct of maintenance while embarked. A company tasked with maintaining a small boat capability represents the requirement to store parts and tools while conducting repairs and maintenance throughout embarkation. Properly planned and coordinated, storage containers can be used to embark maintenance assets and then become stand-alone workshops once underway.

Training Aids

If infantry companies do not bring particular items with them, they will not have them. Sometimes mission and storage limitations dictate hard choices. Regardless of whether embarking aboard amphibious shipping to conduct sustained, forward-deployed operations, or embarking for the purpose of moving immediately to an amphibious objective area, the company will have training requirements aboard ship and must prepare accordingly. Targetry, target building materials, target stands, sandbags, and silhouettes will not exist on ship unless the company brings them. Other items, such as white boards, publications, computer simulations, and other training products, require embarkation as well. For planning

purposes, it is safe to assume that designated classroom space aboard ships will be either nonexistent or in extremely high demand. Company commanders, as part of problem framing, determine the shipboard training requirements for the duration of embarkation and pass training guidance accordingly.

Troop Spaces

Traditionally, the design of most troop space aboard amphibious shipping was predicated on the assumption that embarked units would only be on board long enough to move from a staging area into a planned amphibious operation. While newer amphibious shipping takes into account embarked units conducting continuous operations over some months, spaces remain utilitarian vice comfortable; for general use, vice specific function; and highly compartmentalized so as to better survive battle damage. As a result, companies can plan to have their personnel spread throughout the ship—officers in one portion of the ship, SNCOs in another, NCOs and junior enlisted in a third, and office and work spaces in yet another. Further, communications are slower, meetings replace e-mails and phone calls, daily business takes longer, and things are harder to organize and accomplish. The company gunnery sergeant and an advance party should embark some time prior to the rest of the company, address all administrative requirements in coordination with the MAGTF TEO and with the ship's crew, and prepare to guide company personnel from the pier to their berthing areas.

Combat Rubber Raiding Craft Embarkation

Unlike companies that might plan to use helicopters or AAVs, infantry companies tasked with maintaining a small boat capability must pack and maintain their own form of transportation. The small boat company must work diligently with embarkation personnel from the battalion and the ship to ensure that space assigned for maintenance and storage of parts, combat rubber raiding craft (CRRC), and engines facilitate the requirements to build and inflate, stage, launch, recover, maintain, tear down, and restow small boats. As indicated, the small boat company possesses a significantly greater load plan footprint than any other infantry units do. It is important that the company clearly articulate and document its requirements to ensure they are met. The company must understand that, given the specialized nature of its equipment, the procurement of repair parts through the normal supply system is difficult at best and can be impossible while underway. Much of what a company anticipates needing must be embarked. Failure to do so could rapidly degrade the small boat capability to the point of mission failure. Figure 9-1, on page 9-12, illustrates loading and palletizing deflated small boats and engines.

Rehearsals

The rehearsal phase tests the feasibility of the landing plan, timing and sequencing of various operations, communications, and generally the combat readiness of participating forces. Rehearsals can be limited to squads or include entire MAGTFs and associated naval elements.

Operational Rehearsals

Since most amphibious operations preclude full scale rehearsals, company commanders can expect to participate in multiple rehearsals at the battalion level and higher, which sometimes require "cross-decking" to other ships. In the same manner, company commanders must make maximum use of available planning spaces to conduct such activities as CARs, rehearsals of concept, or mock-up exercises without troops. There is no excuse to not adequately rehearse impending missions and there are numerous effective rehearsal techniques that companies can use aboard amphibious shipping.

Call Away Rehearsals

The primary way the infantry company tests and refines its portion of the landing plan and debarkation timeline is to practice the call away. The

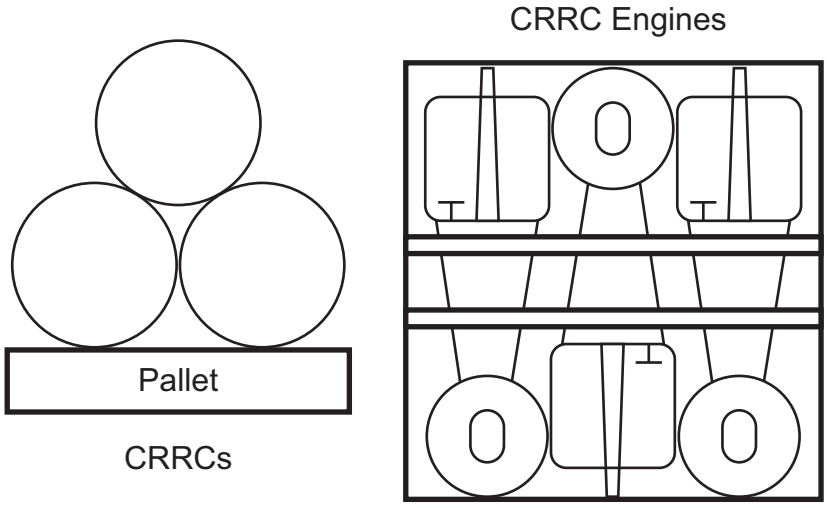

Figure 9-1. Combat Rubber Raiding Craft Palletizing.

call away refers to the calls made over the ship's public address system for designated serials to move to their designated mustering location/debarkation stations on the ship. The general steps the companies rehearse are the serial announcement, confirmation of manifests, equipment, weapons, and ammunition issue and test fire, and movement to the assault or landing craft. The process, involving hundreds of personnel is time consuming and difficult and requires as much rehearsal as possible.

Serial Announcement

When serials are announced over the ship's public address system, company personnel muster by serial with all gear and equipment at prearranged locations/debarkation stations, such as the hanger deck or ramp to the flight deck. The company should establish primary and alternate routes from berthing areas to the armory, muster point, and other destinations. Weapons and gear are issued prior to call away and the company must possess an adequate understanding of how long these processes take and plan and rehearse them accordingly.

Confirmation of Manifests

Upon arriving at the mustering area, combat cargo personnel organize and segregate the company by serial, verifying manifests in the process. Rehearsal of these processes will greatly accelerate and smooth execution. The company should already know which personnel belong to which serials and should self-organize in manifest order to ease accountability procedures.

Ammunition Issue and Test Fire

After confirming manifests, the serials receive their ammunition. Combat cargo personnel guide company personnel by serial to the test fire area of the ship. Test firing is abbreviated and generally consist of one or two rounds before serials are led back to their mustering areas.

Movement to Assault and Landing Craft

In accordance with commands from the ship and the debarkation schedule, combat cargo personnel lead serials from debarkation stations to the appropriate positions, which is usually the flight or well deck, to board their assigned aviation asset, assault, or landing craft.

Ship Rehearsals and Drills

Naval personnel conduct continuous training and drills while underway across all watches. Some drills necessitate embark unit participation, while others require nonengaged personnel to stand

clear. Ships and major amphibious elements publish specific SOPs regarding how different types of drills will occur. Some of the major rehearsals and drills that affect embarked units are general quarters, man overboard, and abandon ship.

General Quarters

The purpose of general quarters is to place the entire crew and ship in a state of readiness to meet either an external threat, such as enemy action, or an internal threat, such as a fire. All hatches and passageways are secured; ventilation may cease; and, since the purpose of the order is to compartmentalize the ship in case of damage, mobility is minimized. Other than some Marines who may participate in ship's defense, the normal place of duty for embarked troops during general quarters is their berthing areas where they can expect to remain for the duration of the drill or emergency.

Man Overboard

Upon sounding the man overboard alarm, all ship's crew and embarked personnel muster in their berthing areas where unit leaders establish positive accountability. The only personnel exempt from mustering in their berthing areas are key leadership and those on duty. A premium is placed on fast, expedient, and accurate accountability, and infantry companies should maintain berthing area rosters for this specific purpose. Embarked units report their accountability through the COT to the ship's CO. Personnel can expect to remain in their berthing areas until the drill is complete, the individual is found and retrieved, or until the CO deems it prudent.

Abandon Ship

As part of the embarkation procedure, embarked units will receive abandon ship training and briefings; learn the size, number, and location of lifeboats per unit; and establish lifeboat manifests. When manifesting, the company should endeavor to maintain unit integrity as much as possible and assign an SNCO or officer to each lifeboat to act as boat team commander. Company commanders and first sergeants should not serve in this capacity because their duties to account for the entire company and report to the COT and ship's CO will preclude them from adequately meeting the responsibilities of the boat team commanders. Upon the sounding of the abandon ship alarm, company personnel muster at their assigned lifeboat stations with a predetermined gear list, usually consisting of a water source, sunblock, cover, and chemlights.

Movement to the Objective Area

For the LF, the movement phase of amphibious operations is characterized by maintaining not only the combat readiness of vehicles, weapons, optics, and gear, but by also ensuring that Marines and Sailors remain proficient in their skills and competencies. Continuing actions during movement to the objective area are vital to the infantry company's combat effectiveness once ashore. Despite possible training and operating limitations placed upon the company while underway, company commanders still have a responsibility to ensure their company personnel, weapon systems, and equipment are ready and prepared for combat operations ashore.

Training

Commanders establish a training battle rhythm that uses the limited space aboard the ship and prevents complacency. The commander must ensure the company training plan is thoroughly coordinated with the ship's crew in order to reduce friction and enable successful training to occur as scheduled. Training schedule coordination and deconfliction occurs through the COT and ship's operations officer. As is the case at home station, successful training is well planned and scheduled early. Despite what may seem like many obstacles, training is still a function of a commander's creativity. Some training considerations are live fire and physical training as well as classroom instruction.

Live Fire Training

Live fire training aboard amphibious shipping normally occurs off the flight deck. This venue alone dictates deconfliction with the flight schedule. Further deconfliction at the amphibious group level must occur for the ship to ensure it sails within the formation in a manner that avoids hazarding other vessels with the effects of its small arms fire. Since time is necessarily short, targetry must be already built and staged for quick setup and breakdown. Cleanup and thorough foreign object and debris walk downs are essential tasks of the training unit. Live fire training normally entails a briefing to the ship's CO and typically includes—

- Training objectives.
- Timelines.
- Types of weapons and munitions.
- Scheme of maneuver.
- Surface danger zones.
- Safety personnel actions and locations.
- Communications plan.
- ORM.

Physical Training

Most physical training occurs at the squad or platoon level due to the lack of facilities and space. Even during times when the flight deck is not conducting operations, operating in that space remains difficult due to the many demands on it from other individuals and units. Company physical training plans should focus on exercises and workouts that do not require weights or large amounts of extra, specialized equipment. Companies should consider embarking gym mats which are useful not only for general exercise, but also for martial arts training.

Classroom Instruction

Classrooms or such suitable spaces are reserved through the COT in conjunction with the ship's operations officer. Due to size constraints of amphibious shipping coupled with the large numbers of personnel embarked, finding space to conduct classroom training may be challenging. Some ways to enhance opportunities are to—

- Rotate platoons through small classrooms.
- Use lounges in berthing areas.
- Use open air deck space in good weather.
- Coordinate with adjacent units for shared spaces.
- Use learning resource centers and ship's libraries.

Underway Vehicle Procedures

Vehicles will be stowed per the discussion earlier in this chapter. Moving vehicles is a time consuming and labor intensive process while the ship is underway. The TEO coordinates weekly maintenance periods, vehicle startups, and fueling. Adequate company representation must be present for these scheduled periods, since it will be unlikely that they will be repeated for individual units. If a company misses one of these regularly scheduled periods, it will generally need to wait for the next.

Shipboard Life Considerations

Life aboard amphibious shipping can be a very different experience from what Marines are traditionally accustomed. The Navy can drive daily routine to a large degree and it is essential for personnel to quickly assimilate to a new environment while still upholding the standards established and met on land. Company personnel require a basic understanding of this environment and its associated requirements in which they will often be living and operating for considerable periods. The scope of these considerations, covered in the following subparagraphs, span command relationships and personnel requirements, ORM and safety, and drills and rehearsals for the ship generally and specifically for the operations for which the company was embarked.

Command Relationships

It is important that all embarked company personnel understand that the highest authority aboard ship is the CO of the vessel. All aboard, regardless of Service, are subject to the CO's orders.

Inspections

There are many inspections to execute while underway. Berthing will regularly be inspected by the ship's XO and should additionally be inspected by the COT and unit leaders. Internal to the embarked infantry company, the company commander implements a regular inspection and maintenance program of weapons, vehicles, and equipment.

Hygiene

Because of the restricted living spaces in troop berthing, hygiene is an important issue. Unit leaders and corpsmen need to regularly check on the health of company personnel and the level of sanitation in their berthing. In addition to the inspections listed above, medical personnel need to play an active role in the prevention of disease: a quickly spreading virus could swiftly render a unit combat ineffective.

Water Usage

Because ships can only produce and store certain quantities of potable water at a time, all personnel practice water conservation. Embarked troops will find that showers often require a physical act of pushing a button to function. This encourages using only enough water to get wet, lather, and rinse. If the ship's ability to produce water is threatened by a malfunction or water levels simply drop too low, the ship's CO will ban use of the showers as well as all physical training, since not showering after physical activity would create hygiene issues.

Smoking

Smoking aboard ship is restricted to a few designated areas. It is prohibited at such times as during drills, in emergencies, when fueling landing craft and aircraft, and when conducting underway replenishments.

Messing

The ship publishes meal schedules. Depending on the size of the ship, meal schedules may be crew- and embarked unit-specific, down to mandated times by unit. Barring significant reason, these times are not adjusted. Therefore, many shipboard activities and training are scheduled around the chow hours because the demand of feeding so many people necessitates a strict schedule.

Laundry

Each company designates a laundry officer or SNCO to coordinate times and dates for the unit to wash its laundry—typically one day a week. Due to the industrial nature of the process, the company personnel should ensure they use strong mesh laundry bags and take care to mark all items of clothing.

Labor Requirements

The ship's CO and COT work closely together to combine the ship and embarked troops into one fighting unit. As part of the ship's company, embarked units take part in certain labor-intensive functions that serve the welfare of the entire ship. The duration and requirements differ depending on the task. Other than LF troops required to augment combat cargo personnel, who are generally detached for the duration of the deployment, personnel return to LF units after a period of time or for operations ashore. Some of the duties embarked personnel will have to augment include—

- Combat cargo.
- Guard force.
- Mess duties.
- Ship's store.
- Barbers.

Action

The following subparagraphs provide information on the various assault craft the infantry company may encounter and deck cycles for aircraft that inform the development of the landing plan.

Landing Craft, Air Cushioned

The landing craft, air cushioned (LCAC) is a high speed, nondisplacement landing craft well suited for use in conjunction with assault support aircraft for over-the-horizon movement. It can operate through surf zones and deliver its cargo well above the high water mark. Being designed to carry heavy loads, it is lightly armored and armed and is not planned for use with the initial assault waves. For more information on the LCAC see MCRP 3-31.1A, *Employment of Landing Craft Air Cushion (LCAC)*.

The LCAC is not constrained by most tidal conditions and hydrographic features, which makes it an ideal complement to other surface and air landing means. Although limited in the number of personnel it can carry without a passenger transport module on board, it complements the displacement landing craft utility well in transporting heavy loads ashore. Because the LCAC produces large volumes of sea spray, waterproofing of vehicles, mounted weapons systems, and mobile loads is vital.

Landing Craft, Utility

The landing craft, utility (LCU) is a versatile displacement craft that is capable of moving more personnel, vehicles, and cargo in one STS movement than the LCAC. It is considered the "work horse" of the AF. Although much slower than the LCAC, its ability to loiter, execute ship-to-ship and open ocean shore-to-shore transits thanks to crew messing and berthing makes it a valuable asset for use across the range of military operations.

Sea states and accurate hydrographical information about potential landing sites are critical to its employment. Although it possess no offensive combat capability, it has a high bow ramp and its steel construct provides a measure of protection against small arms fire. For more information on the LCU, see MCRP 4-11.3G or Navy Tactical Reference Publication 3-02.1.2, *Naval Beach Group Support Element Operations*.

Amphibious Assault Vehicles

The AAV moves the elements of the LF from amphibious shipping to the designated landing site. Possessing both offensive and defensive combat capabilities, having significant range, and being armored, it can conduct mechanized operations well inland once it gets ashore. The AAV's tracks enable it to navigate most tidal, hydrographic, and surf conditions. The AAV's slow rate of movement in the water coupled with the negative effects of sea state on crew and passengers makes them ill-suited for prolonged STS movements. Additional considerations specific to employment ashore are found in chapters 6 and 7. For more information see MCWP 3-13.

Helicopterborne Assault Considerations

Helicopterborne assaults along with the types of operations that the infantry company may conduct using this method of movement are addressed in chapter 6. The following subparagraphs focus on unique considerations that accompany the infantry company when it is using helicopters to conduct an amphibious operation from naval shipping.

Deck Cycle

The deck cycle is the time it takes to move, spot, load, launch, and recover aircraft on the flight deck. The biggest influences on deck cycle time are the number of deck spots and the type, model, series, and ranges of the aircraft. An infantry company lift and the aircraft required to lift it, attack, escort, and bump aircraft is too

large to enable simultaneous staging and launching. Company commanders must consider their ship's deck cycle when developing their schemes of maneuver ashore.

Mustering/Staging

Combat cargo personnel control the debarkation of all landing serials, regardless of debarkation means. For airborne landing serials transiting from their designated mustering locations/debarkations to a crowded and seemingly chaotic flight deck, accountability and immediate and complete compliance to orders from combat cargo personnel is critical. Unlike at an LZ, the infantry company will not control its own movement from the debarkation station.

Concurrent Air/Surface Operations

Company commanders should realize that during the creation of the landing plan, naval planners consider concurrent use of the flight deck and the well deck. Activities on one or both of these can impair the ability of either to function at peak performance. Sea state, wind direction, and safety all play a role. Waiting will be the most likely effect on the infantry company. The company may launch in surface craft early to allow for unrestricted flight operations later or vice versa.

Combat Rubber Raiding Craft Considerations

When an infantry company plans to use CRRCs to conduct the action phase of an amphibious operation, the primary concern is preparing, loading, and launching the craft in conjunction with all other activities taking place aboard the ship. The earlier boats can be prepared and staged the better. Most small boat operations occur in such a manner that operational requirements, such as a night insertion, functionally deconflict the CRRC launch from other amphibious activities. In those rare cases when this is not the case, company commanders must ensure that planners fully understand the length of time required to prepare and launch the boats. Figure 9-2 demonstrates the ideal staging and launching method—an empty well deck. In practice, small boat companies may have to stack and build boats around other vehicles and landing craft.

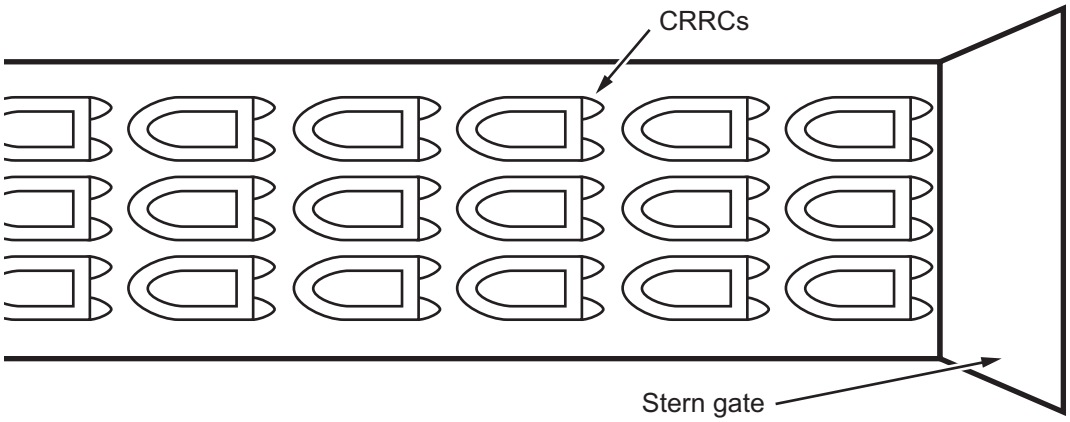

Figure 9-2. Combat Rubber Raiding Craft Staging.

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CHAPTER 10
STABILITY, CRISIS RESPONSE AND LIMITED CONTINGENCY, AND COUNTERINSURGENCY OPERATIONS

Stability operations is an overarching term encompassing various military missions, tasks, and activities conducted outside the United States in coordination with other instruments of national power to maintain or re-establish a safe and secure environment and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief. This chapter discusses the infantry company's roles and responsibilities in conducting stability operations. As discussed in chapter 1 and represented in figure 10-1, stability operations join offense and defense as inherent activities within all military actions that brings stability to unstable situations.

The infantry company will conduct stability operations in terms of ongoing activities, such as addressing the civil considerations inherent to METT-T. The company will also conduct specific, stability-type operations, such as FHA. Stability operations may be short-term responses to crisis or, occasionally, long-term developmental assistance. They may be permissive and nonviolent (such as supporting the Japanese tsunami disaster relief in 2011) or they may be nonpermissive and require significant combat (such as the Iraq invasion and counterinsurgency from 2003 to 2011).

The action arm for stability operations is CMO. The company conducts CMO with and through the interorganizational agencies. Whether conducting specific stability-type operations (such as training HN security forces) or stability activities (such as executing a refugee plan), the military end state for stability operations is a transition to civil authority. The infantry company's normal contribution to stability operations is security.

General Principles and Considerations

Experience in such operations as small wars, interventions, counterinsurgencies, and disaster relief has allowed Marines to identify the following imperatives that apply to stability operations and activities across a range of military operations:

- Manage information and expectations.
- Use the appropriate level of force.
- Learn and adapt.
- Empower the lowest levels.
- Support the HN.

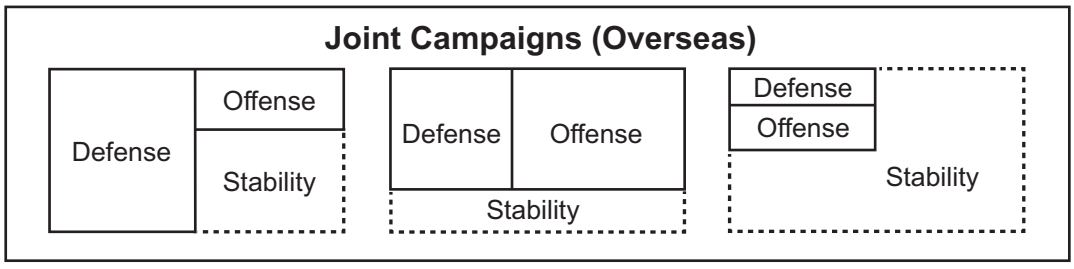


Figure 10-1. Stability, Crisis Response and Limited Contingency,

The infantry company faces numerous challenges in stability-related operations: varying threat environments, the likelihood of distributed employment across a large AO, balancing troop-to-task requirements. For example, within a company battlespace, one platoon may be providing fixed-base security, one platoon may be executing a security patrol to conduct civil engagements, and another platoon may be conducting a cordon and search with HNSF. With many competing tasks and requirements, company commanders must remain focused on their main effort. More than any other type of mission, stability operations tend to drive a diffusion of effort.

Stability operations require versatile, well-trained units and tough, adaptive commanders. The infantry company must be able to operate as part of a joint or multinational force, interacting continuously toward defined goals with partners, interagency and NGO representatives, contractors, and the HN. The company may often interact semi-independently, requiring a well-executed analysis of METT-T and areas, structures, capabilities, organizations, people, events (ASCOPE) to allow the company commander to build a coherent framework with which to execute the tasks assigned.

The end state for all stability activities is a level of order that enables a transition to civil authority. The infantry company most often provides security with a larger, more comprehensive approach in order to build a foundation for transitioning power to civilian control. When tasked and resourced to do so, the infantry company may support other agencies and organizations by performing specific tasks that support other functions, such as rule of law or governance and participation. For example, the company will most likely provide security to agricultural experts from the United States Department of Agriculture working to restore irrigation to a certain area; moreover, the company may receive equipment and training on how to help monitor these efforts.

Categories of Stability Action

Regardless of whether a stability operation is short or long term, it falls within three broad categories, which may or may not occur as sequential phases. The infantry company may find itself participating in only one particular aspect, such as initial response, before transitioning to civil authorities. The categories are—

- *Initial response*. First responders provide a safe, secure environment and attend to the immediate essential service needs of the local population.
- *Transformation*. Longer term efforts develop or re-establish enduring capability and capacity in the HN government.
- *Fostering stability*. Long-term efforts capitalize on capacity-building and reconstruction activities to enable sustainable development.

Principles of Stability Operations

The principles of joint operations apply to any military action in which the infantry company may participate. When conducting stability operations, it is prudent for the company commander to emphasize the following principles over others:

- *Objective*. Whether short or long term, the object of any stabilization effort is to achieve and maintain the stability necessary to meet the military end state. All military actions must move toward a clearly defined, decisive, and attainable objective.
- *Offensive*. Acting quickly, rapidly achieving understanding of the causes of instability, and seizing the initiative to mitigate them is key to stabilization efforts. Ceding the initiative to events or the threat creates vulnerability.
- *Mass*. Concentrating power at the decisive time and place is critical for stability success. The infantry company must be cautious about unnecessarily dispersing its power and resources, especially when there is a significant threat or when the company is called upon to participate in stability functions beyond providing civil security.

- *Economy of force*. Properly balancing offense, defense, and stability is crucial to ensuring that only minimal essential combat power is provided to secondary efforts. Company commanders should never assume that stability operations are secondary efforts.
- *Unity of command*. The stability and combat operations of the infantry company are best served and synchronized under a single commander with the proper authority to employ the forces at his/her disposal. While the presence of enablers, subject matter experts, and interorganizational agencies are possible if not likely, the infantry company should endeavor to unify their efforts—ideally by subordinating them to one commander as applicable.
- *Restraint*. Regardless of the threat or operational environment, the infantry company always seeks to apply overwhelming, but proportionate, force. While it is true that rules of engagement will be provided to the infantry company, the commander inculcates the personnel of the company with the principle of restraint to further the cause of stability not instability.
- *Perseverance*. Regardless of whether facing stability operations in a crisis response or nonpermissive environment or participating in development assistance over a period of years, the infantry company always takes the long view of stability actions. Throughout Marine Corps history, crisis areas often necessitate repeated operations: what occurred previously will directly impact what must occur now. A delicate balance is maintained between halfhearted or transitory engagement and creating a sense of permanence and dependency.
- *Legitimacy*. The actions of the infantry company must sustain the legitimacy of the operation, whether evacuating noncombatants, imposing an internationally sanctioned mandate, or supporting a government against an insurgency. The attitude of the populace and other observers to the battalion itself is less important than their attitude toward the legitimacy of its actions, the standing of the international body that directed its presence, or the HN government.

Stability Operations

The primary objective of any stability operation is stabilization of an unstable environment. The infantry company participates in the missions, tasks, and activities conducted to create that stability. It does so as part of a larger effort that normally provides or executes security-related tasks. The end state of any stability operation is to transition the military role to civil authority. The following actions drive successful stability operations:

- Provide a secure environment.
- Secure land areas.
- Meet the critical needs of the populace.
- Gain support from the HN government.
- Shape environment for interagency and HN success.

Stability Functions

According to MCDP 1-0, *Marine Corps Operations*, the Marine Corps participates in stability operations through the execution of five stability functions. These functions serve as a framework for HHQ to visualize the conduct of the stability actions in any operation, sequence the necessary activities within that operation, and develop appropriate priorities for those activities and resource allocation. The ground combat element and, in turn, the infantry company possess only a limited ability to conduct many of the stability functions on its own without significant augmentation. It is most successful in approaching them as an integral part of a MAGTF. The five functions are:

- Security.
- Foreign humanitarian assistance.
- Economic stabilization and infrastructure.
- Rule of law.
- Governance and participation.

Stability Tasks

Tactical units receive tasks. The execution of the five stability functions depends on units executing

tasks that enable those functions to occur. There are six stability tasks that enable the stability functions (see fig. 10-2). In the same manner that the stability functions relate to each other, so do the stability tasks. For example, it is difficult to establish the rule of law without security, but security is also dependent upon the rule of law. Actions pursuant to any one task inevitably create related effects in another; planned and executed appropriately, carefully sequenced activities complement and reinforce these effects. For example, a company will not focus most of its assets or time on supporting economic and infrastructure development if it faces a highly lethal insurgency; rather, it will direct efforts and time toward establishing civil security (maintaining security at an acceptable level). These tasks apply across a range of military operations and could as easily be executed by the infantry company in a conventional conflict as they could be in a domestic natural disaster. The following subparagraphs discuss the six stability tasks.

Enable Civil Security

Enabling civil security involves providing or assisting in the provision of a safe and secure environment for the HN and its population from internal and external threats. Enabling civil security can apply to a diverse set of activities that

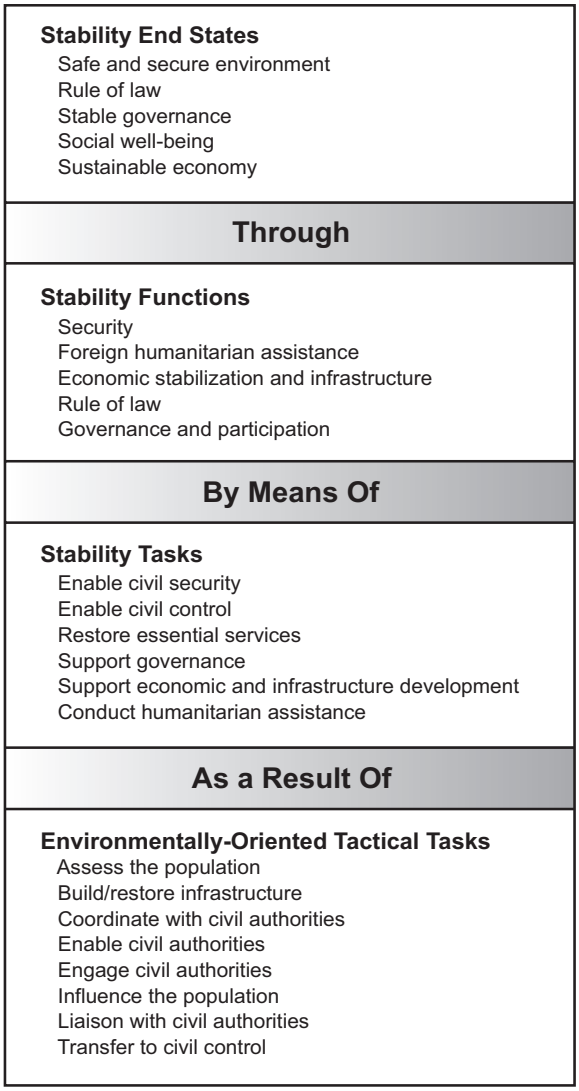


Figure 10-2. Stability End States to Tactical Tasks.

range from enforcing peace agreements to conducting disarmament, demobilization, and reintegration. Such activities include providing security through transition and developing a HNSF. Enabling civil security is resource intense, requiring extensive amounts of personnel and material. Civil security is a necessary precursor to success in achieving other stability tasks. Infantry companies can specifically expect the civil security mission to include the following actions:

- Enforce cessation of hostilities, peace agreements, and other arrangements.
- Advise, mentor, and train HNSF.
- Conduct disarmament, demobilization, and reintegration.
- Conduct border control, provide boundary security, and monitor freedom of movement.
- Establish and support identification programs.
- Protect key personnel and facilities.
- Clear explosive and CBRN hazards.

Enable Civil Control

Enabling civil control supports the rule of law and civil security by providing or supporting the provision of effective judiciary, police, and corrective systems. It encompasses the key institutions necessary for a functioning justice system, which include police, investigative services, the prosecutorial arm, and public defense. This task targets internal threats that manifest as insurgencies, subversive elements within the population, organized crime, or general lawlessness. The infantry company must be ready to execute the following activities, which are associated with enabling civil control:

- Establish public order and safety.
- Assist in establishing an interim criminal justice system.
- Support law enforcement and police reform.
- Support public outreach and community rebuilding programs.

Restore Essential Services

Restoring essential services consists of immediate efforts focused on protecting and supporting the establishment or restoration of basic civil services—food, water, shelter, and medical—until a transition to civil authority occurs. In the aftermath of major armed conflicts and disasters and during many stability operations, military forces support efforts to establish or restore the most basic civil services to sustain the population until local civil services are restored (see fig. 10-3 on page 10-6). These efforts typically include providing or supporting HA, providing shelter and relief for dislocated civilians, and preventing the spread of epidemic disease. Unless they receive specific skill set augmentation, infantry companies usually support these efforts with labor, security, local coordination, and civil engagement. A company commander can expect to support the following activities:

- Provision of essential civil services.
- Assistance to dislocated civilians.
- Famine prevention and emergency food relief programs.
- Nonfood relief programs.
- Human right initiatives.
- Public health programs.
- Education programs.

Support Governance

Military forces support governance by helping to shape the environment necessary to restore public administration and public services through a legitimate, functional, effective system of political governance. The support provided by military forces in the areas of civil control and civil security enables other partners to develop an open political process, a free press, a functioning civil society, and legitimate legal and constitutional frameworks. An infantry company must be ready to execute the following actions, which are associated with supporting governance:

- Support transitional administrations.
- Support development of local governance.
- Support anticorruption initiatives.
- Support elections.

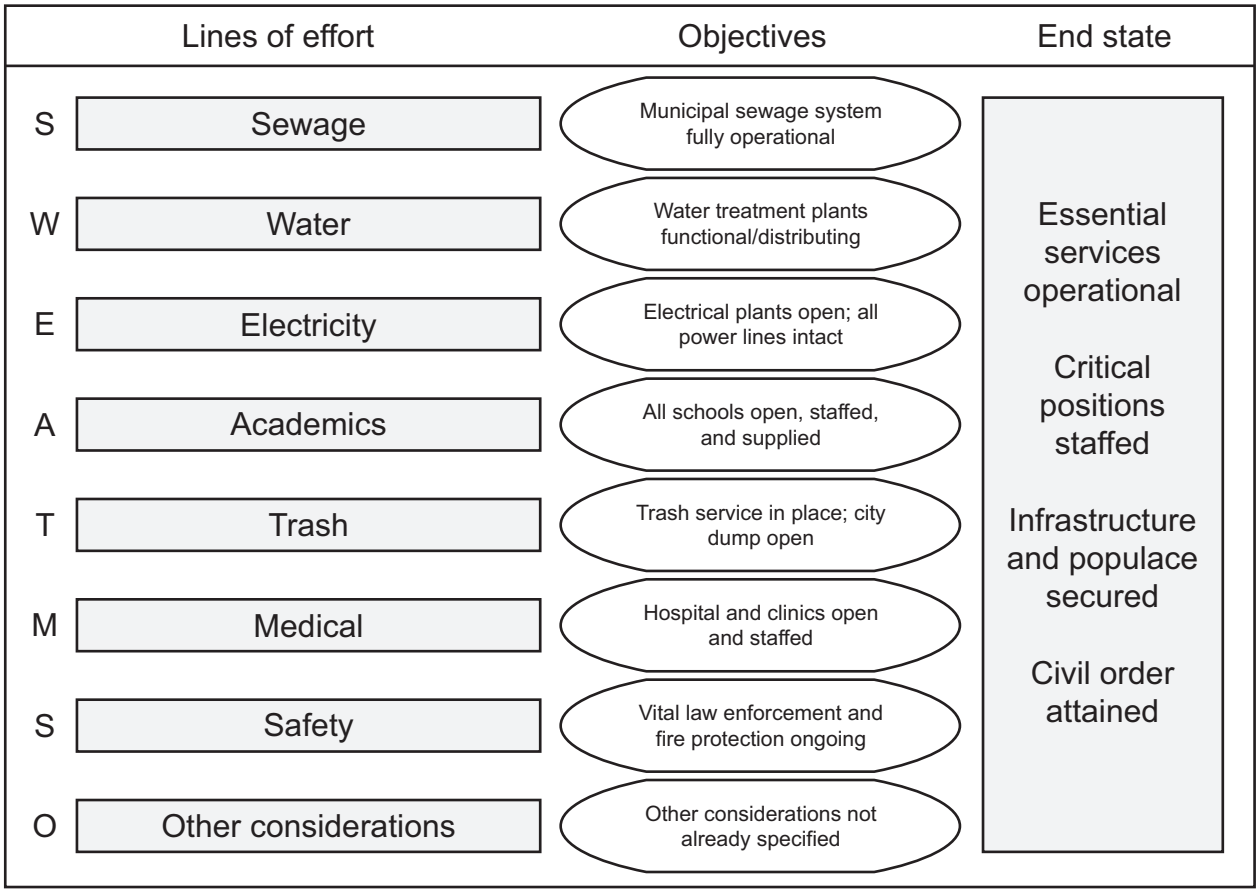


Figure 10-3. Essential Services Lines of Effort.

Support Economic and Infrastructure Development

Economic and infrastructure development consists of military support of mid- and long-term construction and engineering efforts focused on transportation, telecommunications, energy, and other public services. This level of effort is different from that required to restore essential services, which is an immediate and short-term endeavor and requires some basic level of security and rule of law. The infantry company supports economic and infrastructure development in four ways:

- Enables civil security and civil control through active participation in operations and/or by supporting the HNSF.
- Serves as a sensor in providing data to determine economic and infrastructure development needs in the AO.
- Serves as a collector for assessments regarding the effectiveness of economic and infrastructure projects.
- Possesses a limited capability to employ funds and resources in support of HHQ-declared economic and infrastructure goals.

Conduct Humanitarian Assistance

Military forces conduct HA in short-term emergency crises, during other operations, or in long-term development assistance by providing or supporting the provision of access and delivery of basic needs—water, food, shelter, sanitation, and health services. The task is deliberately broad as delivering HA is one of the most common stability tasks that occur across a range of military operations, whether conducting a stability-type operation (disaster relief) or responding to an earthquake during conventional operations or

flooding in a COIN operation. The infantry company supports this task in the following ways:

- Providing security.
- Providing personnel.
- Assisting in determining need and assessments.

Environmentally-Oriented Tactical Tasks

The environmentally-oriented tactical tasks listed in appendix D enable the execution of the stability tasks. The company may receive these tactical tasks from HHQ or, more likely, it will choose to use these tactical tasks to enable its platoons and squads to execute actions and activities that fulfill the company's larger mission. The following are environmentally-oriented tactical tasks:

- Assess the population.
- Build/restore infrastructure.
- Coordinate with civil authorities.
- Enable civil authorities.
- Engage the civil authorities.
- Influence the population.
- Liaison with civil authorities.
- Transfer to civil control.

Civil-Military Operations

Civil-military operations are the activities of a commander that establish, maintain, influence, or exploit relations between military forces, governmental and nongovernmental civilian organizations and authorities, and the civilian populace in a friendly, neutral, or hostile operational area in order to facilitate military operations to consolidate and achieve operational US objectives. Civil-military operations may include performance by military forces of activities and functions normally the responsibility of the local, regional, or national government. These activities may occur prior to, during, or subsequent to other military actions. They may also occur, if directed, in the absence of other military operations. Civil-military operations may be performed by designated civil affairs personnel, by other military forces, or by a combination of civil affairs and other forces.

Civil-military operations is the action arm of stability operations. For stability functions and tasks to occur, the infantry company conducts CMO. The company will often engage and coordinate with civic, government, and religious leadership as well as with the populace itself. Civil-military operations build and use relationships with people, governments, and NGOs to facilitate tactical tasks and military objectives and enhance the effective and thoughtful use of combat power. Civil-military operations are not the realm of civil affairs personnel alone. Civil affairs personnel may support infantry companies, but will most likely work at the battalion level and above. Therefore, CMO remains a commander's responsibility and, as in the case of IO, all members of the company can and will execute CMO efforts.

Civilian populations, organizations, and leadership add considerable variables to the already chaotic and uncertain battlefield environment. Since the actions of many of these elements can only be influenced rather than controlled, company commanders seek to mitigate this unpredictability through well-thought-out CMO plans. When planning CMO actions, company commanders should consider the following:

- Actions that generate and further stability.
- Actions that minimize population interference with company operations while enhancing the legitimacy of friendly forces.
- Actions that isolate the enemy from the population and put additional pressure on their operations.
- Actions that identify and coordinate acquisition of local resources.
- Actions that assist the company in meeting legal obligations to the local population.
- Actions that analyze the CMO aspects and implications of current or planned operations.
- Actions that gain and maintain situational awareness of the civil environment.

Conduct of Civil-Military Operations

Like IO, intelligence gathering, and similar functions, the company ensures that reconnaissance and assessment of the civil environment is part of every operation. In so doing, the company commander can quickly gain a baseline concept of the "normal" civil environment, rapidly recognize sources of instability, and identify opportunities to address them. This generality applies equally to a range of operations, from discovering and handling civilians in a conventional conflict to monitoring the effects of a formal peace agreement in a peacekeeping operation.

Civil-Military Operations Mission-Essential Tasks

The core CMO mission-essential tasks (METs) are those primary tasks that Marine Corps forces, to include the infantry company, must be fully capable of planning, supporting, executing, or transitioning through, with, or by outside factors to mitigate or defeat civil threats. As stated, the commander is ultimately responsible for conducting CMO, but, in most cases, the infantry company must receive resources enablers, such as the following, to do so:

- Civil affairs personnel.
- PA.
- Engineers.
- Health service support (HSS).
- Transportation units.
- Military police.
- MISO.

The CMO METs are discussed briefly below. For further information see Navy Marine Corps Instruction 3500.108, *Marine Air-Ground Task Force (MAGTF) Plans Training and Readiness (T&R) Manual*; MCWP 3-33.1, *Marine Air-Ground Task Force Civil-Military Operations*; and MCRP 3-33.1A, *Civil Affairs Tactics, Techniques, and Procedures*.

Facilitate Populace and Resources Control

The infantry company participating in population and resources control assists HN governments or de facto authorities with retaining control over their population centers to preclude complicating problems that may hinder mission accomplishment. Populace and resource control measures seek to identify, reduce, relocate, or access population resources that may impede or otherwise threaten success.

Populace control provides for security of the populace and mobilization of human resources. It denies the enemy access to the populace or the ability to recruit from the populace. It also reduces the effectiveness of enemy agents and facilitates their detection by friendly forces. Resources control regulates the movement or consumption of materiel resources, mobilizes materiel resources, and denies materiel to the enemy. Examples of populace and resources control include:

- Curfews.
- Restricting movement, such as through obstacles and barriers or entry control point/vehicle checkpoints.
- Biometrics and identification cards.
- Ration controls.

Facilitate Foreign Humanitarian Assistance

The purpose of FHA is to relieve or reduce the results of manmade or natural disasters and other endemic conditions, such as disease, hunger, or privation, that might present serious threat to life or loss of property. It encompasses short-range programs aimed at ending or alleviating human suffering. It supplements or complements the efforts of the HN civilian authorities or agencies that have the primary responsibilities for providing relief. The guiding principle is to do only what civilian authorities or humanitarian relief organizations cannot do or to do what is mission essential. Foreign humanitarian assistance may include relief supplies or logistical support to FHA operations. Infantry company participation normally includes providing security and personnel.

Facilitate Nation Assistance

Nation assistance is civil or military help (other than FHA) provided to a foreign country during peacetime, crises or emergencies, or war. Such operations are normally part of a national- or theater-level long-term engagement strategy and occur through the auspices of the appropriate US ambassador's country plan. Infantry companies normally support nation assistance by participating in military training or providing security to medical, dental, or engineering-related projects.

Manage Civil Information

Managing civil information relates to information and intelligence collection, normally through application of ASCOPE; it does not relate to IO. The infantry company participates in gathering and managing civil information by conducting civil reconnaissance, providing information in accordance with HHQ tasks and processes, and interorganizational agency coordination.

Facilitate Support to Civil Administration

Support to civil administration helps continue or stabilize management of a foreign nation's civil structure by a governing body. It assists an established government or establishes military authority over an occupied population. Support to civil administration is often managed at levels above the infantry company. The company's participation often occurs in such ways as providing security, conducting assessments, or advising HNSF.

Stability Operations Planning Considerations and Tools

Planning Considerations

Stability operations at the infantry company level require specific considerations for planning, organizing, and training before and during combat operations. Extensive planning will occur at levels above the company, but company commanders are responsible for detailed planning in their areas of operations. Training before deployment will still focus on small unit tactics and individual skills; however, Marines must also train to understand, consider, and execute CMO in support of stability.

Task Organization

Stability operations, especially if the focus of the mission, often require significant dispersion of the infantry company. Company commanders should include a relative combat analysis as part of problem framing and COA development—troop to task is part of this process. In doing so, the company commander seeks to develop an understanding of what capabilities the rifle platoons need for effectiveness. Company commanders may find that the requirement to increase the lethality, flexibility, and self-sufficiency of the rifle platoons (through augmentation with CSWs, for example) dictates weapons platoon employment. Company commanders may have to weigh risk: Does the benefit of additional maneuver elements outweigh the threat posed by having less than desired combat power in each of those elements or vice versa?

Company commanders can therefore employ the weapons platoon as a maneuver element, disperse it across the rifle platoons, or retain the capabilities at the company level, weighting company operations with weapons platoon assets as needed. If conducting a RIP during an ongoing operation, commanders consider how the currently engaged company is employing its weapon platoon. The company commander should also seek to understand the reasoning behind the current method of employment before considering changing or adopting it.

Dispersion of the company also results in a greater need for self-sufficiency in terms of material, equipment, and personnel resources. Often, this augmentation is most needed in command and control, intelligence, and logistics warfighting functions. Table 10-1, on page 10-10, lists types of assets that the company commander may require when conducting stability operations. While these might not all be available at any given time, they do represent the types of assets company commanders will likely require.

Table 10-1. Company Task Organization Considerations.

Organic	Nonorganic
Vehicle mechanics	Reconnaissance unit/SF units
Messmen	CI/HUMINT exploitation team
Armorers	Military working dogs
Communications/data Marines	Combat camera
CMCC manager	Explosive ordnance disposal
JTAC	Army 120-mm mortars
TACP	Federal intelligence agencies
Drivers (HMMWV, 7-ton, MRAP)	Law enforcement professionals
Logistical support (supply)	Radio battalion
Medical officers	Interpreters
Intelligence analysts	Combat engineers/heavy equipment
	Communications/data Marines
	Shock trauma platoon
	Satellite communications technician

Legend
CMCC classified material control center
HMMWV high mobility multipurpose wheeled vehicle
MRAP mine-resistant, ambush-protected
SF special forces
TACP tactical air control party

Planning Horizons

The company must integrate the planning horizons of the battalion into their own long- and short-range plans. More so than in the offense and defense, the company can envision the desired stability end state some weeks or months in the future. This planning horizon allows the company commander to assess operations and modify them so that progress continues. Failure to establish a long-range plan within which short-term planning occurs will leave the company constantly reacting to events and failing to achieve stability.

Unity of Effort

As planning begins, engaging and using HN and US civilian partners and stakeholders are critical to ensuring a unified plan with support and agreement from all partners.

Understand Root Causes

Understanding root causes is more than merely listening to the grievances of the people. It is the willingness and ability to separate and comprehend causal and systemic factors and determine when and how to address those problems. If a particular village lost its water service, the immediate causal factor may be as simple as an unrepaired supply pipe. However, the reason the pipe remains unfixed may have to do with priorities being set at the water utility, which might be tied into corrupt officials, party politics, or tribal allegiances. It is the task of company commanders to understand the depth of the problem and then make decisions on how to help solve it given the resources available.

Secure the Population

Stability operations are about bringing order to an unstable situation—basic security is a fundamental aspect of stability and the task in which the company is most likely to participate. Regardless of the nature of the operation, ensuring that friendly forces have a monopoly on force is a critical aspect of stability.

Enhancement of the Legitimacy of the Host Nation Government

The end state of every stability operation from FHA to COIN is a transition to civil authority. The infantry company must avoid putting an HN "face" on operations and activities, and endeavor to create or re-establish real capacity. This prospect may be short term or long term, but a coherent, attainable, building block plan is necessary for success.

Patience

There is no decisive battle in stability operations. Often, it takes years to create an environment in which an HN government can effectively govern its people and defend itself. Infantry companies must understand the difference between "good" and "good enough." They must possess the training and maturity to recognize that many nations and cultures can achieve success, deliver results, and execute legitimate governance without mimicking and mirroring the way those things might occur in the United States.

Secure Critical Infrastructure

Regardless of the level of conflict in which the infantry company finds itself, planning includes securing and endeavoring to retain the functionality of critical infrastructure, such as basic utilities. Critical civilian infrastructure also includes governmental, societal, and culturally sensitive sites.

Win the Information War

Not surprisingly, stability operations and CMO are closely related to IO in that they leverage each other and frequently share resources, assets, and agencies. Every CMO action has potential IO impacts and vice versa. To counter threat narratives and/or meet the information needs of the population, coordination and synchronization of IO and CMO actions are critical as is mutual feedback and assessment. In setting up the company COC planning cell's processes, procedures, and briefing methods, company commanders should ensure they aid, assist, and enable IO and CMO personnel to work together and share information.

Intelligence Preparation of the Battlespace and Stability Operations

The IPB process remains equally important in supporting planning, decisionmaking, targeting, and assessment in stability operations. In conducting IPB within stability operations, the company commander and company intelligence specialist consider the effects on civilians, of the environment on the population, and on interconnected systems.

Amplified Importance of Civil Considerations

When conducting IPB in support of stability operations, the societal component of the operational environment is at least as important as traditional terrain and threat analysis. Within the context of problem framing and the company's task and purpose, the company commander must provide the company intelligence specialist and CLIC with guidance on how to weight their IPB efforts. When analyzing civil considerations, the company considers ASCOPE. Considered completely, ASCOPE increases the company's understanding of the environment in terms of societal relations, infrastructure, capacity, and resources (ASCOPE is discussed in detail later in this chapter). Such an analysis provides baseline data for assessments of company operations and efforts. Table 10-2, on page 10-12, lists significant terrain considerations often taken into account when addressing civilian considerations.

Effects of the Environment on the Population

The second step of IPB (describe the battlespace's effects) helps commanders understand how the environment enhances or degrades friendly and enemy forces and capabilities. Within the context of stability operations, company commanders must also understand how the environment supports the population. For example, while it is good to know that the heat in the

Table 10-2. Significant Terrain Characteristics Common to Counterinsurgency Operations.

Forms and Functions	Construction and Placement	Military Aspects of Terrain (KOCOA)
Cores Industrial areas Toxic industrial material production and storage facilities Standard signs and markings for toxic chemicals Outlying high-rise areas Residential areas and shantytowns Commercial ribbon areas Forts and military bases Broad urban patterns Types Satellite Network Linear Segment Dominant or central hub (if any) Area covered (square miles) Street patterns Basic types Radial Grid Irregular (planned and unplanned) Variations Rayed radial ring Contour forming Combined Widths	Construction Mass or framed Light or heavy clad Material (dirt, wood, stone, brick, cinder block, concrete, steel, and glass) Density and thickness (roots, floors, and interior and exterior walls) Load-bearing walls and columns Height (floors) Doors, windows, fire escapes, and other openings Interior floor plan (including crawl spaces, elevators, and stairs) Placement Random Close, orderly block Dispersed Ownership	Key terrain Landmarks Buildings of cultural, social, political, historical, or economic significance Observation and fields of fire Smoke (fire), dust (explosions), and flying debris Rubble Engagement ranges (including minimum safe distances and backblast factors) and obliquity/angles (ricochets) Elevation and depression considerations Lasers and reflective concerns Cover and concealment Building protection Weapon penetration (single shot and multiple rounds) considerations Rubble and vehicles Obstacles Rubble and vehicles Steep embankments Medians Inadequate bridges and overpasses (destroyed, weight-restricted, or narrow) Tunnels and underpasses (destroyed or narrow) Mines and roadside IEDs Masking of fires Burning buildings or other fire hazards Rivers and lakes Avenues of approach (mobility corridors) Airspace Surface Suprasurface Subsurface

AO reduces enemy operations, it is also important to know that the heat drives civilian activity late into the night with corresponding late mornings. This information in turn allows the company commander to make choices about when to conduct certain types of operations. An early afternoon sweep will catch most people at home; whereas, an early morning sweep will catch most people in bed.

Principle of Interconnected Systems

When company commanders analyze the battlespace in terms of civilian considerations, they must appreciate the interactions and reactions within the whole. Certainly, infantry companies approach the enemy holistically as well: the enemy's operation; their systems, capabilities, and resources; and their vulnerabilities. Commanders must understand how complex civil societies can be not a cause for paralysis, but a stimulus for encouraging the company to analyze the societal portion of the battlespace carefully and to take into account possible second and third order effects when planning operations. Table 10-3 lists societal considerations that company planners should address.

Stability Operations Tools

The elements of the infantry company leverage their ability to interact with the local population when conducting such activities as patrols, census operations, checkpoints, key leadership engagements, or interaction. During all such activities, the infantry company can gain information through

active and passive means, determine the tenor of the community (atmospherics), identify key leaders and trusted agents, and collect data that supports the planning process for future operations. All these may be considered tools of CMO and stability operations. Some others for specific consideration are ASCOPE, district stabilization framework, and CMO center.

Table 10-3. Societal Considerations.

Population Demographics	General population size Village Town City Metropolis Megalopolis Group size based on race, age, sex, political affiliation, economics, religion, tribe, clan, gang, criminal activities, or other significant grouping Significant US or coalition populations Distribution, densities, and physical boundaries and overlaps Majority, minority, and dominant groups Increasing or decreasing migration trends Dislocated civilians NGOs Local National International Languages (distribution, dialects, relationship to social structure) Educational levels and literacy rates Crime rates Birth and death rates Labor statistics and considerations Skilled and unskilled Imported and exported Unemployment Standard wages and per capita income Workday and workweek norms
Health	Diseases Nutritional deficiencies Local standards of care Pollution and environmental hazards (air, water, food, and soil) Health workers (types, numbers, and degree of skill)
History	General and for a specific group Internal or external Recent conflicts Relationship with allies and other participating multinational forces Applicable international treaties Status-of-force agreements Antagonists/protagonists Heroes Events, facts, and dates considered important or celebrated Urban area's historical importance

Table 10-3. Societal Considerations. (Cont'd)

Leadership and Prominent Personalities	Identification, location, and prioritization of influential leaders (exploitation, evacuation, protection, etc.) Affiliation (ethnic, religion, military, government, industry, criminal, or entertainment) Education attained Organization and distribution of power Associations among different leaders and groups
Ethnicity and Culture	Values, moral codes, taboos, and insults (verbal and nonverbal) Attitudes toward age, sex, and race (including same-sex interaction) Role of the clan, tribe, or family Biases between ethnic groups Privacy and individuality Recreation, entertainment, and humor Fatalism or self-determination Exchanges of gifts Displays of emotion Lines of authority Dating and marriage Greetings, leave-takings, and gestures Visiting practices Alcohol and drug use Important holidays, festivals, sporting, or entertainment events Eating and dietary practices Significance of animals and pets Urban-rural similarities and differences Driving habits Clothing
Religion	Sects, division, and overlaps Religious biases and problems Relationship and influence on government, politics, economics, and education Impact on ethnic and cultural beliefs Key events or celebrations (daily, weekly, monthly, or annually) Funeral and burial practices

Table 10-3. Societal Considerations. (Cont'd)

Government and Politics	Present and past forms Organization and powers (executive, legislative, judicial, and administrative divisions) Scheduled elections and historical turnouts Degree of control over the population Identification required Border crossing procedures Relations with US or multinational governments, national government, and criminal elements Political factions and boundaries Political traditions Grievances Censorship Nepotism and other clan, tribal, or social ties Civil defense and disaster preparedness (organization, plans, training, equipment, and resources) Legal system System of laws Applicable treaties Courts and tribunals Procedures Records (birth and deeds) Property control Monetary system (formal and informal) Domestic and foreign trade Taxation and tariffs Customs requirements Rationing and price controls Economic performance and contribution to gross national product Economic aid Perception of relative deprivation Trade unions Competition with the black market and organized crime

Areas, Structures, Capabilities, Organizations, People, Events

The mnemonic ASCOPE provides a tool for the company to assess the civil environment in terms of its capacity and means to help, hinder, or affect military operations. It also provides insight into the effect of military operations on civil considerations in the following ways:

- *Areas*. The analysis of areas refers to key localities or aspects of the terrain within a battlespace that are not normally considered militarily significant, such as locations of government centers; political boundaries; social, religious, or criminal enclaves; agricultural and mining regions; and traditional trade routes.
- *Structures*. Studying structures includes an analysis of the location, function, capability, and application of existing civil structures, such as warehouses, schools, irrigation pump stations, mass media stations, utilities, and cultural sites.
- *Capabilities*. The study of capabilities looks into what exists or is required to sustain the populace and infrastructure, including public administration, public safety, emergency services, or food distribution, and resources and services that can be used or contracted to support the military mission. Such support may include interpreters, construction materials, and heavy or transport equipment.
- *Organizations*. The company should identify organized groups that may or may not be affiliated with government agencies. Examples include religious, fraternal, nationalistic, and political entities; community watch groups; and NGOs.
- *People*. The study of people includes all civilians that the infantry company can expect to encounter in the AO as well as those outside the AO but in the AOI, whose actions, opinions, or political influence can affect military operations. Examples include all local nationals, civil authorities, key leaders, expatriates, contractors and foreign employees, and the media.
- *Events*. The company must consider all civilian events that may affect military operations. Examples include religious/national holidays, harvests, elections, and recent conflict.

District Stability Framework

The district stability framework (DSF) tool assists the company commander in creating stabilization plans, identifying sources of instability, and supporting stabilization efforts. As a planning and execution tool, DSF helps users to identify local sources of instability; prioritize them; and design, monitor, and evaluate the execution of programs and activities to address them. With such knowledge, company commanders can better plan, more wisely allocate resources, and conduct operations that are more effective. While more information on DSF is located in MCWP 3-33.1 the basic steps are—

- *Situational awareness*. Situational awareness is gained by viewing the circumstances through four lenses: operational environment, cultural environment, local perceptions, and stability/instability dynamics. The primary input of situational awareness comes from the company's IPB and the civil considerations.
- *Analysis*. Analysis involves using the understanding gained through planning and situational awareness to identify potential areas of instability, their causes, the desired effects (tied to conditions and the objectives), and the MOE and MOP for assessing those effects. A key output of analysis is determining what actual sources of instability are important and relate to successful mission accomplishment. Grievances and problems that might be important during a long-term development assistance mission are unlikely to be important or even addressed in a short-term crisis response situation.
- *Design*. In the design phase of DSF, the company prioritizes and synchronizes stabilization activities. It focuses on the sources of instability that it has chosen to address and has placed into a tactical stability matrix. This process

starts by brainstorming potential activities that will address each of the systemic causes of the sources of instability. These ideas are then screened and refined in light of the mission and resource availability.

- *Monitoring and evaluation*. Like all assessment, monitoring and evaluation is directly tied into planning, execution, and decisionmaking. The company uses assessment tools (see MCWP 3-33.1) to manage programs and help track output and impact of individual activities.

Civil-Military Operations Center

A CMO center is an ad hoc organization established by commanders to assist in the coordination of activities of military forces and US Government agencies, NGOs, HN government, and the local civilian population. A CMO center may be a permanent or temporary organization. It can be used for functions, such as the following:

- Providing services to the local population, including adjudication of claims, project and contractor meetings, and issuance of identification documents/cards.
- Providing a venue for meetings between local government and military personnel.
- Enhancing and encouraging the coordination of activities among military personnel, NGOs, HN government, and US Government agencies.

Assessing Stability Tasks

Assessment is the continuous monitoring and evaluation of the effectiveness and progress of any particular effort, endeavor, and operation against the desired end state of the company commander. In short, assessment answers those basic questions regarding whether the company's efforts are making progress toward mission accomplishment: If it is not making progress, why not, and what must be done differently?

As with all other operations, the infantry company constantly assesses its success in stability tasks and activities. The types, methodology, and processes of conducting assessment at the company level are discussed thoroughly in chapter 2. The following are examples of useful indicators to create MOEs and MOPs when addressing civilian considerations and stability operations:

- *Acts of violence*. Numbers of attacks, friendly/HN casualties.
- *Dislocated civilians*. Dislocated civilian is a broad term primarily used by the Department of Defense that includes a displaced person, an evacuee, an internally displaced person, a migrant, a refugee, or a stateless person. The number, population, and demographics of dislocated civilian camps or the lack thereof are an indicator of overall security and stability. A drop in the number of people in the camps indicates an increasing return to normalcy. People and families exiled from or fleeing their homes and property and people returning to them are measurable and revealing.
- *Human movement and religious attendance*. In societies where the culture is dominated by religion, activities related to the predominant faith may indicate the ease of movement and confidence in security, people's use of free will and volition, and the presence of freedom of religion. Possible indicators include the following:
  - Flow of religious pilgrims or lack thereof.
  - Development and active use of places of worship.
  - Number of temples and churches closed by a government.
- *Presence and activity of small and medium-sized businesses*. When danger or insecure conditions exist, these businesses close. Patrols can report on the number of businesses that are open and how many customers they have. Tax collections may indicate the overall amount of sales activity.
- *Level of agricultural activity*. Answers to the following questions are indicators:
  - Is a region or nation self-sustaining or must life-support type foodstuffs be imported?

  - How many acres are in cultivation? Are the fields well maintained and watered?
  - Are agricultural goods getting to market? Has the annual need increased or decreased?
- *Presence or absence of associations*. The formation and presence of multiple political parties indicates more involvement of the people in government. Meetings of independent professional associations demonstrate the viability of the middle class and professions. Trade union activity indicates worker involvement in the economy and politics.
- *Participation in elections*. Such participation is an indicator of progress, especially when insurgents publicly threaten violence against participants.
- *Government services available*. Examples include the following:
  - Police stations operational and police officers present throughout the area.
  - Clinics and hospitals in full operation and whether new facilities sponsored by the private sector are open and operational.
  - Schools and universities open and functioning.
- *Freedom of movement of people, goods, and communications*. This is a classic measure to determine if an insurgency has denied areas in the physical, electronic, or print domains.
- *Tax revenue*. If people are paying taxes, this can be an indicator of HN government influence and subsequent civil stability.
- *Other indicators*. Other indicators include industry exports, employment/unemployment rate, availability of electricity, and specific attacks on infrastructure.

Crisis Response and Limited Contingency Operations

The ability of the United States to respond to crises around the world promotes regional security. Crisis response and limited contingency operations may arise during or because of other operations. Military units may respond unilaterally or as part of a larger interagency or multinational effort. Many of the missions associated with crisis response and limited contingency operations, such as disaster relief and FHA operations, do not necessarily require combat but may require basic security and FP measures. However, these types of events might occur in the midst of offense, defense, or stability operations as well, requiring a balance of combat preparedness and humanitarian response. Still, some operations, such as Operation Restore Hope in Somalia, can be extremely dangerous in their own right and require a significant effort to protect friendly forces while accomplishing the mission; therefore, infantry companies must be prepared to conduct the full range of MAGTF operations in support of crisis response scenarios.

Types of Crisis Response and Limited Contingency Operations

There are eight types of crisis response and limited contingency operations in which the infantry company may participate: disaster relief, FHA, NEO, strikes and raids, embassy defense, recovery operations, defense support of civil authorities, and peace operations.

Disaster Relief

Disaster relief operations are actions taken to maintain or restore essential services and manage and mitigate problems resulting from disasters and catastrophes, including natural, manmade, or terrorist incidents. Disaster relief resulting in employment of the infantry company can occur both domestically or in foreign countries and either unilaterally or as part of a much larger multiagency and multinational effort. Military units executing disaster relief will normally serve as a supporting force for civilian-directed responses.

EXAMPLE: Following Hurricane Andrew in Florida in 1992, the Special Purpose MAGTF established and maintained a temporary city for 2,500 displaced civilians, distributed supplies, and helped restore power to Dade County. Marines also supported relief efforts after Hurricane Katrina in Louisiana in 2005 and are called out almost yearly to fight wildfires in California.

Foreign Humanitarian Assistance

The purpose of FHA is to relieve or reduce the results of natural or manmade disasters or other endemic conditions that pose a serious threat to life (disease, starvation) or property. The US military typically supplements HN authorities along with US Government agencies, NGOs, and unaffiliated individuals (see fig. 10-4 on page 10-20). Most FHA operations resemble disaster relief operations.

EXAMPLE: In 1991, 24th MEU (Special Operations Capable) provided security, shelter, food, and water to the dissident Kurdish minority in northern Iraq. The 5th Marine Expeditionary Brigade, during Operation Sea Angel in 1991, assisted Bangladesh in the aftermath of a devastating tropical cyclone by distributing food and medical supplies and repairing the country's transportation infrastructure. In late 2004 and early 2005, III Marine Expeditionary Force units assisted Indonesia and neighboring areas following an earthquake and subsequent tsunami.

Noncombatant Evacuation

A NEO is a Department of State-run operation that serves primarily to evacuate US citizens whose lives are in danger. It can also evacuate natives and third-world country nationals when directed to do so. The military supports the Department of State through swift insertion of forces and the temporary occupation of an objective, followed by a planned withdrawal. An infantry company participating in a NEO may task-organize to provide security, organizational and logistical support, detainee handling, or evacuation assistance. The company uses only the force needed to protect evacuees and defend itself.

EXAMPLE: On 12 July 2006, Hezbollah conducted a rocket attack on northern Israel. The American embassy (Department of State) requested Department of Defense support on 14 July for a NEO of American citizens, resulting in a US Central Command execute order issued on 15 July. The order resulted in the following mission statement for 24th MEU: "On order, 24th MEU (Special Operations Capable) conducts the evacuation of ap-proximately 25 American citizens from the US Embassy in Beirut, Lebanon, to Cyprus in order to support Department of State authorized departures. Be prepared to support follow-on evacuation operations of designated personnel."

Strikes and Raids

A strike is an attack to damage or destroy an objective or a capability. Raids are a type of attack that include a planned withdrawal (see chap. 6). Forward deployed forces, of which the infantry company may be a part, most often conduct strikes and raids. Infantry companies may participate directly or may provide direct and indirect support.

EXAMPLE: In 1988, elements of a special purpose MAGTF destroyed two oil platforms in the Persian Gulf being used by Iran as staging platforms for attacks on merchant shipping.

Embassy Defense

When periods of civil unrest, revolution, and lawlessness exceed the HN's abilities to contain, Marine Corps forces have often been called upon to defend US diplomatic posts and personnel against *external* danger (the Marine Corps Embassy Security Group provides *internal* security services). Embassy defense operations are frequently conducted in conjunction with NEOs.

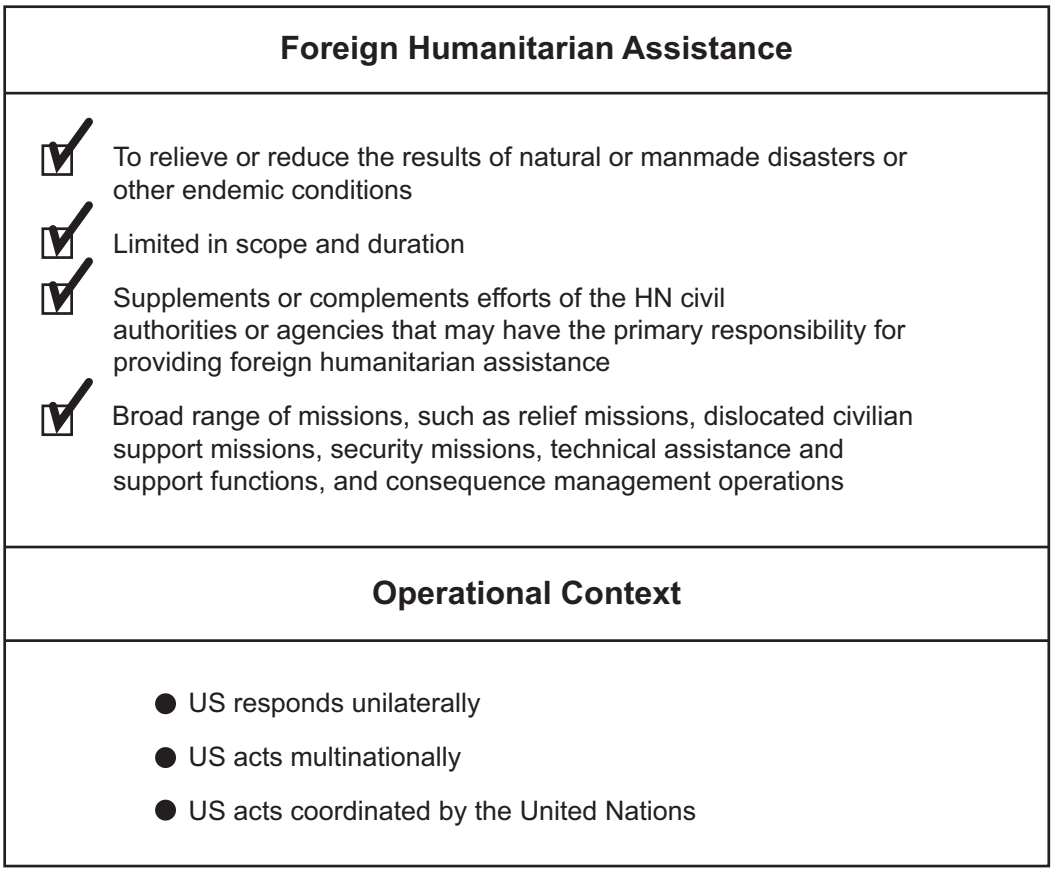


Figure 10-4. Foreign Humanitarian Assistance Purpose and Operational Context.

EXAMPLE: In 1996, elements of the 22nd MEU (Special Operations Capable) simultaneously reinforced the American Embassies in Monrovia, Liberia (Operation Assured Response) and Bangui, Central African Republic (Operation Quick Response), providing security for some months and eventually evacuating 2,444 and 448 people respectively.

Recovery Operations

The Marine Corps maintains the ability to execute recovery of personnel, aircraft, and equipment. Often, particularly with personnel, these operations occur within the context of the Department of Defense Personnel Recovery System. The Marine Corps expects that personnel and aircraft recovery plans are inherent within the conduct of all operations from patrols through amphibious landings, which is why commanders at all levels plan drills and procedures, such as break contact, missing person, or escape and evasion.

Due to its expeditionary nature, the Marine Corps is unique in having developed a specific operation—tactical recovery of aircraft and personnel (TRAP)—to execute recovery tasks. The MAGTF normally designates a TRAP force, even if that force exists only on a contingency basis. The TRAP force consists of specially trained and briefed aircrews with a task-organized ground force. The infantry company or elements of the company form the basis of the ground force. The company focuses on the following:

- Enemy threat.
- Location of personnel, aircraft, and equipment to be recovered.
- Composition of personnel, aircraft, and equipment to be recovered.

- Troop to task, to include special skills or equipment of the TRAP force for the mission.
- Insertion and extraction means, to include secondary and tertiary assets and locations.
- Expected time on the ground.
- GO and NO-GO criteria.
- Verification of SPINS.
- Constitution of a reserve.

The actual execution of a TRAP mission includes five phases—report, locate, support, recover, and reintegrate. The infantry company commander can expect that information from the report and locate phases will drive the company's TRAP participation in the support and recover phases. The reintegrate phase is beyond the scope of the company.

EXAMPLE: On 3 September 1992, United Nations' relief flight 2117, an Italian G-222 transport aircraft, crashed near Sarajevo airport from suspected hostile fire in the former country of Yugoslavia. The 26th MEU, operating aboard the helicopter carrier USS *Iwo Jima* in the Adriatic Sea, received a TRAP mission task to rescue or assist any survivors of the Italian G-222.

Defense Support of Civil Authorities

When permitted by law (Posse Comitatus Act) and when events overcome the ability of local authorities to respond, domestic civil authorities may receive temporary military support. Infantry companies tasked to provide this type of support may respond to a range of activities, such as augmenting forest firefighting efforts, providing humanitarian relief to hurricane victims, and assisting in the restoration of law and order during periods of civil disturbance. It is critical that the company leadership understand the differences between conducting operations inside and outside of the United States. While the military may serve as lead agency outside of the United States, it will never do so within the United States. Both Active and Reserve components of the Marine Corps are not legally the same as civilian agencies or the National Guard. From the ground, guarding a motor pool and handing out food in a foreign country appears very much like guarding a motor pool and handing out food in a US city, but they are not the same. It is important that the company understands the legal differences between the two operational environments.

EXAMPLE: In 1992, Marine Corps forces formed as a special purpose MAGTF to provide security and assistance to local law enforcement in response to riots in the city of Los Angeles.

Peace Operations

Peace operations is a general term that applies to all manner of international and military missions seeking to contain conflict, restore peace, create and sustain an environment of reconciliation and rebuilding, and facilitate transitions to legitimate governance. It encompasses three general areas: operations in support of diplomatic efforts, peacekeeping, and peace enforcement. The infantry company may participate in peacekeeping or peace enforcement, but is unlikely to participate in operations supporting diplomatic efforts unless part of a larger force. Under the umbrella of these three general areas, peace operations are broken down further to include peacekeeping operations, peace building, peacemaking processes, conflict prevention, and military peace enforcement operations (see fig. 10-5 on page 10-22). Peace operations may occur under the auspices of the United Nations or other intergovernmental organizations, within a mission-specific coalition of nations, or unilaterally.

Peacekeeping Operations. When participating in this mission, the infantry company monitors and facilitates the implementation of cease fires, truce negotiations, and other such agreements. The company's task organization, employment, and engagement with local leadership and populace focuses on assuring all sides in the dispute that the other involved parties are not taking advantage of settlement terms to their own benefit. The company concentrates on security and FP. It is quite possible that, as peacekeepers, the infantry company will lack access to heavy weapons and

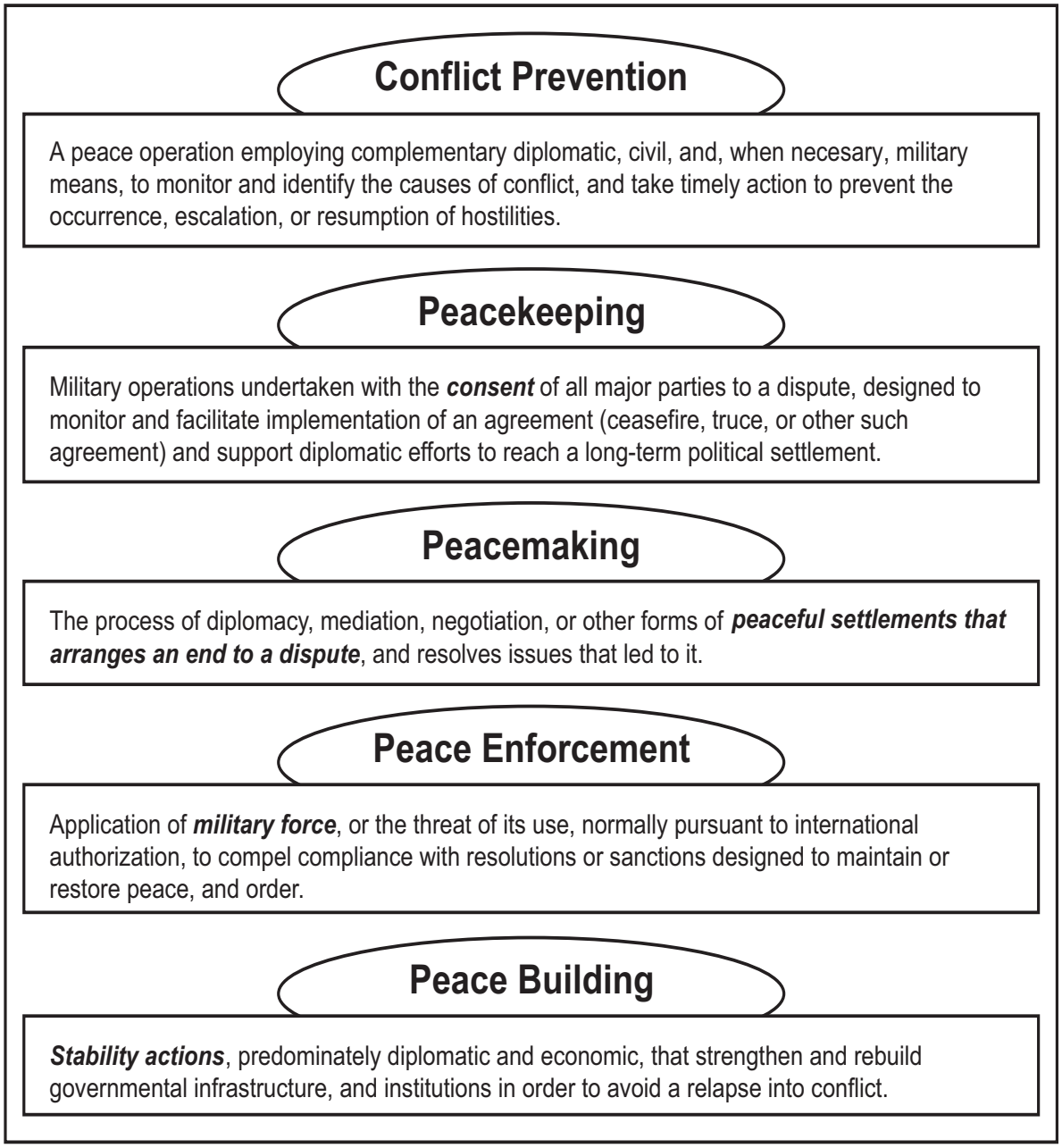


Figure 10-5. Types of Peace Operations.

must build contingency plans accordingly. The infantry company most often observes and monitors or supervises and aids the parties involved in the dispute.

Peace Enforcement Operations. When employed to support peace enforcement operations, the infantry company conducts operations to compel compliance with resolutions or sanctions assigned and to maintain or restore peace and order. The requirement to compel compliance may require combat, armed intervention, or physical threat of armed intervention. Under the provisions of an international agreement, the infantry company may be employed to use coercive military power to compel compliance with international sanctions or resolutions.

EXAMPLE: In concert with the US Government's ongoing commitment to East Timor, 11th MEU/ Boxer Amphibious Ready Group deployed more than 500 Marines and Sailors daily 9-11 April 2002, from the USS *Boxer,* USS *Harpers Ferry*, and USS *Cleveland* to several locations in East Timor to conduct medical and dental assistance, airlift and sealift of humanitarian supplies, and assistance in community relations projects around the island. Marines and Sailors from 11th MEU and the Boxer Amphibious Ready Group safely and professionally performed three days of humanitarian assistance operations in the developing country of East Timor.

Crisis Response and Limited Contingency Operations Planning Considerations

Company commanders must expect an uncertain, fluid, and chaotic operational environment when conducting crisis response and limited contingency operations. Gaining and maintaining an understanding of the environment and the nature of the problem is critical and leaders must stay flexible and understand their roles within the operation. The following are some planning considerations for the infantry company:

- Understand the chain of command. For whom is the military working?
- Develop an initial employment plan, which includes site reconnaissance and site security, for potential company operating bases.
- Ensure that civilian agencies and counterparts understand the capabilities and limitations of an infantry company.
- Possess a clear understanding of the operational environment (hostile, uncertain, permissive) and the ROE/escalation of force continuum (see app. E) and its implications on mission accomplishment.
- Plan to establish communications and liaison with local authorities, such as government officials, law enforcement agencies, and public works officials.
- Determine processes and procedures necessary to coordinate, support, and get support from local authorities and agencies.
- Identify key equipment, logistical, personnel, and external augmentation requirements as derived from problem framing.
- Ensure that the company's IPB process clearly takes into account the IE and civil considerations.
- Establish CCIRs and PIRs that allow the infantry company to best assess, validate, and determine the requirements of the local populace.
- Establish an assessment plan with valid MOEs and MOPs.
- During COA development, ensure decisive points reflect the immediate actions necessary to stabilize the situation and the priority of those actions.
- Plan and synchronize a robust IO fires plan.
- Perform a civilian considerations analysis based on METT-T. What external resources, such as engineers, MISO teams, interpreters, or civil affairs, are required to accomplish the mission?

Counterinsurgency

Counterinsurgency is the comprehensive civilian and military effort taken to simultaneously defeat and contain an insurgency and address its root causes. Participation in counterinsurgency might entail small teams conducting training in the relative security of an HNSF base, or it might require the commitment of significant ground forces and combat operations. Regardless of the mission, an understanding of insurgency and counterinsurgency, combined with a similar understanding of stability operations, enables successful mission accomplishment. Many of the tactics, techniques, and procedures of the classic insurgent apply to other individuals and organizations employing violence for various ends, such as organized criminal activity in disaster relief, active and passive resistance among a hostile population in general war, and asymmetrical threats from terrorist organizations seeking to destabilize a country (see table 10-4 on page 10-24). Marine Corps Warfighting

Table 10-4. Counterinsurgency Best Practices.

Successful Practices	Unsuccessful Practices
Emphasize intelligence	Overemphasize killing and capturing the enemy rather than securing and engaging the populace
Focus on the population, its needs, and its security	Conduct large-scale operations as the norm
Establish and expand secure areas	Concentrate military forces in large bases for protection
Isolate insurgents from the populace (population control)	Focus special forces primarily on raiding
Conduct effective, pervasive, and continuous IO	Place low priority on assigning quality advisors to HN forces
Provide amnesty and rehabilitation for those willing to support the new government	Build and train HN security forces in the US military's image
Place HN police in the lead with military support as soon as the security situation permits	Ignore peacetime government processes, including legal procedures
Expand and diversify the HN police force	Allow open borders, airspace, and coastlines
Train military forces to conduct counterinsurgency operations	
Embed quality advisors and special forces with HN forces	
Deny sanctuary to insurgents	
Encourage strong political and military cooperation and information sharing	
Secure HN borders	
Protect key infrastructure	

Publication 3-33.5, *Insurgencies and Countering Insurgencies*, and Marine Corps Interim Publication 3-33.01, *Small Unit Leader's Guide to Counterinsurgency*, provide detailed discussion of executing counterinsurgency operations.

Dynamics of an Insurgency

Insurgencies are the organized use of subversion and violence by a group or movement that seeks to overthrow or force change of a governing authority. Insurgency can also refer to the group itself. Insurgencies are political movements that result from real or perceived grievances or neglect that lead to alienation from an established government and are differentiated from more formal forms of rebellion by their lack of belligerent status—they are not internationally recognized as belligerents. The following dynamics are common to insurgencies and understanding these dynamics will assist company commanders in planning and executing operations across a range of military operations:

- Leadership.
- Objectives.
- Goals.
- Ideology.
- Environment and geography.
- External support.
- Internal support.
- Phasing and timing.

Elements of an Insurgency

Insurgent organizations vary in size and capabilities, but typically consist of five elements within a military and political framework: leaders, combatants, political cadre, auxiliaries, and mass base. The proportions of each element depend upon insurgent strategy and the degree of active support obtained from the populace. The duties and responsibilities of individuals within these elements can often blend, though the functions of the elements remain separate. The visibility of these elements is a function of the strength of the HN government in any given area. Where the HN is weak, insurgent elements may exist quite openly, while they may exist clandestinely in areas of HN strength. Table 10-5 and table 10-6, on page 10-26, provide insight into insurgent strengths and weaknesses and how the counterinsurgent can defeat the strengths and exploit the weaknesses. Figure 10-6, on page 10-26, reflects the relationship of the insurgency elements to each other and the general population.

Table 10-5. Insurgent Strengths and Countermeasures.

	Insurgent Strengths	Countermeasures
Indigenous	Insurgents are usually indigenous to the local area and have the support of at least some of the populace; therefore, they have the ability to blend in with them. In many cases, they have two roles—a local resident one moment, an insurgent the next. This enhances their capability to operate without discovery in a given area.	The counterinsurgent force must separate the insurgent from the rest of the populace. This is best accomplished through the effective use of populace and resources control. Care must be taken to ensure that civilians are not injured or mistreated as a result of counterinsurgent operations.
Knowledge	Since most insurgents are indigenous, their knowledge of the local populace, customs, issues, language, and terrain is first hand. The insurgents use this understanding to develop working relationships with the populace. The insurgent can apply this knowledge to the effective use of propaganda. If insurgents can get some of the local populace to identify to some degree with their cause, they can win its support and gain new recruits. If insurgents cannot persuade locals to help or refrain from hindering, they may resort to coercion.	The counterinsurgent force must overcome the insurgent's advantage of local knowledge by fostering a strong relationship with government security forces, other counterinsurgent forces, and the populace. If possible, counterinsurgent forces should reside within the local area and include members of the local populace. Maintaining continuous counterinsurgent operations in a given area through a permanently stationed counterinsurgent force is important. The skillful use of local assets or creation of a local civilian defense force that has the support and backing of the government are some ways to accomplish this.
Intelligence Operations	The insurgent's inherent advantage with the population normally allows them to develop intelligence networks and infrastructure within the government and population. These networks can provide insurgents with continuous and current information on government or counterinsurgent force dispositions, strengths, weaknesses, and capabilities.	The counterinsurgent force must place counterintelligence operations, intelligence collecting, and intelligence analysis as high priorities. The use of compartmentalization, deception, operations security, and communications security must be constantly emphasized. Since insurgents are indigenous, their intelligence networks and infrastructures can be infiltrated to gather intelligence and turn insurgent operatives into double agents.
Motivation	Some insurgents may be devoted to their cause to the point of fanaticism. On the other hand, insurgents who wish to abandon the movement face major challenges—their ability to cease being an insurgent is difficult. The government and the local populace may not welcome them back and the remaining insurgents will view them as turncoats and threats. Motivation within the insurgency is usually kept high through intimidation and threats of violence on them and their families.	The counterinsurgent force must therefore promote the belief that remaining an insurgent leads only to death and defeat while creating a viable method for "former" insurgents to return to normal life. Host government reintegration, reconciliation, and amnesty programs remain the important elements of this success.
Focused Responsibility	Insurgents do not have the responsibility to maintain normal governmental obligations toward society. This frees their efforts to conduct focused operations in support of their goals. However, they often provide some aid and services to the local community, especially where government services fall short, and they highly advertise this fact.	Counterinsurgent forces can use the insurgents' lack of provisions for the society as a tool to increase government support of counterinsurgent operations and to decrease the populace's insurgent support. In addition, they can show that the insurgents have acted irresponsibly. Increasing the HN government's ability to provide services to the population may marginalize insurgent efforts.
Insurgent Tactics	The insurgents can use a broad range of tactics, from conventional warfare to terrorism. They can escalate or de-escalate their activity in reaction to government or counterinsurgent activity almost at will.	The counterinsurgents must remain flexible and adaptive to engage and, if possible, disband, defeat, or destroy the insurgent force while preventing the insurgent force from having tactical successes. They must also learn and adapt quickly.
Enduring Hardship	Insurgents often come from impoverished backgrounds, are young, and are in good shape. They can manage with less by both design and background. Successful insurgents are innovative in their tactics, techniques, and procedures. They learn and adapt to changes in the operational environment.	The counterinsurgent forces must therefore establish controls and eliminate resource support. Tight security and control of arms and ammunition must be maintained, to include thorough destruction of unused, abandoned, and discarded equipment. Hardships are still hardships and the harder life is for the insurgent, the more likely the insurgent is to quit.

Table 10-6. Insurgent Vulnerabilities and Considerations.

	Insurgent Vulnerabilities	Countermeasures
Limited Personnel	Insurgents operate in small bands to avoid detection by government and counterinsurgent forces. Due to the challenges of recruiting new insurgents, insurgent personnel losses are not easily replaced.	Insurgent methods to recruit replacements can be identified and exploited.
Limited Resources	Because of their covert nature, insurgents must rely on resources that are stolen or clandestinely delivered from friendly entities, such as internal or external supporters. This is especially true for sophisticated equipment, cash, replacement parts, and expendable supplies.	Insurgent equipment losses are not easily replaced and methods of resupply can be discovered, severed, or tracked to sources and destinations.

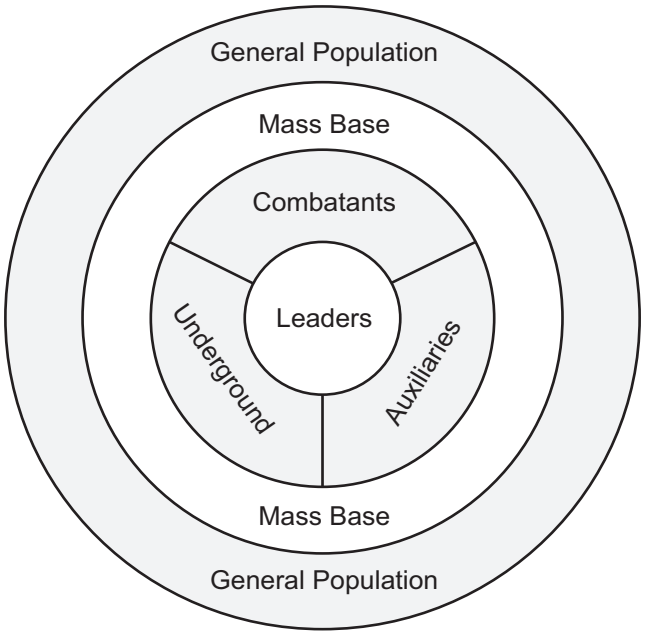


Figure 10-6. Relationship Among Elements of an Insurgency.

CHAPTER 11
OTHER TACTICAL OPERATIONS

This chapter discusses other operations that enable actions across the range of offense, defense, and stability operations. Like all tactical operations, they may be main or supporting efforts. Other operations include engineering, RIP, passage of lines, linkup, reconnaissance, convoy, deliberate and hasty checkpoints, and the handling of detainees and captured personnel. Planning and preparing for other operations present the same challenges and requirements as for any type. Other operations executed by the infantry company can occur in mounted or dismounted roles, with or without enablers, in contiguous or noncontiguous employment, and in a joint or coalition environment.

Engineering Operations

Engineers conduct four primary missions: mobility, countermobility, survivability, and general engineering. The following subparagraphs expand upon discussions of mobility and countermobility in chapters 6 and 7.

An obstacle is an obstruction designed or employed to disrupt, fix, turn, or block the movement of an opposing force while imposing additional losses in personnel, time, and equipment on them. Obstacles can be natural, manmade, or a combination of both. Mobility operations seek to reduce obstacles to maintain freedom of movement for maneuver units, weapon systems, and critical supplies. Countermobility operations endeavor to construct obstacles to delay, disrupt, and destroy the enemy to slow or divert them; increase time for target acquisition; and increase friendly weapon effectiveness.

Mobility

Mobility applies to all engineering activities that enhance the ability of friendly forces to maneuver. A bridging unit conducts engineering mobility in the same manner that an engineer squad creates a breach. Engineers conduct mobility operations across a range of military operations and, regardless of operational environment, the infantry company faces increasing numbers of widely varying types of obstacles from tank ditches to IEDs. To the infantry company, it is not a matter of *if* it will encounter enemy obstacles, but a matter of *when* and *where*. Therefore, company commanders plan, organize, and prepare their companies to perform mounted and dismounted mobility tasks using the full range of organic and nonorganic mobility assets available.

Obstacle Crossing

Obstacle crossing applies to those tasks associated with traditional breaching and the crossing of all obstacles, such as rivers. Obstacle crossing can occur at the division level, such as the reduction of a complex obstacle belt during Operation Desert Storm, or at the squad level by breaching protective wire to enter an enemy position or getting over a deep ravine. Obstacle crossing is a task that occurs often during offensive operations and entails the employment of a combination of techniques, procedures, and equipment to project combat power to the far side of an obstacle. Company commanders must understand the challenges presented by various types of obstacles and the capabilities and limitations of the assets the company can employ to defeat them. They must further understand the basic tenets of obstacle

crossing, obstacle breaching, and the types of breaches the company may conduct on its own or as part of a larger force.

Breaching

In the planning and execution of a breaching operation, the company commander applies the five tenets of breaching:

- Intelligence.
- Breaching fundamentals.
- Breaching organization.
- Mass.
- Synchronization.

When confronting simple or lightly defended obstacles, well-rehearsed battle drills, tactical SOPs, and breaching asset redundancy can offset a lack of obstacle intelligence; however, detailed obstacle intelligence is imperative for a successful breach of a complex obstacle. Company commanders must remember that the purpose of the enemy obstacle is to disrupt, turn, fix, or block the company. If the company lacks intelligence on how to defeat the obstacle and associated defenses, it is performing in the manner the enemy desires and faces disastrous consequences. At a minimum, effective obstacle IRs for breach and maneuver planning should identify the following:

- *Bypasses and gaps*. The requirement for a breaching operation depends on the existence of adequate bypasses. Existing gaps may influence the type of breach used.
- *Obstacle location and orientation*. These factors affect the approach to the breach and the scheme of maneuver that supports the breach.
- *Obstacle composition and depth*. These factors determine required breaching resources; how long the breach will take; the amount of exposure friendly forces will experience while passing through the breach; and the combat power required to emplace, maintain, and exploit the breach. Further considerations include the location of enemy direct fire weapons and the topography and soil composition.

There are five basic steps that form a part of every breaching operation—suppress, obscure, secure, reduce, and assault (SOSRA):

- *Suppress*. A company's failure at this step ensures the failure of the rest. The infantry company uses all available organic and nonorganic combat power to deny the enemy the ability to place effective fires on the breach and assault forces for the duration of the breaching operation.
- *Obscure*. The infantry company employs screening or obscuring smoke to prevent or disrupt enemy acquisition of friendly elements. Plans must be made to ensure the obscuration lasts for as long as it is needed.
- *Secure*. Under the cover of suppression and obscuration, the infantry company secures the breach site to prevent enemy interference with obstacle reduction or the movement of friendly forces through the cleared lanes. When conducting task organization, assigning combat power, and creating the scheme of maneuver, the company commander must ensure that security at the breach site can defeat all types of enemy actions, such as counterattack forces, that could threaten the breach.
- *Reduce*. With the risk of enemy action mitigated by the previous first three steps, the breaching force physically reduces the obstacle, creates lanes for movement, and guides friendly forces through the breach.
- *Assault*. During the assault phase, the infantry company exploits the breach by passing through combat power that assaults the objective, destroys enemy forces capable of bringing direct or indirect fires on the breach, and sets the conditions for further exploitation and pursuit.

To conduct a breach, the infantry company must perform three functions—support, breach, and assault—and generally organizes itself in that manner. How company commanders organize their available combat power is not as important as effectively accomplishing the three functions:

- *Support force*. The support force establishes necessary SBF and observation positions to

suppress the enemy with direct and indirect fires to prevent effective fires against friendly forces. It employs obscuration to screen breach and assault forces.

- *Breach force*. The breach force searches for bypasses, establishes breach site security on both sides of the obstacle as required, reduces the obstacle, and proofs and marks lanes or bypasses.
- *Assault force*. The assault force exploits the breach to assault the objective and set conditions for follow-on actions. It is prepared to assist the support force in suppressing the enemy, assist the breach force in securing the far side of the breach site, and conduct assault breaches of protective obstacles.

The infantry company masses combat power at the breach site by focusing all resources and assets on isolating and fixing the enemy in position. The company commander should plan for at least a 50 percent redundancy in obstacle breaching assets.

The company commander synchronizes complex breaching operations through detailed reverse planning, clear instructions to subordinate elements, effective command and control, and extensive rehearsals (see fig. 11-1 on page 11-4). Basing planning around SOSRA and using reverse planning methodology, company planners consider—

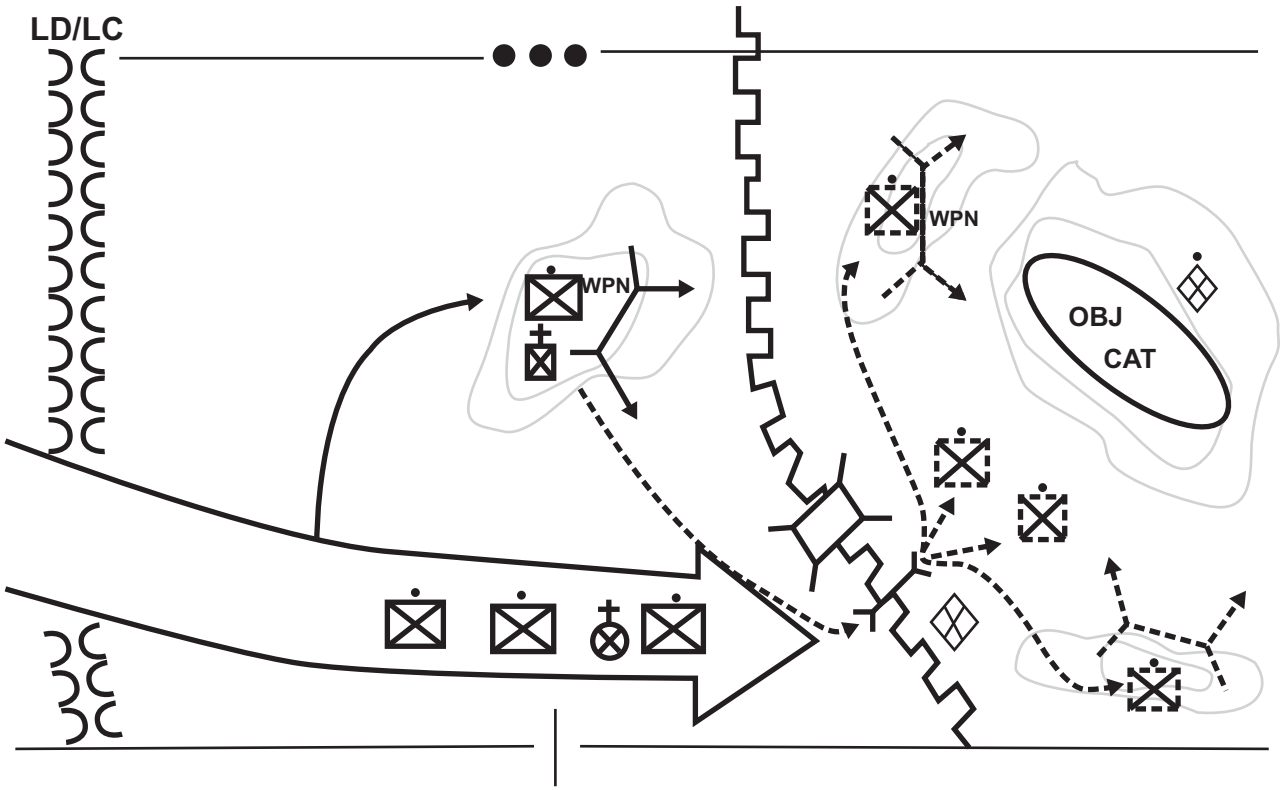
- *Actions on the objective*. The planned actions on the objective influence the size and composition of the assault force and the number and location of lanes required of the breach element.
- *Breach requirements*. Lane requirements, topography, and the types of obstacles determine the type and number of reduction assets required by the breach force.
- *Breach site security*. The ability of the enemy to interfere with the breach determines whether fires, force, or both secure the breach site.
- *Suppression requirements*. The enemy's ability to mass fires at the breach site dictates the nature of the required suppressive fires, including the composition of the support force and the type, amount, and duration of supporting fires. In planning this step, company commanders develop assessment criteria to determine when to commit the breach force.
- *Support positions*. The location of the enemy and the availability of clear fields of fire determine the location of the support force and its SBF position.

Though there are two types of breaches at the company level and above—hasty and deliberate—the bypass method is the first thing a commander should consider before committing to an actual breaching operation. At this level of operation, the company will often (but not always) serve as a support, breach, or assault force for the parent battalion.

Bypass. When a unit bypasses an obstacle, it physically changes direction and moves along a route that avoids the obstacle. While the desire to maintain momentum encourages bypassing obstacles whenever possible, company commanders must ensure that bypassing an obstacle provides a tactical advantage without exposing the unit to unnecessary danger. A reconnaissance should allow commanders to consider the following:

- The limits of the obstacle.
- Physical aspects of the bypass route, including location, availability of cover and concealment, and key terrain influencing the route.
- Confirmation that the bypass route takes the company where it needs to go, but not where the enemy wants it to go, such as into possible ambush sites or kill zones.

Hasty Breach. Companies and battalions employ the combined arms hasty breaching technique to overcome unexpected or lightly defended obstacles quickly; they may also use the technique when the obstacle or enemy situation is unclear. Company commanders and battalion commanders prepare their units for a combined arms hasty breach by task-organizing subordinate battalions or companies (as applicable) with the additional



•Isolate •Suppress •Obscure			•Secure •Reduce			•Penetrate •Exploit	
Size of support force	Amount of suppression and obscuration	Overwatching enemy	Size of breach force	Number and location of lanes	Action at obstacles	Size of assault force	Actions on the objective

Reverse-planning sequence

Legend:	
LD/LC - line of departure is the line of contact **OBJ -** objective	**WPN -** weapon

Figure 11-1. Reverse Planning—Breaching.

forces necessary to conduct the operation. As with the combined arms deliberate breach, the battalion commander may direct the company, probably task-organized with one or more attached engineer platoons, to conduct the combined arms hasty breach on its own. The company commander assumes responsibility for designating support, breach, and assault forces and for synchronizing SOSRA actions.

Deliberate Breach. When confronting known, complex, or heavily defended obstacles and when no other reasonable tactical alternatives exist, the combined arms deliberate breach is conducted. The combined arms deliberate breach is a standalone operation specifically designed to reduce an obstacle, allowing the unit to continue the mission. Thorough reconnaissance, detailed planning, and extensive preparation and rehearsals

characterize the deliberate breach. Subordinate elements are tasked to perform the roles of support, breach, and assault forces.

River Crossing

Unfordable rivers exert considerable influence across a range of military operations by imposing restrictions on movement and maneuver. The wider, deeper, and swifter the current of any given river, the stronger that river is as an obstacle. Infantry companies will most likely participate in river crossings as part of a larger force that conducts a centrally planned and controlled offensive operation. River crossings are resource intensive, usually requiring external means of crossing. The operation itself concentrates on successfully crossing the gap, establishing a beachhead, rapidly building up combat power on the far side of the river, and then sustaining further combat operations. A hasty river crossing will use the means at hand and seek to ford the obstacle by seizing an intact crossing site, such as a bridge or ferry. As the name suggests, a deliberate river crossing requires extensive planning and detailed preparations.

Role of Engineers in Mobility Operations

Engineers reduce obstacles as part of company breaching operations and must be prepared to perform mounted and dismounted reduction tasks using manual, mechanical, and explosive reduction means. Through reverse breach planning, the supporting engineer identifies critical mobility tasks, allocates reduction assets, and recommends a breaching task organization to the company commander. Keys to allocating reduction assets include identifying all reduction tasks within the zone or axis, matching specific reduction assets to each task, and planning redundancy in reduction assets for each task. Since the breach force must have the capability to secure the breach site locally, engineers must receive adequate maneuver combat power to destroy or suppress enemy forces in the immediate vicinity of the breach site. Other mobility tasks are route clearance operations and mobility planning.

Route Clearance Operations. Regardless of employment or operational environment, the infantry company can expect to conduct routine route clearance. Companies may conduct route clearance as part of normal operations, such as IED identification or natural debris removal, or the company may receive a specific route clearance mission. The latter form of route clearance is a combined arms operation normally assigned to an infantry battalion or company that is task-organized with combat engineers and LCE assets as required. As such, it requires the detailed integration and synchronization found in typical breaching operations.

Mobility Planning in the Defense. Mobility operations in the defense enhance the ability of the infantry company to reposition forces, conduct delays, and launch counterattacks. As discussed in chapter 7, mobility planning is a key component of any defensive scheme of maneuver. The company commander determines mobility requirements as the defensive scheme of maneuver evolves. Critical considerations may include the following:

- Lanes and gaps in the defensive obstacle plan.
- Lane closure plan and subunit responsibility.
- Route reconnaissance, improvement, and maintenance.

Countermobility

While mobility seeks to enhance the ability of friendly forces to maneuver, countermobility seeks to degrade and deny the enemy maneuver. Both apply across the operational continuum. As mobility operations assist a company defense, countermobility can assist in protecting the flanks of an attacking force. In the same manner, as countermobility may canalize civilian traffic patterns into controlled areas in stability operations, mobility may allow for successful emplacement of a bridge in a contested river crossing.

Given the complex nature of planning, siting, synchronizing, and emplacing obstacles, combat

engineers perform significant obstacle planning and provide detailed integration and resourcing information to the supported commanders. Combat engineers assist commanders by using obstacles to develop EAs, protect friendly vulnerabilities, and counteract enemy reactions to friendly maneuver. Obstacle plans must support the scheme of maneuver, maximize subordinate flexibility, and facilitate future operations.

The advent of scatterable, remotely delivered minefield systems greatly eased labor and time demands on obstacle emplacement while greatly increasing a commander's flexibility on the battlefield. While use of mines may still apply to high-intensity conflict, most operational environments preclude such use of minefields. Further, the United States does not employ nonself-destruction antipersonnel land mines. Consequently, time continues to remain the single biggest consideration in developing and implementing countermobility plans.

Obstacle Groups, Belts, and Zones

Figure 11-2 demonstrates the interaction among obstacle groups, belts, and zones. All seek to create specific effects on the enemy, whether to disrupt, fix, block, or turn. Beginning at the company and battalion level, one or more individual obstacles are integrated with direct and indirect fires to create an obstacle group with a specific effect. Groups, in turn, combine their individual effects to create a specific effect at the regimental level and above.

Obstacle Intent

Chapter 7 addresses EA and defensive scheme of maneuver development. When integrating barriers, obstacles, and mines into the defensive scheme of maneuver, company commanders constantly consider the advantages and disadvantages of their employment. When determining the intent of any obstacle or set of obstacles, commanders consider the following:

- Creating uncertainty in the enemy.
- Using obstacles to free friendly combat power for other tasks.
- Exploiting geographic features.
- Inflicting significant personnel, equipment, and psychological damage on the enemy with minimal risk to friendly forces.
- The enemy's ability to bypass, breach, or clear friendly obstacles.

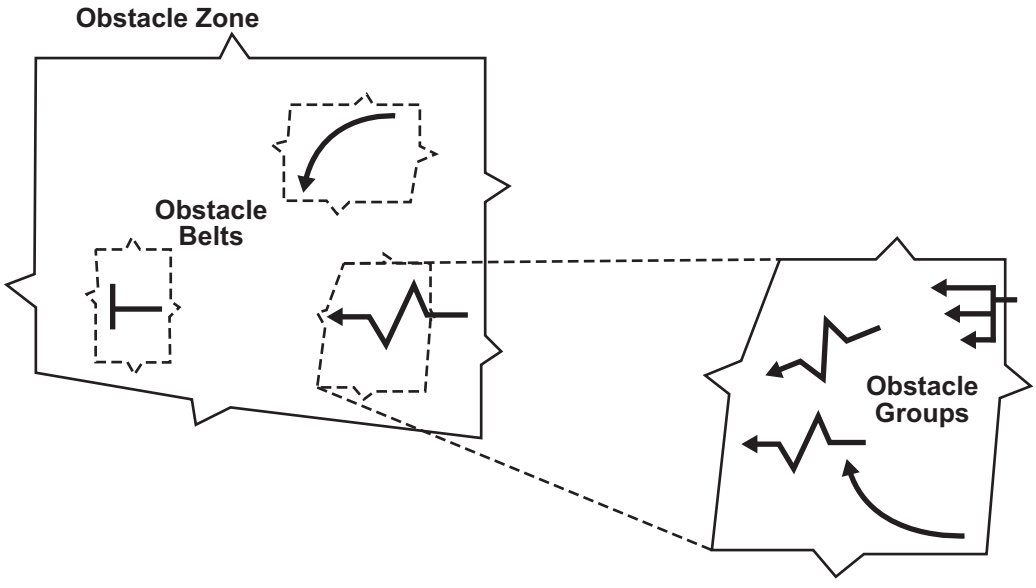


Figure 11-2. Obstacle Groups, Belts, and Zones.

- Amount of friendly time and resources available to create obstacle effects.
- The effects on potential friendly maneuver, such as a counterattack and pursuit.
- How obstacles will be removed or made safe after use.

Using a commander's intent for obstacles provides a simple framework to issue countermobility guidance and facilitates common understanding and coordination between maneuver and engineer forces. This method is applicable across offensive, defensive, and stability operations. It applies whether the enemy is a conventional mechanized infantry battalion or an asymmetrical terrorist cell working within the population. The intent for obstacles is the foundation of the obstacle integration process that includes target, obstacle effect, and relative location.

The target is that portion of the enemy—*who*—that the commander wants to affect with fires and tactical obstacles. The commander identifies the target in terms of size, type, echelon, avenue of approach, or any combination of these.

The obstacle effect portion of the intent describes *how* the commander wants to attack enemy maneuver with obstacles and fires. Tactical obstacles block, turn, fix, or disrupt the enemy. See figures 11-3 and 11-4, 11-5 on page 11-8, and 11-6 on page 11-9. The obstacle effect drives integration by focusing on the relationship between obstacles and both direct and indirect fires.

The relative location is *where* the commander wants the obstacle effect generated against the targeted enemy force. Whenever possible, the commander identifies the location relative to the terrain and maneuver or fire control measures to initiate the obstacle integration process.

Obstacle Planning Process

The obstacle planning process is an integral part of employing countermobility effects across a range of military operations. It correlates

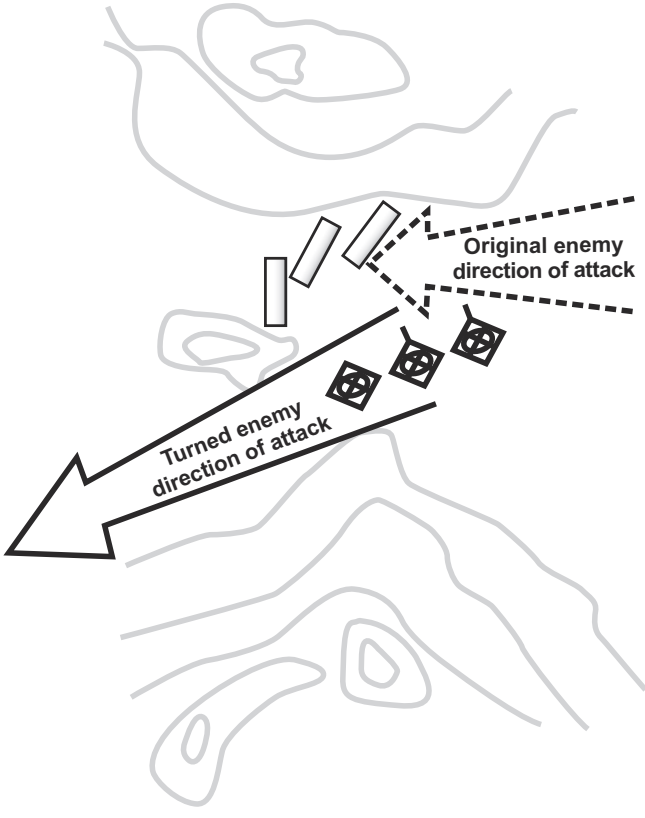


Figure 11-3. Turn Effect.

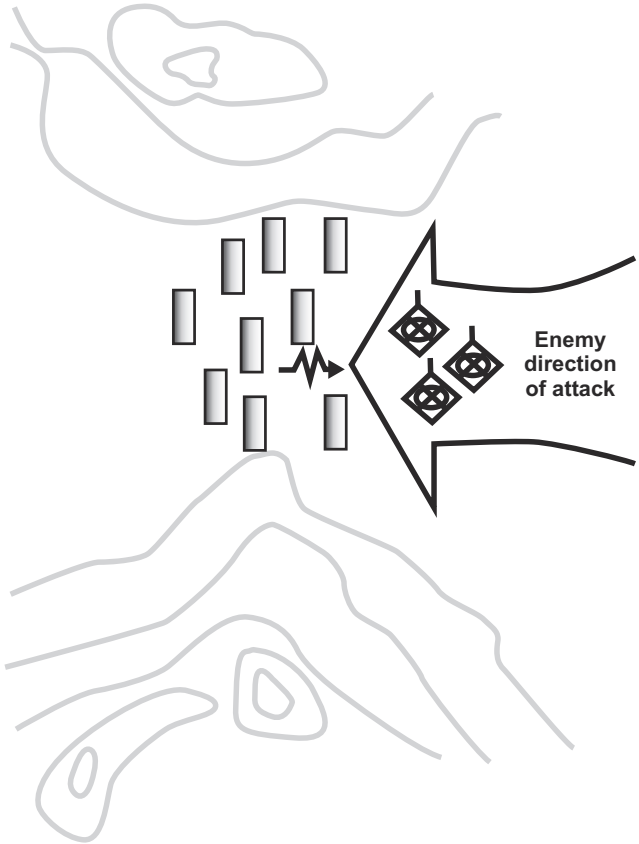


Figure 11-4. Fix Effect.

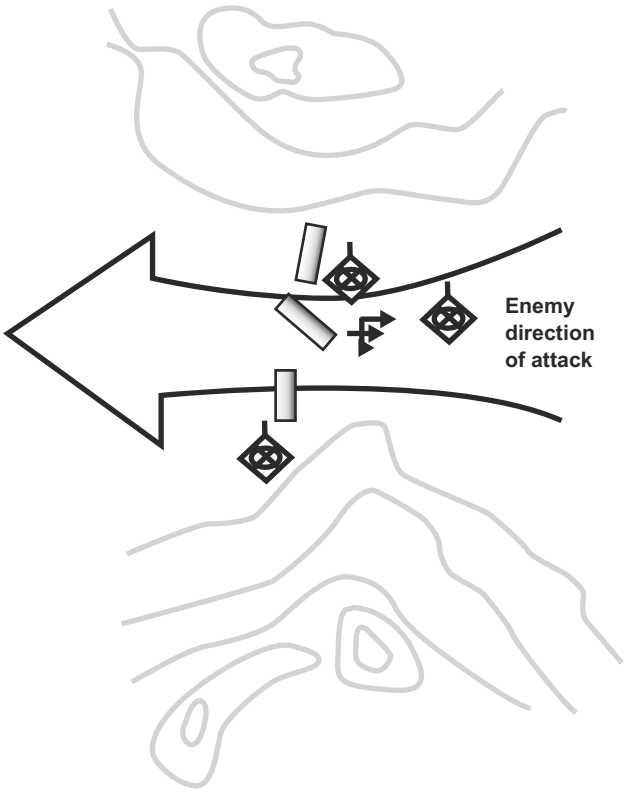


Figure 11-5. Disrupt Effect.

directly with subunit maneuver and positioning, EA development, and enemy actions. It includes the following key components:

- Direct and indirect fires analysis.
- Obstacle intent integration (target, effect, relative location).
- Method of emplacement (conventional or scatterable).
- Obstacle effect priority.
- Mobility requirements.
- Obstacle design and resourcing.
- Marking and reporting obstacle locations.

Figure 11-7, on page 11-10, demonstrates proper planning/integration of obstacles into the EA of development. It shows the following information:

- Obstacle gaps exist to allow egress from forward positions.
- Turning obstacles on both flanks tie into terrain features, receive reinforcement by direct and indirect fires, and force the enemy into the company fires.
- A fix effect obstacle reinforces the company's main effort by enhancing the effects of destructive direct and indirect fires.

Mine Dump Operations

Methods and processes for obtaining countermobility supplies are addressed in chapter 13; however, specific to the resource-heavy demands of countermobility operations is the use of mine dumps. Mine dumps normally contain resources for a single obstacle group, but may contain only the resources for individual obstacles if the distances between obstacles in a group are excessive and may waste an inordinate amount of transportation time. The company commander, in coordination with the supporting engineer, locates mine dumps where they best support obstacle construction within the AO. If a company is assigned more than one obstacle group, it may have more than one mine dump. In light of the austere engineer organization within the force, it is imperative that the infantry company provide leadership and personnel to operate the mine dump, allowing engineers to construct tactical obstacles more efficiently.

Cordon Operations

A cordon is a temporary, enabling operation that isolates a target area of some size to conduct further operations within the cordon. Such operations could consist of raids, searches, visits, meetings, or some combination of all of these. Once operations within the cordon are complete, it collapses. Company commanders can extrapolate the guidance on cordon and search to cordons in general and any other operations that may occur within the cordon.

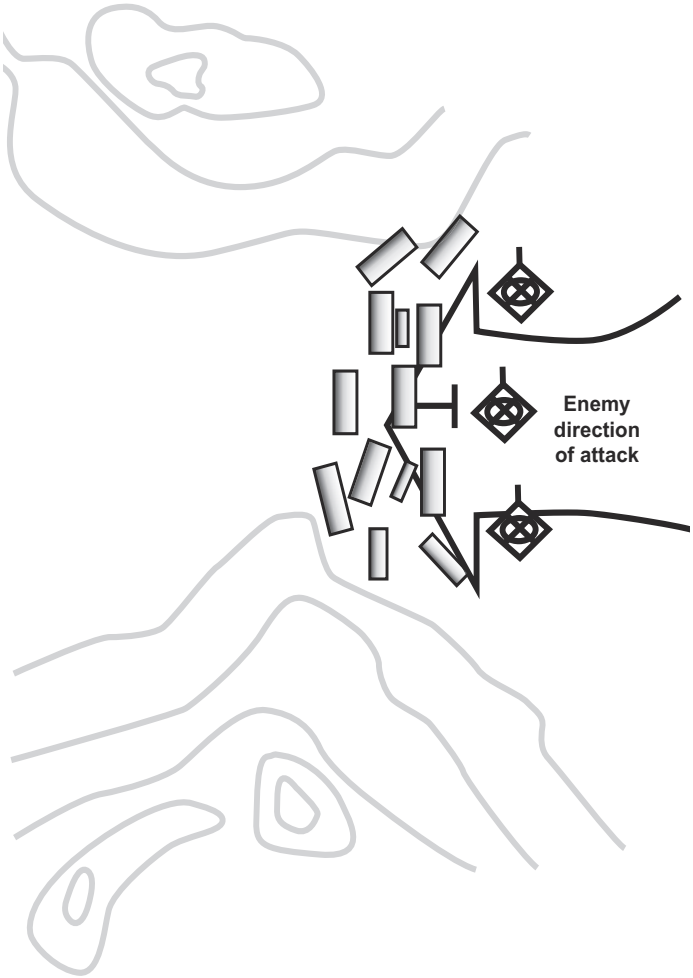


Figure 11-6. Block Effect.

Cordon and Search Operations

Cordon and search operations are one of the most likely a company may conduct. They isolate a target area and search suspected buildings and areas to capture or destroy possible insurgents/contraband. They may be conducted in any type of environment and the principles remain the same whether in a jungle or in a city. Cordon and search operations are by no means limited to, but often are associated with, clear-in-zone actions conducted during clear-hold-build COIN operations. Depending on the threat and the accuracy of intelligence leading to the operation, a cordon and search may appear similar to a movement to contact, raid, deliberate attack, or area reconnaissance. Regardless of appearances and similarities, the cordon and search orients on finding the threat and their caches. Cordons may involve mounted or dismounted troops or a combination of both.

Organization

Four elements perform the major tasks of a cordon and search: command, security, support, and search and assault. In general, the headquarters element provides command and control, the security element sets up inner and outer cordons, the support element acts as reserve and overwatch, and the search and assault element acts as the main effort for actions within the cordon.

Command Element

The command element provides command and control and generally collocates with either the support or search and assault elements where it can best provide oversight to the entire operation. The composition of the command element may be as small as the commander and an RO or may include security vehicles, interpreters, female engagement teams, and HN officials. The command element remains mobile so it can quickly displace as necessary. Depending on the size of the operation, the command element may provide direct oversight of integration with other security forces, detainee handling, tactical questioning, evidence handling, and damage claims.

Security Element

Using inner and outer cordons, the security element isolates the target area through both containment and interdiction, which limits or prevents threat or civilian influence from outside of the cordon and prevents targets from escaping the cordon. Such security normally entails decentralized employment to cover multiple avenues of approach, blocking positions, and OPs. The security element may employ local patrols to cover

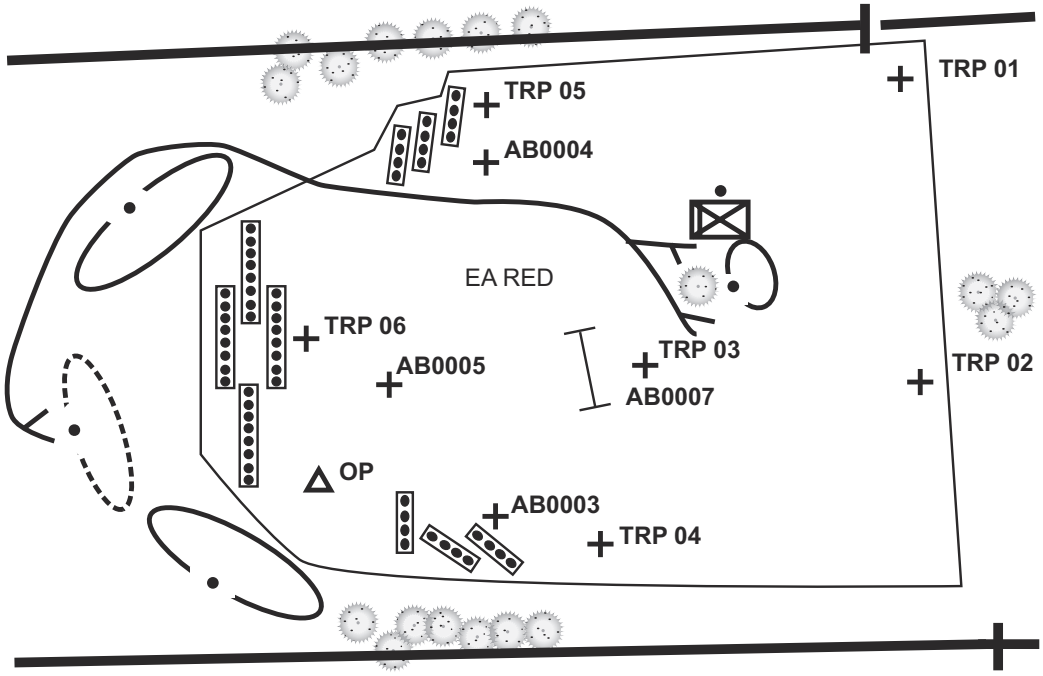


Figure 11-7. Successful Obstacle Planning and Integration.

gaps and requires enough combat power and logistical resources to accomplish its mission.

Support Element

The support element serves as a reserve, prepared to augment or assume the missions of any of the other elements. The support element requires identification and prioritization of potential tasks for purposes of planning and preparation. Such tasks could include reinforcing the cordons; clearing and searching buildings; conducting CASEVAC; and securing and safeguarding civilians, detainees, and captured material or equipment.

Search and Assault Element

The search and assault element serves as the main effort for the cordon and search. It accomplishes the purpose of the operation by securing, clearing, and conducting site exploitation of the target. The element normally organizes itself internally into assault, search, security, and support teams to facilitate its SBF, security, breaching, searching, and other similar tasks. The search and assault element must possess explosive and nonexplosive breach capabilities and, regardless of whether there is resistance, enough combat power to clear target structures using standard entry and building clearing battle drills. The search and assault element may create the following specific subteams:

- Detainee team (support team), consisting of at least two personnel.
- Field interview team (support team), a CI/HUMINT team with interpreter.
- Documentation team (search team), a team large enough to take pictures of structures and rooms, evidence and contraband, and detainees; determine resident status and occupancy; and handle and document evidence.
- Mine detection/demolition team (search team), the search team lead that looks for mines, IEDs, and other potential threats to the security and assault element.
- Breach/demolition team (assault team), a team capable of conducting explosive and nonexplosive breaches as well as providing the assault element with a mine detection capability.
- Tunnel reconnaissance team (assault team), a team capable of investigating such confined spaces as tunnels and subbasements.

Execution

The cordon and search consists of five phases: planning and reconnaissance, movement to the objective area, cordon, actions on the objective, and withdrawal.

Planning and Reconnaissance

During the planning and reconnaissance phase, the mission is received or initiated and problem framing begins to develop the task and purpose of the cordon and search. Initial friendly forces and support, possible enemy threats, and the nature of the target and objective areas are identified. A tentative scheme of maneuver is established, WARNORDs are issued, and generic rehearsals begin. Planning and reconnaissance generally occur simultaneously as they depend and build upon each other. Planning serves to focus reconnaissance collection efforts by identifying what to look for and where to look for it, while reconnaissance helps refine the plan by providing current and detailed information. The planning and reconnaissance phase ends with the issuance of a complete order, conduct of final rehearsals, and completion of PCCs and PCIs.

Movement to the Objective Area

The movement to the objective area phase begins with departure from the AA. The infantry company may use multiple AAs or routes depending upon the scheme of maneuver. There are two methods of moving to the objective area: single point and multidirectional ingress.

The single point of ingress method of approach to the target area facilitates command and control, timing, and deconfliction of fires (see fig. 11-8). However, it produces a larger movement signature, is a slower method of establishing a cordon, and makes the entire force vulnerable to enemy threat actions.

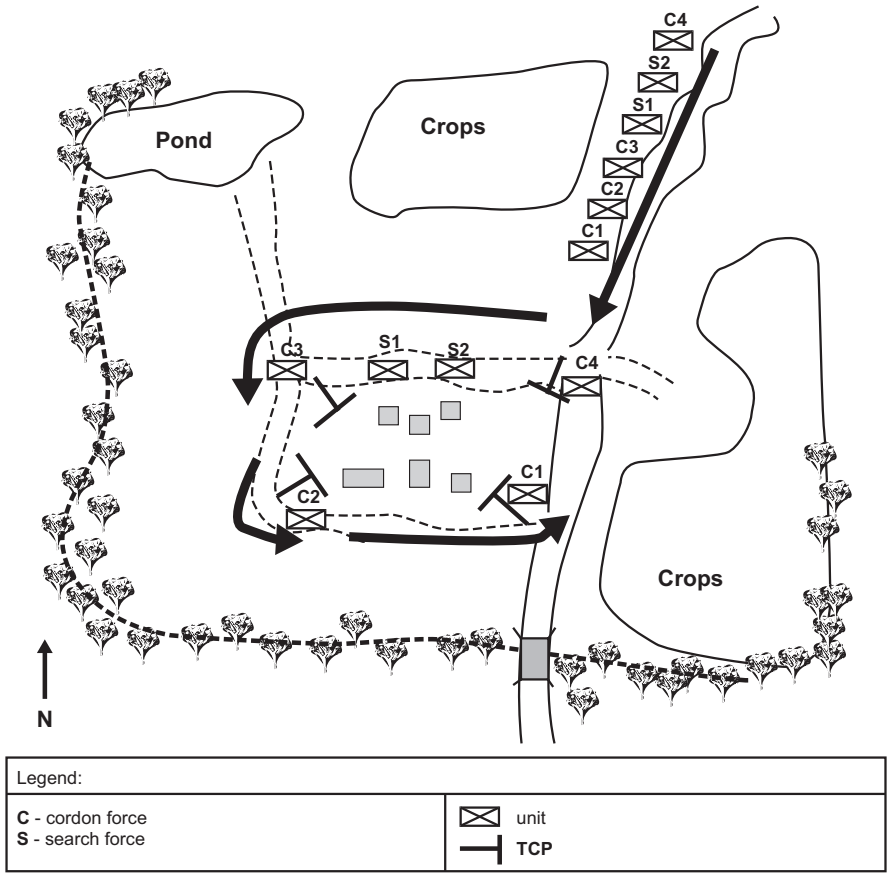


Figure 11-8. Single Point of Ingress Method of Approach.

The preferred method of approaching the target area is from multiple directions, which provides a lower movement signature while allowing for almost immediate emplacement of the cordon (see fig. 11-9). However, multidirectional ingress approaches make command and control more difficult, increase the risk of fratricide in the event of contact, and increase the risk to temporarily isolated units.

All operations should include MILDEC—any technique that makes the cordon and search force appear to have a different mission or objective will aid in success. Commanders are limited only by their imagination and practicality. Possible techniques include infiltrating elements into the area under the guise of local security patrols, increasing operating tempo in the area a few days prior to the actual operation, and masking movement by following a regularly scheduled convoy.

Cordon

The movement to the objective area phase should transition smoothly into the cordon phase. Depending on the method of approach, the transition is either sequential (single point) or nearly simultaneous (multidirectional). While the cordon itself is an enabling operation, it is important that leadership effectively integrate the cordon technique within the larger operation to maintain momentum and focus. It is also important that FP measures be considered and implemented as cordon forces are generally static for the duration of

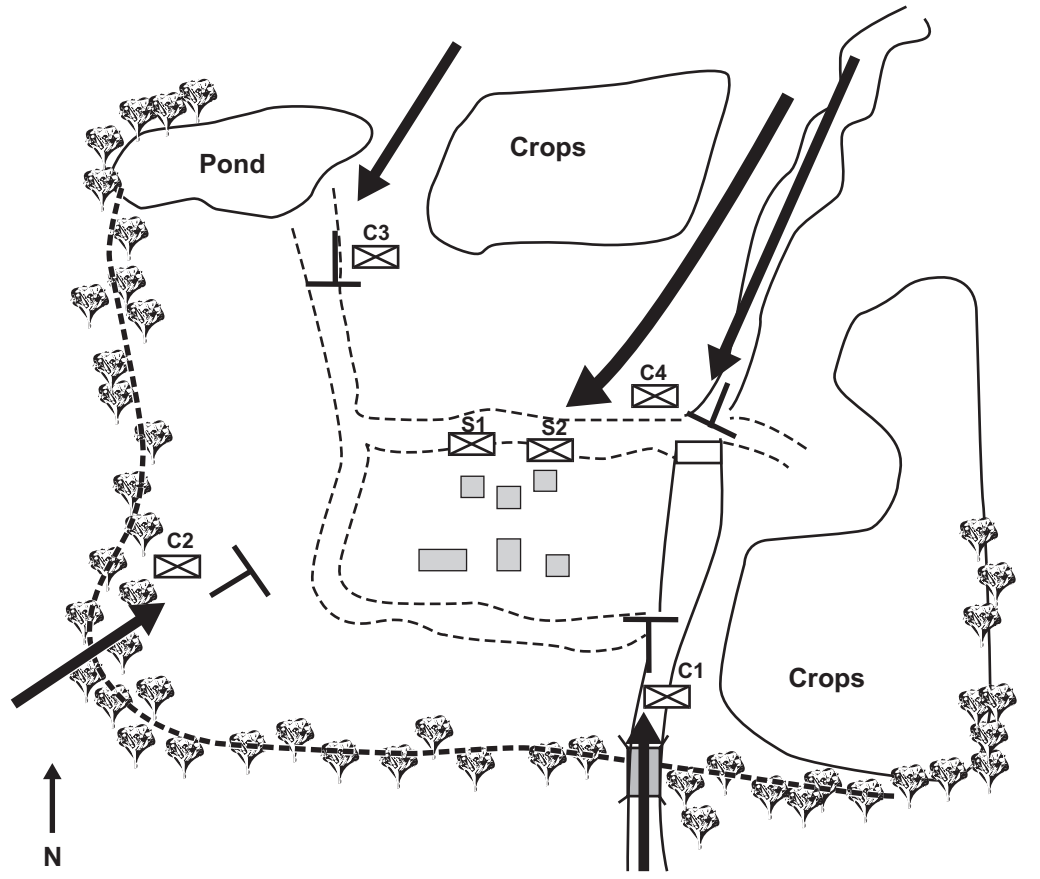


Figure 11-9. Multidirectional Ingress Method of Approach.

the operation, which increases their chances of being targeted by such threats as snipers or suicide bombers. There are two portions to the cordon. The outer cordon that generally focuses on external influences and threats and the inner cordon that generally focuses on preventing escape from the target area. Proper coordination between the two should be a central focus of the security element.

Outer Cordon. The outer cordon isolates the objective area through containment and interdiction to prevent threat or civilian influence in the objective area (see fig. 11-10). It is normally in place prior to the inner cordon. The outer cordon is likely to focus on terrain in terms of controlling avenues of approach and egress. It establishes control using hasty traffic control points, blocking positions, OPs, sniper employment, FP measures, and local patrols and screens. The outer cordon deconflicts BSG with other elements and makes use of any aviation assets that are available. The keys to success for the outer cordon are detailed reconnaissance and terrain study, planning, rehearsals, and vigilance.

Inner Cordon. The mission of the inner cordon is to prevent escape from the target area and to provide security and overwatch to the search and assault element (see fig. 11-11 on page 11-14). If opposed by a hostile force, the inner cordon provides supporting fires to the search and assault elements as they maneuver. Portions of the security element that establish the inner cordon do so by setting up mutually supporting positions that isolate the target area through overlapping sectors

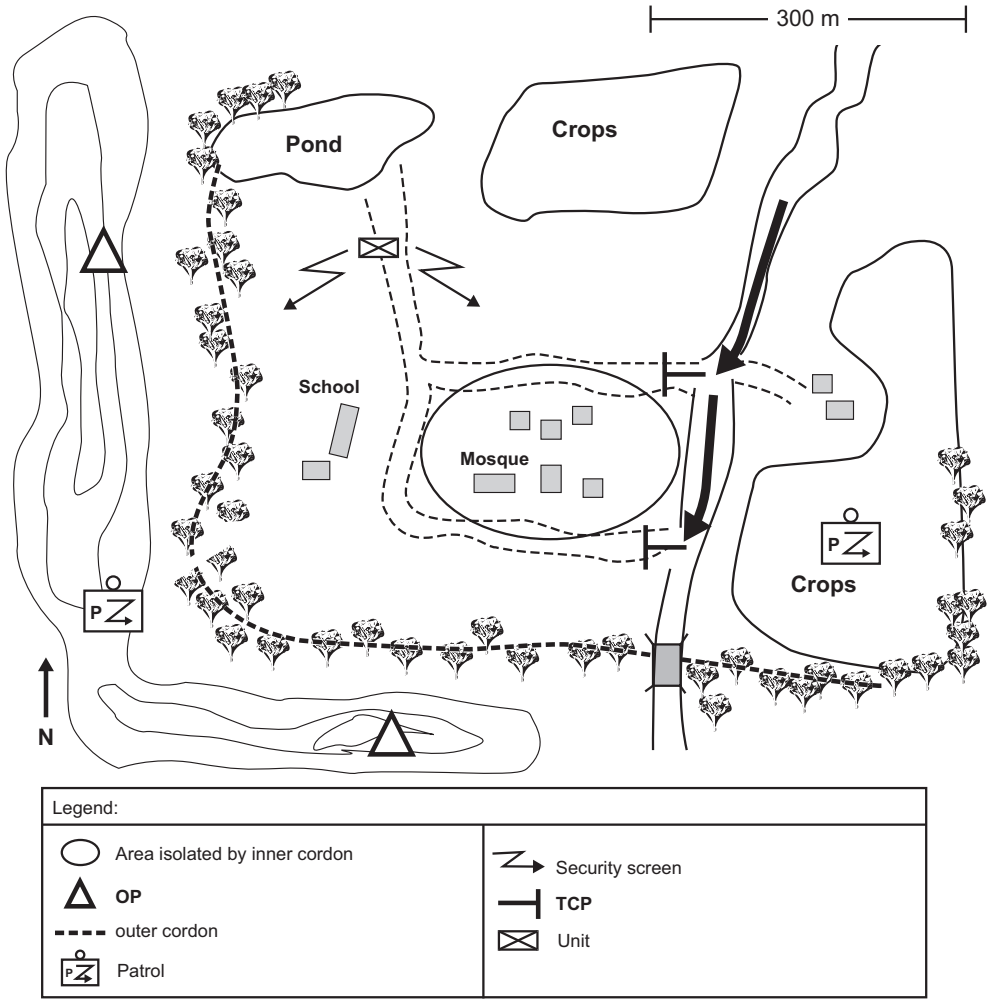


Figure 11-10. Outer Cordon.

of fire and observation. Given the often compressed nature of the target area, BSG awareness and deconfliction is critical. Force protection consideration and measures for the inner cordon are similar to those for the outer cordon. The success of the inner cordon also depends on detailed reconnaissance and terrain study, planning, rehearsals, and vigilance.

Actions on the Objective

The search and assault element initiates actions on the objective once the outer and inner cordons are in place. If the target area is large or the objective area contains multiple target areas, the support element may provide additional overwatch and security to the search and assault element and its subteams. The search and assault element accomplishes its mission by gaining a foothold on or in the target to clear all threat and noncombatant personnel and by conducting a systematic search of the target. These areas may be searched selectively (only specific rooms/buildings/blocks) or systematically (everything within a given area). The search and assault and support elements resolve the disposition of captured and detained material and personnel. For example, a large cache of explosives may be destroyed on site after documentation or it might be removed for further exploitation. Members of the search and assault elements must be extremely judicious in their use of force due to the proximity of noncombatants and friendly forces (see fig. 11-12).

Withdrawal

When actions on the objective are complete, the cordon and search force withdraws in reverse order: the search and assault element, support element, and command element pull off the objective followed by the collapse of the inner and outer cordons. The method of retrograde mirrors those of approach—either single point of egress or multidirectional—but care needs to be taken to avoid using the same routes out that were used going in. The key to the retrograde is the assessment criteria for the operation established by the commander. The operation could be over in a

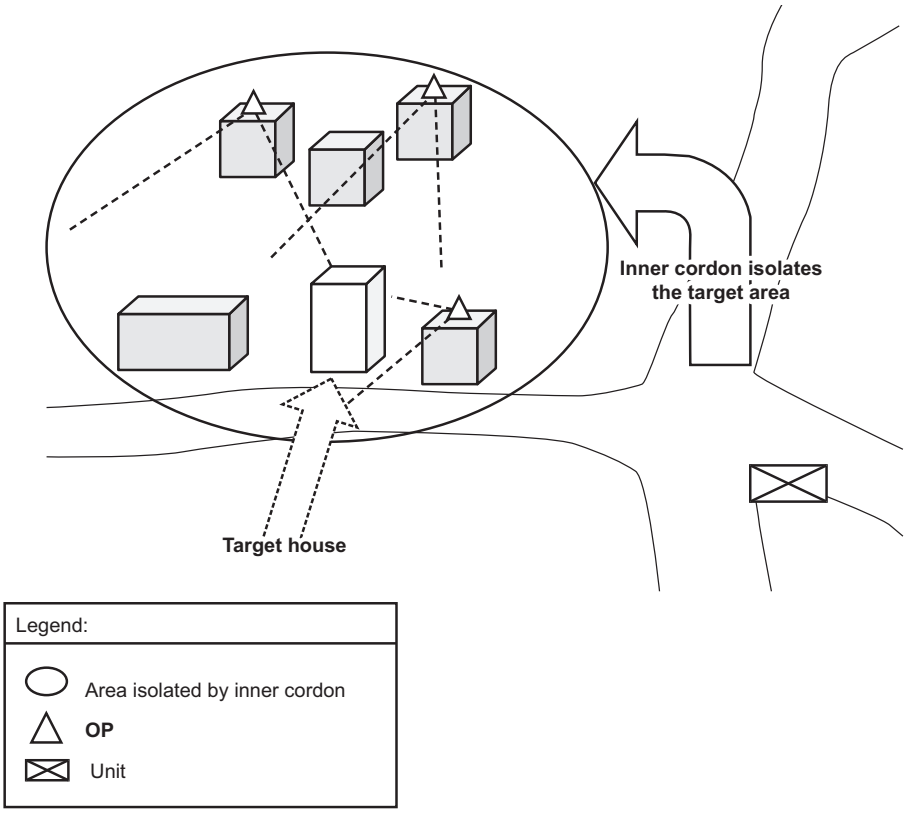


Figure 11-11. Inner Cordon.

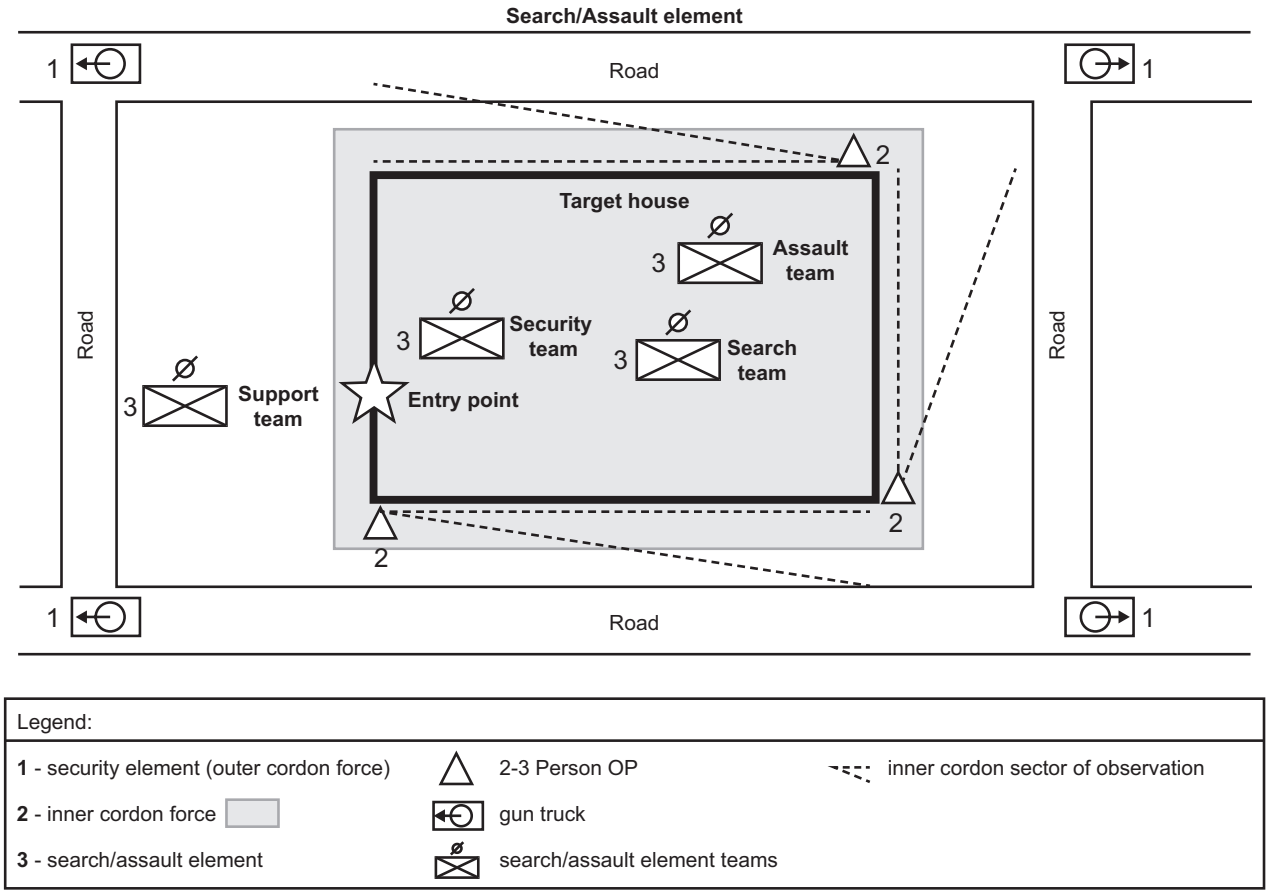


Figure 11-12. Actions on the Objective.

matter of hours or, if sizable caches are discovered, security may need to remain on the site for some days. Commanders plan for all eventualities prior to committing the force.

Relief in Place Operations

A RIP is an operation directed by HHQ that tasks one unit to partially or completely relieve or replace another unit in an assigned area. The relief can take place at once or over some period, ideally during periods of reduced visibility or at night, and in such a phased manner as to maintain tactical security throughout. Depending on the nature of the relief, commanders may also execute a transfer of authority. Transfers of authority, or RIP-TOAs, tend to occur during stability operations or crisis response and limited contingency operations, during which units accumulate significant resources, logistic tails, and responsibilities. Throughout the operation, reconnaissance, liaison, coordination, and cooperation are essential as is a clear definition of command relationships and passage of control.

Critical Tasks

Control and authority are the primary issues during a RIP. Defensive positions and the ability of subordinate units to defend them are relatively simple matters; however, understanding who is exercising command and control of the whole at any given time is the crucial matter. Consequently, during a RIP, it is critical that units—

- Develop a liaison plan.
- Maintain the time schedule.
- Monitor progress of subordinate units.

- Notify HHQ upon relief.
- Establish AAs for the outgoing unit in order to maintain control of movement.
- Report new position of outgoing unit to HHQ.
- Maintain accountability of personnel and equipment.

Planning Checklist

When planning a RIP, planners should consider the liaison plan, command relationships, CPs, fire support, and control measures.

Liaison Plan

Once HHQ orders a RIP, the incoming unit sends liaison parties capable of addressing all the warfighting functions to the outgoing unit. These liaisons familiarize themselves with the tactical situation, conduct necessary reconnaissance, act as guides for the rest of the incoming unit, and brief the incoming unit on the tactical situation.

Command Relationships

When the relieving unit arrives at the start point, it comes under the tactical control of the unit being relieved until C2 transfer. Before beginning the RIP, the commanders of both units determine when the relieving unit takes control and maintains this arrangement, even if contact occurs during the relief. Battle handover checklists are developed and distributed. The unit conducting the relief generally defers to the recommendations of the unit being relieved in these and similar matters because the outgoing unit possesses the best understanding of the area and the enemy.

Command Posts

One of the first events to occur during a RIP, before the movement of any subordinate units, is the collocation of the unit CPs to better facilitate command, control, and coordination.

Fire Support

The authority for control of fire support is with the outgoing unit until control of the sector is passed to the incoming unit. Then, the incoming unit assumes responsibility for control of fire support.

Schedule and Control Measures

Depending on the nature of the HHQ order, planning either begins with a time to commence the relief or occurs in reverse from the time the relief must be complete. Plans, such as routes, march control measures, priority of movement, AAs, and contact points, are developed to ensure smooth movement both in and out of the battlespace. Depending on the enemy situation, units should consider transferring mortar base plates, machine gun tripods, field phones, antennas, or even entire weapon systems. Mortar base plates already sunk, machine gun tripods already set according to range cards, already functioning field phones, and similar measures can be valuable in the face of an aggressive enemy.

Execution Checklist

When executing a RIP, planners should consider the outgoing and incoming units. As the unit most familiar with the area and the enemy, the outgoing unit should drive the relief process. Commanders and their senior staff members should be the last to leave so they can ensure accountability of their unit and provide guidance or advice until the last moment. The outgoing commander—

- Contacts the incoming unit commander.
- Reconnoiters and validates the terrain and routes for use during the relief.
- Briefs the incoming unit on the existing defensive plan, including fire support, barriers, counterattack plans, and friendly and enemy activities.
- Plans the relief to take place at periods of reduced visibility, to include the possible use of obscuration.
- Establishes the time or circumstances when command passes to the incoming commander.
- Maintains radio listening silence of the relieving unit while the relieved unit continues normal traffic.
- Employs indirect fires to cover the sound of vehicles if necessary.

- Limits the size and composition of reconnaissance parties.
- Plans and employs fire support, if necessary, during the relief.
- Completes relief rapidly to reduce enemy detection and reaction time.
- Meets incoming element at designated point.
- Guides incoming element to new position in the determined sequence of relief: small arms elements, CSWs, and then fire support.
- Affects transfer of equipment as required.
- Remains in charge until RIP is complete and incoming element is in place and is prepared to assume the mission.
- Plans transfer of excess ammunition, wire lines, POL, and other materials to the incoming unit.
- Reports completion of relief.
- Reports outgoing unit is clear of old area of operations.

The incoming unit generally defers to the tactical arrangements of its predecessor unless extraordinary circumstances dictate otherwise. The incoming unit can make changes as it sees fit upon the completion of the RIP, but must learn as much as it can from the outgoing unit before its departure. The incoming unit's commander has the following responsibilities:

- Begins operation under radio listening silence.
- Receives guides from the outgoing unit to lead the incoming unit to its new positions.
- Positions unit CP next to outgoing unit's CP in order to train.
- Ensures the outgoing unit commander remains in place until relieved of responsibility by incoming commander.
- Once in position, breaks radio listening silence and transmits appropriate traffic to maintain the pattern of the outgoing unit's communications.
- Reports change of call signs and completion of RIP.
- Ensures movement is rapid, orderly, and completed on schedule without detection by the enemy.

Passage of Lines Operations

When a moving unit cannot bypass the positions of another friendly unit, it moves through it by conducting a passage of lines. The movement may be forward to continue the assault or rearward, a retrograde and battle handover. A passage of lines is not merely an administrative movement between two units. It is an operation that involves units moving and transferring responsibility for the battle. The HHQ of the involved units plans, coordinates, and tasks the passage of lines. The commanders of the two units conduct detailed planning, liaison, and coordination. The essential element of a passage of lines is maintaining the momentum of the moving element. Requiring the moving unit to stop, conduct coordination, and then move defeats the fundamental point of this enabling operation.

Types

Although not a separate type, passage of lines planning methodology is applicable to the movement of units within each other's battlespace in stability operations. When a company or battalion is passing through the battlespace of another similarly sized unit, the units should coordinate routes, guides, engagement criteria, and control of fires. Simple answers, such as the stationary unit escorting the moving unit, may resolve many issues. However, if operating tempo precludes such involvement, the units should approach the problem using the passage of lines operation as a guideline.

Forward Passage of Lines

In a forward passage of lines, the passing unit occupies its AA first and conducts passage of lines coordination as part of its preparation for the attack. Such coordination normally entails stationing liaison personnel with the stationary unit CP, establishing a battle handover checklist, receiving current intelligence on the enemy, and conducting reconnaissance. At the designated

time, the moving unit departs the AA and moves tactically through designated passage lanes. Movement occurs expediently with the moving unit seeking to reduce its vulnerability in the passage lanes to a minimum. The moving unit holds its fire until forward of the battle handover line (BHL). Once forward of passage lane restrictions, the moving unit deploys as necessary and conducts its designated mission (see fig. 11-13).

Rearward Passage of Lines

During a rearward passage of lines, the moving unit may or may not be under enemy pressure. Further, the moving unit either is conducting a planned movement as part of the defensive scheme of maneuver or is conducting an unplanned or earlier than expected movement. The conditions of the movement affect the amount of planning time available and the risk of fratricide, which is always significantly higher in a rearward passage of lines. The passing unit contacts the stationary unit while it is still beyond direct fire range and conducts coordination, liaison, and reconnaissance. It creates the battle handover checklist. Coordination emphasizes far and near recognition signals as well as the location of the BHL, which is normally established at the limit of the stationary unit's direct fire capabilities. The units use additional control measures, such as RFAs or restrictive fire lines, as

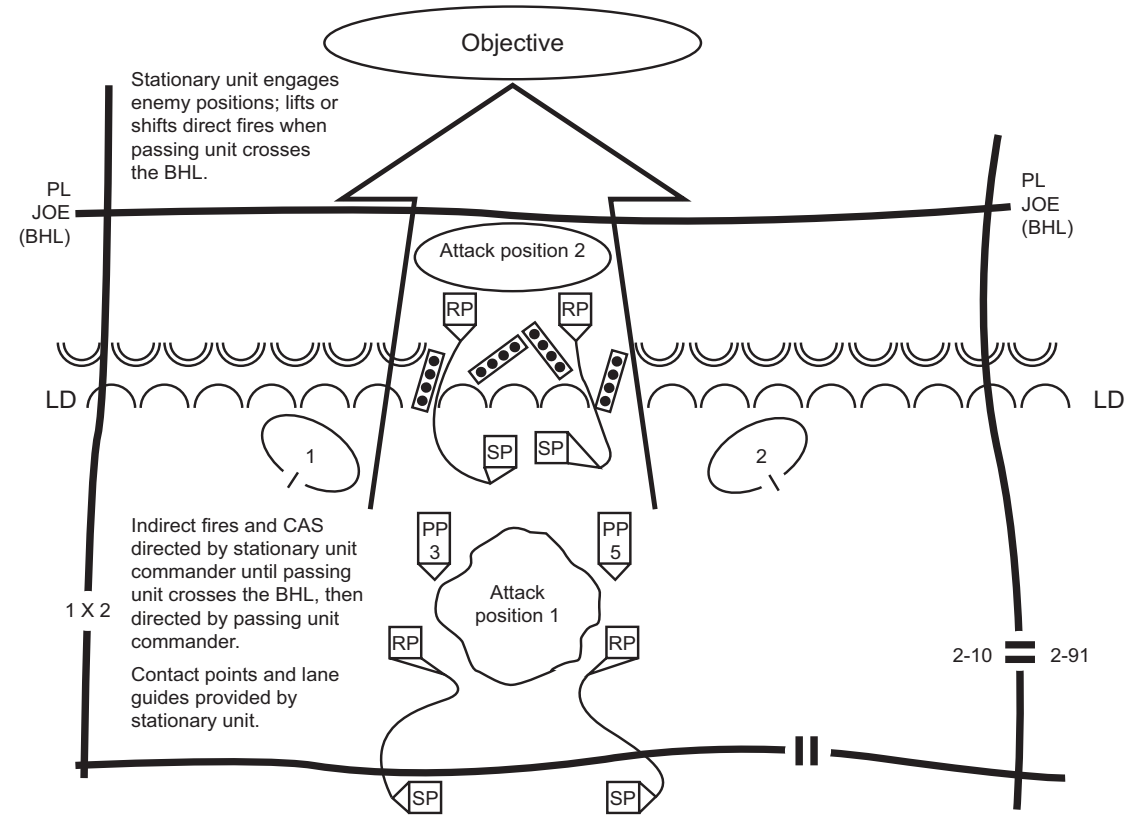


Figure 11-13. Forward Passage of Lines.

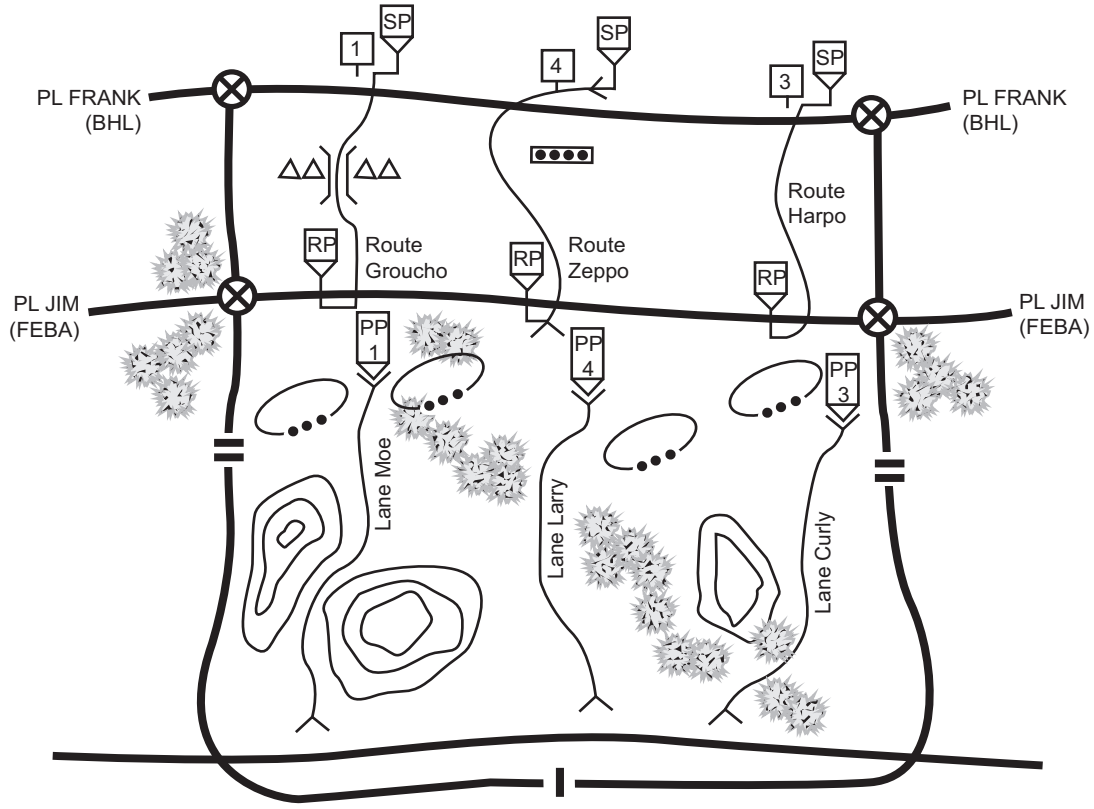
necessary to further minimize the risk of fratricide. Following coordination, the passing unit continues tactical movement toward the passage lanes. Weapons remain oriented in the direction of the enemy and the passing unit is responsible for its own security until it passes the BHL. The passing unit minimizes vulnerability in the passage lanes by moving quickly through them toward some designated location well to the rear of the stationary unit (see fig. 11-14).

Planning Considerations

In planning the passage of lines, infantry companies remain mindful of the purpose of the passage of lines. They focus their planning efforts on two crucial keys to success: passing responsibility for the battle from one unit to another and maintaining the momentum of the moving unit.

Battle Handover

Regardless of the direction of the movement, the responsibility for fighting the battle transfers from one unit to another. In the case of a forward passage of lines, the stationary unit passes control to the advancing unit. In the case of a rearward passage of lines, the retrograding unit passes control to the stationary unit. Both units rely upon clearly defined battle handover criteria and procedures from HHQ, to include the roles of both the passing unit and the stationary unit and the use of direct and indirect fires. If necessary, HHQ specifies a



Legend:

FEBA - forward edge of the battle area
PL - phase line
PP - passage point
RP - release point
SP - start point

Figure 11-14. Rearward Passage of Lines.

BHL, normally the line of departure for a forward passage of lines and the limit of the stationary unit's direct fire weapons for a rearward passage of lines. A forward passage of lines is complete when the passing unit deploys and crosses the BHL. A rearward passage of lines is generally complete when the passing unit is clear and the stationary unit is ready to engage the enemy.

Passage Lanes

The passage should facilitate transition to follow-on missions using multiple lanes or lanes wide enough to support doctrinal formations for the passing units. The stationary unit marks passage lanes and provides guides, to include briefing and coordinating obstacles. Units should coordinate passage times, number of elements, and number of troops and vehicles per element. These are especially critical for rearward passage of lines where accountability of friendly forces is essential to avoid fratricide or enemy infiltration.

Command and Control

To enhance command and control during the passage of lines, units should collocate CPs for the duration of the operation.

Intelligence

Planners and liaison officers should ensure that intelligence on the current and future enemy situation is part of the battle handover checklist. In a forward passage of lines, the stationary unit enhances the advancing unit's chances of success by providing continuous updates on the enemy situation to their front. The moving unit should provide similar updates on the enemy situation as it retrogrades and passes control of the battle to the stationary unit. In all cases, units should closely monitor HHQ command frequencies to track the progress of the battle.

Use of Deception

Units use deception to enhance the success of the passage of lines. Stationary units can create multiple lanes, to include dummy lanes, and conduct increased internal troop and vehicle traffic to mask the movement of an advancing unit. A retrograding unit seeks to mask the location of the stationary unit's positions through delay and disrupt techniques. All may make use of smoke, obscuration, and masking terrain to create uncertainty for enemy forces.

Air Defense

In those environments that possess an air threat, whether in the form of attack or mere observation, the passage of lines represents a vulnerable and valuable chokepoint. Normally, the stationary unit is responsible for providing air defense, allowing the passing unit's air defense assets to move with it.

Logistics

Since both units already possess necessary logistical support, the logistical coordination required in a passage of lines applies to vehicle recovery and CASEVAC in the passage lane. An advancing unit will normally handle these issues because the passage lanes quickly become a rear area for it. Conversely, when conducting a retrograde, the stationary unit will likely assist or execute evacuation actions to enable it to quickly clear and close the lanes in preparation for conducting the defense.

Linkup Operations

Linkup is an operation that entails the meeting of friendly ground or helicopterborne forces. The infantry company conducts linkup activities semi-independently or as part of a larger force. When conducting a linkup, one of the units must be stationary. If both are moving, one must occupy temporary positions to conduct the linkup. The HHQ directing the linkup will dictate command relationships. Within a larger unit, the company may lead the linkup force. The differences between linkups at the platoon level and below and at the company level and above involve levels of complexity. Regardless of the

size of the units conducting a linkup, whether divisions or squads, all require communication, coordination, and planning. They begin with contact at the smallest unit levels—two patrols making contact at a linkup point. Linkup operations usually occur when the following occurs:

- Advancing forces reach an objective area previously secured by air assault or infiltrating forces.
- Units conduct coordination for a RIP.
- Cross-attached units move to join their new organization.
- A unit moves forward to conduct a follow and support or follow and assume mission.
- A unit moves to assist an encircled force.
- Units converge on the same objective during an attack.
- Units conduct a passage of lines.

Execution

As an operation, the linkup generally consists of an approach, the preliminary linkup of the units, and the transition to subsequent operations. The linkup procedure begins as the stationary unit halts, unless already in position. At a designated time, the stationary unit sends an element to occupy the linkup point. The moving unit halts at a predetermined spot, sufficiently far enough away to allow it to defend itself without risking fratricide with the stationary unit. Once halted, the moving unit sends an element to affect a linkup at the linkup point. The linkup elements conduct standard small unit near and far recognition procedures. Once both elements make physical contact, the units rapidly execute those planned actions, such as confirming positions, deconflicting battlespace, exchanging liaison officers and guides, conducting joint reconnaissance, and fulfilling other requirements to transition to subsequent operations.

Linkup Planning

Linkups occur for many reasons and under many different conditions. Not every planning consideration applies to every possible linkup. The indirect fire control planning required by two units approaching each other from different directions is entirely different from any that might need consideration during a RIP. Planners should review the conditions in the following subparagraphs when conducting planning.

Follow-On Actions

Since linkups are seldom an end, the HHQ ordering the linkup should provide both units the task, purpose, coordination, and subsequent actions of the operation. While devoting significant effort to the mechanics of approaching and linking up, planners cannot forget to adequately plan for follow-on actions. For example, if two battalions are conducting a linkup as part of a double envelopment, then both battalions will have follow-on missions that require them to coordinate actions to prevent enemy efforts at breaking out or relieving the encirclement. To maintain momentum, the battalions cannot wait until the linkup occurs to plan their follow-on missions.

Site Selection

Site selection refers to picking the linkup point (a primary and alternate site) where elements of the linkup units will conduct initial contact. Linkup sites should be easy to find at night, have cover and concealment, and be off natural lines of drift. They must be defensible and offer both access and escape routes.

Recognition Signals

Units use near and far recognition signals to prevent fratricide. Depending on the tactical situation, units conducting the linkup should avoid radio communications as a means of recognition due to the threat of compromise. Instead, visual and voice recognition signals should be planned.

Direct and Indirect Fires

Direct and indirect fires must be planned in detail before a linkup. Lack of planning could lead to fratricide or hesitation in the face of enemy action resulting in casualties. The stationary unit

controls fires near the linkup point. While the moving unit does not give up control of fires in its battlespace, it does near the linkup point and stationary unit. Both units use RFAs, restrictive fire lines, and phase lines to shift and control fires as the moving unit approaches the stationary unit.

Contingency Plans

Unit tactical SOPs, or the linkup annex of OPORDs, should address what to do if enemy contact occurs before, during, or after the linkup. They should also determine actions if units fail to linkup and alternate linkup and rally points.

Reconnaissance Operations

Successful reconnaissance is a focused collection effort that is aimed at gathering timely, accurate information about the enemy and the terrain in the AO. As stated in MCDP 1-0:

> *Reconnaissance is a mission—aerial, ground or amphibious—undertaken to obtain, by visual or other detection methods, information about the activities and resources of the enemy or to secure data on the meteorological, hydrographic, electromagnetic, or geographic characteristics of a particular area. More simply, reconnaissance obtains information about the characteristics of a particular area and any known or potential enemy within it.*

In many ways, reconnaissance is a continuous effort. It is the responsibility of every infantry company commander to ensure such reconnaissance occurs to gain the information needed to ensure the success of the company. This effort, combined with IPB and other collaborative efforts, yield greater situational understanding of the operation or area. The infantry company may conduct reconnaissance as ordered by HHQ.

As discussed in chapter 4, the mere act of executing operations, such as patrols and convoys, serves a secondary purpose of reconnaissance. Accordingly, the company commander should inculcate the company with a reconnaissance mindset. At a larger level, a company movement to contact is a reconnaissance operation that seeks to gain and maintain contact with the enemy. The company may participate in a battalion reconnaissance in force to gain information and exploit enemy weaknesses. These operations demonstrate that passive reconnaissance through aerial or ground surveillance or even aggressive patrolling may not provide the information necessary for a commander to defeat the enemy. It is sometimes necessary to move against the enemy with a robust, highly flexible force that makes the enemy react in a manner that reveals key command and control and weapon systems. Even in stability operations, such actions as shows of force or area sweeps are reconnaissance activities that seek the threat and attempt to force an enemy reaction.

Regardless of methodology, all reconnaissance falls into one of four types: route, area, zone, and force-oriented missions. Within these types, reconnaissance orients either on the enemy or on the terrain as its primary purpose.

A route reconnaissance focuses on gathering detailed information about a specific route as well as on all terrain from which the enemy could influence movement along that route. Route reconnaissance may be oriented on a specific area of movement, such as a road or trail, or on a more general area, such as an axis of advance.

Area reconnaissance focuses on gathering detailed information concerning the terrain or enemy activity within a specific prescribed area vice a zone. The area can be any location that is critical to the unit's operations, such as a town (large area), a ridgeline (medium area), or a bridge (single point).

A zone reconnaissance focuses on gathering detailed information concerning all routes, terrain, enemy forces, and obstacles within a defined zone. Zone reconnaissance is used most often

when the enemy situation is vague or when the company requires information concerning cross-country trafficability.

Force-oriented reconnaissance focuses on not only gathering detailed information on a specific enemy asset, but also on conducting surveillance on that asset. Reconnaissance assets focus on the target; they move when required to maintain observation on the target and report the elements of information tasked.

Control Points

Control points are defined as positions along a route of march at which Marines are stationed to give information and instructions for the regulation of supply or traffic. More specific to the infantry company, a traffic control point (TCP) is a designated spot on the ground, road, or trail network used to control and influence the flow of pedestrian, vehicular, or boat traffic to support tactical tasks and their effects. Traffic control points can be hasty or deliberate in nature and can be friendly, terrain, enemy, or environmentally oriented. The purpose of TCPs can be further delineated with prefixes, such as entry, vehicle, or pedestrian. The infantry company enforces circulation control measures, laws, orders, and regulations on vehicle and pedestrian traffic by using hasty and deliberate TCPs. Across a broad range of military operations, infantry companies should expect to employ TCPs regularly.

The TCP is critical for planning because it determines combat power and resources assigned to the task. A series of hasty, temporary TCPs designed to disrupt the enemy require little material as opposed to a terrain-oriented TCP that seeks to strictly regulate movement into a given area. Friendly-oriented TCPs serve such purposes as controlling friendly movement and conducting FP through inspections of vehicles. Terrain and environmentally-oriented TCPs serve such purposes as restricting movement into certain areas, demonstrating the presence of peace forces, or enforcing the terms of peace agreements. Enemy oriented TCPs serve such purposes as disruption and interdiction of movement, prevention of smuggling, and interference with communication.

Control point layout, construction, and staffing should reflect METT-T factors, including the purpose and amount of time available for emplacement. The following considerations for control points require the greatest amount of planning, logistics, and combat power (see fig. 11-15 on page 11-24):

- *Positioning*. Infantry companies position TCPs where they are visible and where traffic cannot turn back, get off the road, or bypass the control point without observation.
- *Establish control*. In designing the TCP, the infantry company should endeavor to create an environment that deters resistance. Such deterrence is best achieved through overmatching combat power, such as with visible CSWs or armored vehicles, which are not merely displayed, but are woven into the overall scheme of the control point.
- *Obstacles*. Obstacles are placed in the road to slow and canalize traffic into search areas and bypass lanes as appropriate.
- *Communications*. The TCP should rely on wire as its primary means of communications.
- *Search areas*. Search areas should be below ground or heavily fortified to keep the effects of blasts or small arms internal to the search area. The design of search areas allows for general searching areas; facilities appropriate for more detailed searches that require privacy; and, as appropriate, search areas segregated by gender. They should also afford some means of FP for the personnel conducting searches.
- *Enablers*. Control points should receive special skill sets appropriate to their missions, such as female search teams, interpreters, HN liaisons, or military working dog teams.

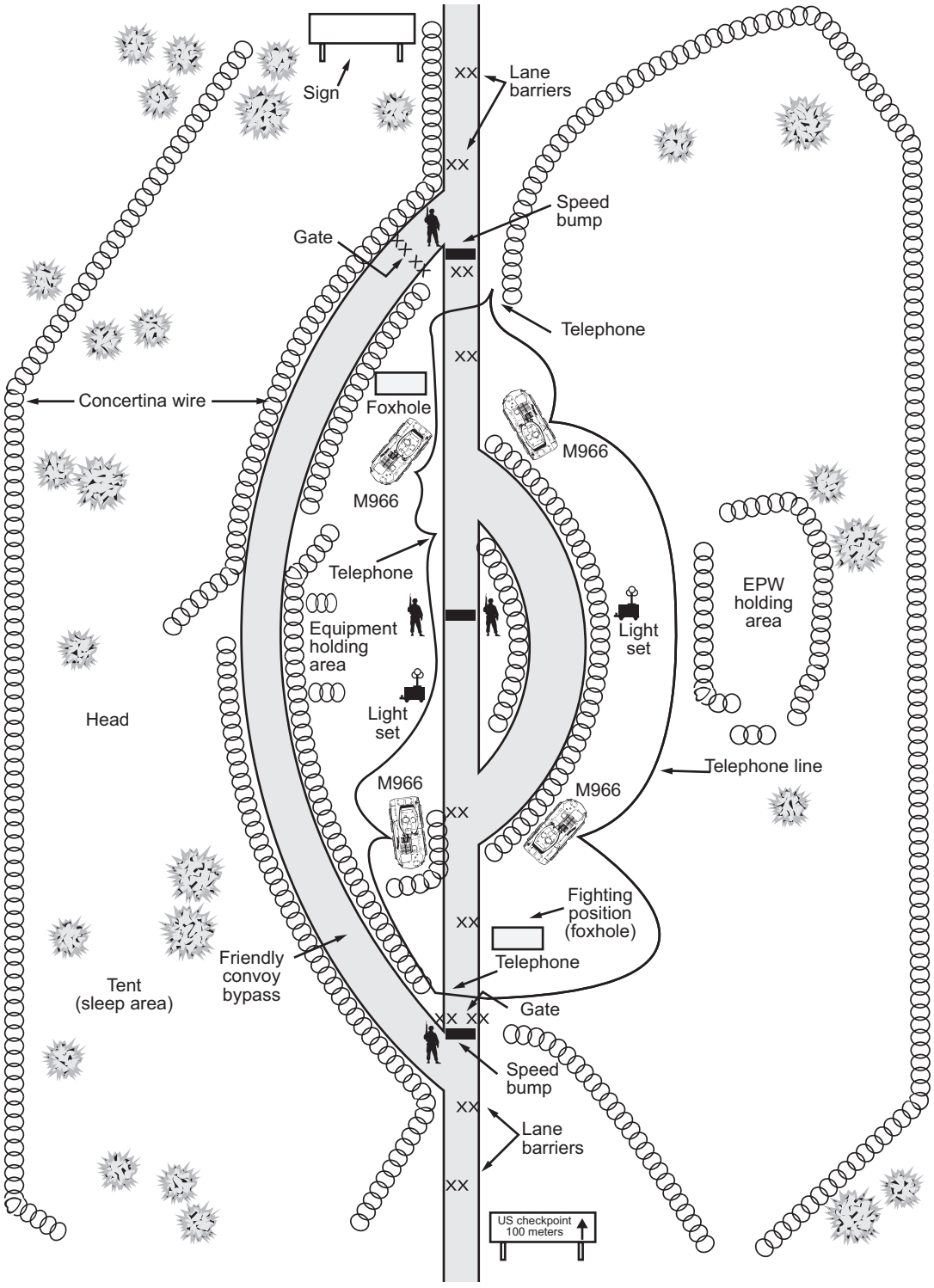


Figure 11-15. Traffic Control Point.

CHAPTER 12
FORCE PROTECTION PLANNING

The purpose of Marine Corps leadership is mission accomplishment and troop welfare. While mission accomplishment takes priority, troop welfare has always been included because, without effective, capable troops at the point of decision, there can be no mission accomplishment. The inclusion of FP within the Marine Corps warfighting functions is formal recognition of the increased complexity of the concept of troop welfare. Force protection is not a directive or prescription for paralysis or nonaction—the warfighting and maneuver warfare tenets of Marine Corps doctrine demand otherwise. Force protection is taking reasonable measures to ensure that the infantry company retains enough capability to accomplish the mission assigned. This chapter discusses ORM and external and internal FP measures from the infantry company commander's perspective.

Force protection is defined as preventive measures taken to mitigate hostile actions against Department of Defense personnel (to include family members), resources, facilities, and critical information. (JP 1-02) Further, MCRP 5-12C amplifies the joint definition with "actions or efforts used to safeguard own centers of gravity while protecting, concealing, reducing, or eliminating friendly critical vulnerabilities." Force protection does not include actions to defeat the enemy or protect against accidents, weather, or disease. The purpose of FP is to ensure that commanders possess the troops, equipment, and facilities necessary to accomplish the mission. While the semantics, processes, and procedures may be new, the concept of FP is as old as warfare. From march rates to load weights and from restricting operations to traditional "campaign seasons" to basing invasion routes on the availability of food and fodder, commanders from antiquity to present always considered the measures necessary to ensure that they arrived on the battlefield with enough healthy people who possess the right weapons and are equipped with functioning gear to defeat the enemy. When determining and executing FP measures, infantry company commanders face a task that is no different from the one their predecessors faced.

Force protection applies inwardly and outwardly: while internal protection measures protect the force against its own actions, external protection measures protect it from the enemy. Examples of these types of measures include antiterrorism barriers, OPSEC, engineering survivability measures, and body and vehicle armor. Examples of internal FP include weapons safety, proper BSG, proper clothing for the environment, rest plans, and unit hygiene.

Operational Risk Management

Risk management processes and methods provide tools to help commanders balance the demands of mission accomplishment against the risk they can accept in terms of combat power. The Marine Corps uses ORM, a process that applies to any mission or environment, for this purpose. Operational risk management is a five-step process that helps identify and control hazards to protect the force. Operational risk management serves to help identify and control risk, not necessarily eliminate risk. While eliminating risk is always preferred when possible, it cannot be a goal in itself since the only way to truly eliminate risk is to take no action at all. Company commanders use ORM as a tool to assist them in balancing risk, not as a lock-step process that dictates COAs. Similarly, the Marine Corps expects its company commanders to possess the maturity and judgment to understand the importance of risk management in mission accomplishment.

The basic principles of ORM underline its importance as a tool and thought process, rather than an outcome-generating methodology:

- Accept risk when benefits outweigh the cost.
- Accept no unnecessary risks.
- Anticipate and manage risk by planning.
- Make risk decisions at the right level.

The critical input necessary for the ORM process is identification of hazards. The company identifies hazards through guidance from the company commander, during the planning process, and during execution. The METT-T with civilian considerations methodology helps to identify hazards not only across the operational areas of a broad range of military operations, but also in training and garrison environments:

- Mission: specified, implied, essential, and subtasks determine what the company must do and how it may do it.
- Enemy: how and what the enemy can do to affect the force directly impacts FP.
- Terrain and weather: the terrain and environment in which the company must operate will dictate hazards that must be mitigated in order to operate effectively.
- Troops and support available: the condition, training, experience, and readiness of troops and equipment affect the risk of certain COAs.
- Time available: the amount of time available to plan, rehearse, and execute a mission impacts the amount of risk a company commander might accept.
- Civilian considerations (as appropriate): the effects of the company's actions and combat power on noncombatants is often a critical hazard for which company commanders seek mitigation.

The five steps of ORM apply to each identified hazard individually:

- Identify the hazard to the force.
- Assess the impact of the hazard.
- Develop controls and make a risk decision.
- Implement controls.
- Supervise and evaluate.

External Force Protection

External FP refers to outside challenges to the balancing of mission and troop welfare. Company commanders view these external threats through the lens of ORM thought, asking the following questions: What must the company do? What are the risks entailed in executing the mission? What is the company doing to mitigate or eliminate those risks?

During the conduct of the planning process, COA development and wargaming provide critical inputs into ORM in terms of enemy hazards to the force. Many hazard controls that apply to the enemy are tactical in nature. For example, the use of a SBF position is a hazard control that mitigates enemy risk to the assault element. Similarly, the creation of both branch and sequel plans are hazard control measures that mitigate the risk of the enemy taking different actions than those most likely. While company commanders might not choose to use a formal ORM tool for mitigating the enemy threat, they are still required and expected to seek ways to mitigate enemy hazards.

Operations Security

Operations security is the method company commanders use when determining whether the enemy can observe or access friendly actions and information and whether the enemy can use any of the friendly information they gather. This method helps commanders implement controls to block the enemy's attempts to gain friendly information or mitigate damage from any friendly information they are able to gather. Operations security is nothing less than constantly seeking to thwart and subvert the enemy's intelligence collection efforts. This endeavor takes both active

form, such as frequently changing frequencies and call signs, and passive form, such as safeguarding the personal information of the company's personnel. As with all risk mitigation, company commanders integrate OPSEC considerations into the company's planning processes. The OPSEC process involves five steps:

- Identification of critical information.
- Analysis of threats.
- Analysis of vulnerabilities.
- Assessment of risk.
- Application of appropriate countermeasures.

When conducting operations, company commanders continually evaluate threats to OPSEC that range from company actions visible to the enemy to the control of visitors, HNSF, and coalition partners within the company area. Managing risk is always a subjective decision of the commander who must weigh six factors in pursuit of mission accomplishment, which are discussed in the following subparagraphs.

Critical Information

Company leadership identifies and safeguards critical information (such as the date and time of an attack). Such information, if possessed by the enemy, would present an immediate threat to the success of the mission.

Indicator Management

The mere presence of the infantry company and its daily actions serve as indicators to the enemy intelligence collection effort. Balancing OPSEC against paralysis, company commanders seek to manage detectable friendly actions. An example might be hiding the delivery of additional supplies for an attack within habitual movements or during periods of darkness. Similarly, in conducting a reconnaissance for a potential COP, the patrol and accompanying engineers might visit a variety of sites to confuse the enemy regarding which point the company will place the position.

Threat Analysis

What the enemy can observe or collect directly impacts what OPSEC measures the company takes. Company commanders institute OPSEC measures as a matter of SOP and, when in doubt, they err on the side of giving the enemy too much credit. Threat analysis should also include considering the *enemy's* ability to analyze and act on information they gather.

Analysis of Vulnerability

Like all other security measures, supervision is constant as is assessment of how well the company is performing OPSEC: What information are company members sending home, e-mailing, or posting on the Internet? Analysis of vulnerability also applies in a mission-specific way: What, if any, unique OPSEC concerns apply to an upcoming mission and are control measures in place to safeguard the actions and information?

Risk Assessment

The OPSEC process is a way to balance mission accomplishment with FP risk. Company commanders must balance all considerations to determine what OPSEC control measures to institute in keeping with mission accomplishment.

Appropriate Countermeasure Application

Once decided upon, whether habitual actions taken by the company (such as routine shredding of documents containing personal information) or mission-specific measures (such as creating a BP at night), company commanders institute OPSEC control measures and supervise their application.

Antiterrorism

Antiterrorism is an official security program used by the Marine Corps across a broad range of operations both at home and abroad. While most commonly associated with the security of facilities (such as bases, air stations, and FOBs) with regard to terrorist threats, the tenets of antiterrorism apply

beyond terrorism and mere fixed site security. These tenets represent a security mindset that seeks to make "hard targets" of all activities, from social functions and training exercises to COPs and headquarters buildings.

Considerations

In conducting antiterrorism assessments, company commanders consider the nature and degree of possible threats by geographic location, criticality and vulnerability of the target, and level of hostile intent. In most cases, company commanders can expect to receive significant antiterrorism assessment support from HHQ. Such support does not alleviate company commanders from considering their own local vulnerability or from conducting antiterrorism assessments when executing semi-independent operations.

Collect and Analyze. Using a combination of information sources, including HHQ, turnover with previous units, law enforcement, local threat assessments, and inspections, company commanders make a risk assessment of the likelihood and type of possible threat actions against their companies. Just like planning for any operation, company commanders then consider the best friendly responses to threat actions. Using antiterrorism methodologies, company commanders assess the vulnerability of their company personnel and positions in terms of physical security, personal protection, threat capabilities, and OPSEC.

Plan and Prepare. Based on the antiterrorism collection and analysis results, company commanders develop countermeasures and controls to mitigate or eliminate risks of terrorism or similar threat actions. During planning, the company determines resource shortfalls and seeks augmentation as necessary. During preparation, company personnel receive training on new procedures and processes, the company implements IO education campaigns if required, and engineers conduct surveys and draw up plans for physical security augmentation.

Implement. The company commander either includes FP measures within the OPORD or prepares an antiterrorism-specific order in cases involving significant and detailed antiterrorism processes, procedures, and countermeasures. In addition to various procedures, an antiterrorism order contains guidance for operating within the context of larger operations, such as the requirements of HHQ, emergency response actions and reporting, and a threat and vulnerability assessment. The issuing of the order marks the start of implementation to include the introduction of physical security measures and facility hardening if needed.

Threat Metrics

There are a wide variety of terrorist threat levels, security conditions, and other assessment metrics used by different US Government entities. While all seek to classify terrorists, threats, and expected friendly actions, many are subject to change, revision, or elimination. The following three subparagraphs address those threat conditions company commanders most likely will encounter.

Department of Defense Force Protection Conditions. The Department of Defense has identified and standardized the FP conditions in table 12-1. Commanders may adopt higher FP condition measures than ordered by the chain of command if local conditions warrant greater security measures.

Table 12-1. Department of Defense Force Protection Conditions.

NORMAL	General threat of possible terrorist activity exists but warrants only routine security.
ALPHA	General threat of possible terrorist activity against personnel and installations; nature is unpredictable.
BRAVO	Increased/more predictable threat activity exists; must be able to be maintained for weeks without undue hardship.
CHARLIE	An incident occurs or intelligence indicates terrorist action is imminent.
DELTA	Terrorist attack has occurred in the area or intelligence indicates attack is likely.

Antiterrorism Security Conditions. Commands use the following metrics to report antiterrorism security conditions and postures:

- Condition Red: Denotes the actual in progress or identified imminent threats to force personnel. All force personnel are alerted and must stand to. All access points to areas of operations are closed.
- Condition Yellow: Indicates probable hostile actions or unidentified activity that warrants investigative actions by security personnel. All security personnel are alerted.
- Condition Green: Activity is normal. No actions are required.

Rear Area Security Threat Response Levels. Infantry company commanders may encounter the metric outlined in table 12-2 in relation to a threat assessment conducted by rear area security personnel.

Table 12-2. Rear Area Security Threat Assessment Levels.

Level I	Those threats that can be defeated by local defenses.
Level II	Those threats that are beyond the capabilities of local defense, but that can be defeated by reaction forces. Local defenses must be able to contain Level II threats until the arrival of reaction forces.
Level III	Those threats that require the commander to employ combat units to defeat them, which is normally a tactical combat force.

Company Commander Responsibilities

Company commanders execute the requirements mandated in the latest version of the antiterrorism order. In general, they can expect to—

- Act in accordance with HHQ antiterrorism direction.
- Institute and maintain antiterrorism threat assessments, plans, orders, and control measures.
- Incorporate antiterrorism countermeasures and risk assessments into physical and fixed site security, training plans, OPORDs, and company planning and execution methodology.
- Coordinate and synchronize antiterrorism, OPSEC, and information security requirements.
- Appoint a company FP officer in accordance with the latest version of the antiterrorism order to manage antiterrorism programs within the company.
- Ensure that the company and its personnel meet current antiterrorism individual and unit training requirements per the latest version of the antiterrorism order.
- Ensure that the company determines the nature of and conducts any additional antiterrorism training required for deployment to specific areas as defined both geographically and by threat condition.

Chemical, Biological, Radiological, and Nuclear

For infantry companies operating in a CBRN hazard environment or CBRN threat environment, the most important consideration is maintaining the force for further operations. Company commanders meet FP requirements in this challenging environment primarily through contamination avoidance to include timely warning and reporting, effective individual protection measures, well-trained CBRN reconnaissance and surveillance, and decontamination teams. These teams are normally managed at the battalion level. Per unit SOPs, a percentage of Marines in companies are trained by the battalion CBRN section to be CBRN team members.

Threat Analysis

Infantry companies receive information regarding the potential for operating in a CBRN environment from HHQ, whether that environment results from terrorist action or from the introduction of CBRN warfare into the operational environment. Depending on the threat, HHQ may—

- Issue additional equipment such as individual protective, decontamination, and detection equipment. Medical may issue antidote kits.
- Test CBRN warning and reporting system by sending and receiving CBRN reports.

- Conduct additional training for reconnaissance and surveillance teams and decontamination teams.
- Establish control measures and resources, such as separate routes for contaminated and decontaminated units, or primary and alternate decontamination sites.
- Modify operational timelines to account for slower tempo in a CBRN environment.

Threat Conditions

The CBRN threat conditions listed in table 12-3 are used to quickly provide information about current threat and protective measures to be taken.

Company Actions

Infantry companies ensure mission accomplishment in a CBRN environment by conducting

Table 12-3. Chemical, Biological, Radiological, and Nuclear Threat Conditions.

Threat Condition	Attack Probability	Enemy Indicators	Civil Indicators	Minimum Protective Actions
White: Zero probability (serial 1)	Negligible	No CBRN offensive capability in the AOI	No known industrial hazards or nuclear reactors in the AOI	Verify CBRN equipment Conduct routine maintenance
Green: Low probability (serial 2)	Possible	Offensive CBRN capability No indicators of potential employment in the next 24 hours	Confirmed presence of hazardous industrial materials or nuclear reactors in the AOI	Take all of the above actions Conduct CBRN training and rehearsals Conduct CBRN equipment PMCS, to include vehicle and shelter filters Establish shelter/overhead cover plan Review MOPP considerations
Amber: Medium probability (serial 3)	Probable	Enemy moving, dispersing, or prepositioning CBRN munitions forward or near delivery systems Enemy wearing protective gear or moving/dispersing decontamination systems Increased OPSEC of delivery means	Hazardous industrial practices reported Hazardous conditions in storage facilities detected Combat operations being conducted near sites with confirmed hazards	Take all of the above actions Emplace alarms Cover equipment/supplies Verify alarms/warnings Brief CBRN teams Verify mask seals/MOPP Prepare decontamination site Erect collective shelters Issue medical countermeasures Conduct reconnaissance
Red: High probability (serial 4)	Imminent	Enemy ready/certain to employ CBRN munitions CBRN munitions used in AOI; no local contamination hazard present	Localized spill or accident confirmed HN authorities direct limited precautionary evacuation or declare hazard area	Take all of the above actions Implement MOPP considerations based on METT-T Monitor continuously Use vehicle overpressure Conduct reconnaissance overwatch of NAI
Black	Attack occurred	CBRN contamination present in AO Germs/toxins detected in AO	Major industrial accident/incident	Take all of the above actions Mark contaminated areas Find clear routes Resupply CBRN equipment
NOTE: The CBRN threat levels and serial numbers used for assessment purposes are according to NATO Standardization Agreement 2984, *1995 Graduated Levels of Nuclear Biological Threat and Associated Protection*.				

contamination avoidance. After a CBRN incident, Marines continue accomplishing the mission through effective use of individual survival measures. Companies coordinate reconnaissance and surveillance and decontamination operations with HHQ. Since companies do not have CBRN defense officers or CBRN defense specialists, the CBRN subject expertise available to the infantry company resides at the regimental and battalion level.

Mission-Oriented Protective Posture. Like other similar orders and directions, company commanders may not lessen a minimal mission-oriented protective posture (MOPP) level dictated by HHQ, but may adopt a more protective posture if necessary. In general, when addressing MOPP levels, commanders take into account the mission, level of threat, environment, temperature, work/rest rate, performance degradation, and physical conditioning of the company's personnel (see table 12-4) by considering the following:

- What is the mission? Is it offensive or defensive?
- What is the likelihood of employment?
- What is the expected warning time?
- How physically and mentally demanding is the work to be performed?
- What is the expected duration of the mission?
- What are the weather, terrain, and time of day?
- Has the company accounted for degraded performance of even simple tasks? Are work and rest cycles planned?

Reconnaissance and Surveillance Teams. The infantry company does have Marines trained in CBRN reconnaissance and surveillance, but such Marines are typically trained as teams at the battalion level. Companies will be directed by HHQ to execute reconnaissance and surveillance team operations. The CBRN reconnaissance and surveillance operations locate, identify, and track CBRN hazards.

Decontamination Teams. The infantry company has Marines trained in decontamination; however, they are typically trained/organized as teams at the battalion level. Companies will support HHQ decontamination efforts with Marines that have been designated as decontamination team members.

Decontamination Operations

There are three types of decontamination: immediate, operational, and thorough. Individuals, as the situation allows, perform immediate decontamination of themselves and their personal equipment to minimize casualties, prevent the spread of contamination, and keep the maximum amount of combat power engaged in operations. A company can perform immediate decontamination, MOPP gear exchange, and MOPP gear drop per MCWP 3-37, *MAGTF Nuclear, Biological, and Chemical Defense Operations*. Thorough and operational decontamination are organized by HHQ.

Table 12-4. Mission-Oriented Protective Posture Levels.

MOPP Equipment	MOPP Levels						
	MOPP Ready	MOPP 0	MOPP 1	MOPP 2	MOPP 3	MOPP 4	Mask Only
Mask	Carried	Carried	Carried	Carried	Worn[1]	Worn	Worn
Overgarment	Ready[2]	Available[3]	Worn[1]	Worn[1]	Worn[1]	Worn	
Boots	Ready[2]	Available[3]	Available[3]	Worn	Worn	Worn	
Gloves	Ready[2]	Available[3]	Available[3]	Available[3]	Available[3]	Worn	

Notes
1—In hot weather, coat or hood can be left open for ventilation.
2—Must be available within two hours. Second set available in 6 hours.
3—Within arm's reach.

Chemical, Biological, Radiological, and Nuclear Warning and Reporting

The primary means of warning units of an actual or predicted CBRN hazard is the CBRN Warning and Reporting System. Higher headquarters normally transmits CBRN warnings or alarms in the form of CBRN 3 reports and CBRN 5 reports. Higher headquarters will direct what MOPP level a company will use based on analysis performed. Companies will generally only send CBRN 1 observers reports to HHQ. See MCRP 3-37.2A, *Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Contamination Avoidance*, for information regarding CBRN warning and reporting.

Internal Force Protection

Internal FP measures refers to such things as fratricide, negligent discharges, equipment or communications failure, and other items within the company's control that can negatively affect troop welfare and mission accomplishment. Company commanders view these internal issues just as external issues—through the lens of ORM—asking the following questions: What must the company do to accomplish the mission? What are the risks entailed in conducting the mission in terms of internal failures? What is the company doing to mitigate or eliminate those risks?

Guardian Angel

The guardian angel method uses the overwatch concept to provide continuous security for a unit, function, activity, or facility. When conducting a security halt, a squad leader may place a pair of Marines on the roof of a nearby building to provide overwatch for the patrol. When conducting a change of command ceremony, a fire team of Marines may position themselves unobtrusively at vantage points overwatching the formation and avenues of approach. Guardian angels are mature, alert, and trusted individuals who use an ambush mentality to watch over a unit's security. Whether armed or unarmed, they must have the means to convey a threat (sound the alarm). Guidelines for employment of guardian angels are:

- Personnel and equipment remain tactically alert to ensure security, protection, and early warning until a trained guardian angel is emplaced.
- Guardian angels will be given guidance and training regarding the use of deadly force and local ROE and escalation of force continuum procedures. Guardian angels rehearse the immediate actions required of them.
- Units will employ the appropriate communications gear to ensure that guardian angels can provide proper early warning of a threat.
- Guardian angels remain vigilant and alert to potentially hostile activities and actions near their units.
- Guardian angels should be rotated in order to maintain the highest levels of awareness.
- Guardian angels are employed at all unit evolutions, regardless of size or operational environment.

Fratricide Prevention and Battlespace Geometry

Fratricide represents a real threat to FP and mission accomplishment. Fratricide happens when friendly weapons and munitions are used to destroy the enemy, but the effects of those weapons and munitions impact other friendly forces instead. While some definitions of fratricide include such words as unintentional and unforeseen, most friendly fire incidents result from human error or loss of situational awareness. Company commanders can implement substantial controls to significantly reduce the risk of fratricide. The basis of such controls are schemes of maneuver and tactical control measures that mitigate the chance of fratricide; maintain situational awareness across the company; and train company personnel to understand their weapons, the effects of their weapons, and the principles of BSG.

Tactical Control Measures

Control measures deconflict fire and maneuver, assign responsibilities, and control combat operations. They may apply to the scheme of maneuver and operations or they may apply to internal procedures. They may be verbal, graphic, or both. Tactical control measures reinforce the company commander's scheme of maneuver, help prevent fratricide, are easily understood, and are tied to readily recognizable terrain features as appropriate. Examples of tactical control measures are—

- Maneuver, such as axis or direction of attack, EAs or BPs, and attack and SBF positions.
- Command and control, such as contact and control points, boundaries and phase lines, rally and passage points, and limit of advance.
- Internal control measures, such as day and night visual markings, challenge and passwords, and brevity codes.

Battlespace Geometry

As seen in figure 12-1, on the combined arms battlefield, BSG requires awareness of eight elements of information. While every individual in the company cannot track all elements of BSG, they can be trained for awareness. If individual members of the company understand how BSG

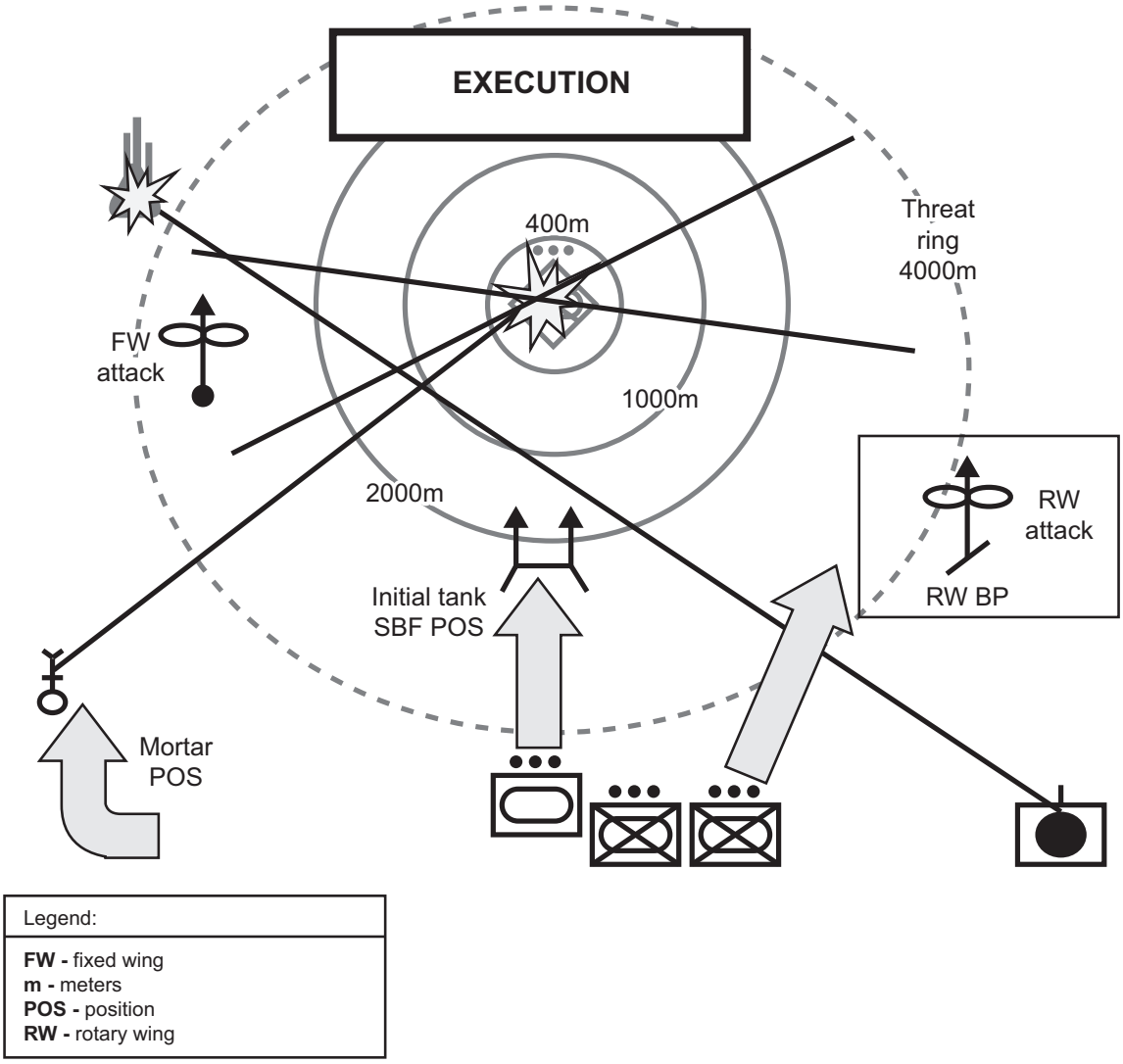


Figure 12-1. Battlespace Geometry (Training Distances) Example.

works for both small and combined arms and if they understand how the different combined arms platforms, such as CAS or artillery, operate, then they are much more likely to recognize unsafe situations and act accordingly. The individual rifleman or squad leader might only know that he/she can expect rotary-wing CAS support from the east, but that small amount of information will make him/her aware that helicopters are in the battlespace, the direction from which they can be expected, and that the infantry should be prepared to check their fires if something unexpected occurs. The eight elements of BSG are—

- Friendly positions and associated surface danger zones.
- Enemy positions.
- Enemy threat ring.
- Ordnance minimum safe distances (training) or risk estimate distance (combat).
- Artillery gun-target lines.
- Mortar gun-target lines.
- Fixed-wing CAS attack cones.
- Rotary-wing CAS BPs.

Weapons Safety

The ability for company personnel to understand the functioning, employment, and effects of their weapons is crucial to avoiding fratricide. A good understanding of BSG helps prevent poor employment of a weapon system, but Marines must also understand the effects of their weapons in terms of maximum range, penetration depth, beaten zone, and blast effects to avoid engaging the enemy in such a manner as to endanger friendly troops. Further, understanding the functioning of a weapon and mature and engaged leadership prevents fratricide resulting from negligent discharges. Most negligent discharges do not happen in combat, but happen during training, weapons clearing and cleaning, or because of horseplay. The Marine Corps uses the following five safety rules as the basis for weapons safety:

- Treat every weapon as if it were loaded.
- Never point a weapon at anything you do not intend to shoot.
- Keep your finger straight and off the trigger until you intend to fire.
- Keep your weapon on safe until you are ready to fire.
- Know your target and what lies beyond it.

Combat Checks and Inspections

A unit that has a well-established system of checks and inspections will more consistently perform to standard (see table 12-5). The company commander establishes checks and inspections that support the unit's operational tasks. Once established, the company commander must ensure that the checks and inspections happen before and after combat operations. Checks and inspections fall into the following categories: PCCs, PCIs, postcombat checks, and postcombat inspections.

Precombat Checks

Precombat checks help the leader to prepare the unit for combat and include checks for individuals, vehicles, weapons, and equipment. While these checklists are generic, they can be easily tailored to fit a unit's specific needs. Leaders at all levels use these checklists to plan and prepare instructions to their subordinate leaders.

Precombat Inspections

Precombat inspections validate that the PCCs occurred. They are a leader's primary means of ensuring that essential equipment is present and ready and that subordinates understand the order and the mission. Leaders must plan their time and that of the unit to ensure that inspections happen. Time must also be available for corrective actions should an individual or item fail the inspection. Leaders cannot delegate this responsibility; they must be the inspectors. This demands that they be competent in the maintenance and care of the unit's equipment. The standards a commander sets and to which he/she inspects will determine the unit's ability to perform in combat.

Table 12-5. Sample Precombat Inspection Checklist.

Vehicle preparations	● Loaded according to the load plan ● Vehicle refueled ● Water cans full, Class I stowed ● Equipment cleaned and stowed ● First aid kit/combat-lifesaver bag complete and stowed ● Vehicle dispatched, technical manual present, vehicle tool kit stowed ● Basic load of ammunition stowed
Communications equipment	● Radios operational, mounted, and secured ● Connections and receptacles cleaned and frequencies set ● Antenna matching unit(s) operational ● Communications security equipment operational ● Telephones operational and stowed ● OE-254 antenna complete, operational, and stowed ● All required nets entered and monitored
CBRN	● CBRN equipment accounted for and serviceable ● CBRN equipment stored/employed as appropriate ● Individual CBRN equipment is issued as appropriate
Optics	● NVDs and binoculars cleaned, operational, and stowed
Maintenance	● PMCS conducted on all equipment ● Department of Army Form 2404(s), *Equipment Inspection and Maintenance Worksheet*, completed on all equipment
Armaments	● All weapons cleaned and test fired

Postcombat Checks

Postcombat checks are identical in form to PCCs but differ in substance. Individuals, vehicles, weapons, and equipment checks still occur; however, the focus changes to repairing and refitting these items to be reusable. Expendable items may need replenishing and lost items require replacing. Units replace their basic load items and ensure that equipment has its full complement of POL. Damaged and nonoperational equipment is evacuated for repair. In lower priority, individual needs, such as rest, refitting, medical, and moral problems, receive attention.

Postcombat Inspections

In the same way that PCIs require unit leaders to verify PCCs, postcombat inspections require leadership to inspect postcombat checks. Since postcombat operations are maintenance oriented, unit leaders should employ inspection teams consisting of vehicle, communication, supply, and other appropriate personnel to assist them. As well as helping with the inspection, these personnel can also make on-the-spot corrections. Inspections must focus on serviceability. Sufficient time is necessary to perform these inspections to accommodate the required attention to detail. In depth, postcombat actions increase the speed and efficiency of precombat actions.

Body Armor Protective Level

In many cases, company commanders can expect some sort of guidance regarding body armor protective level (APL) posture from HHQ. This direction usually aligns APLs with general enemy threat conditions or activities, while providing guidance on company commander authority for modification, waiver authority, or waiver procedures. When determining APL requirements, commanders must, as with all FP considerations,

balance mission accomplishment against troop welfare. During the simultaneous conflicts in Iraq and Afghanistan, APL requirements differed in each AO. In Afghanistan, commanders accepted risk and reduced APL requirements in order to accomplish a mission that placed great demand on dismounted mobility. In Iraq, with a significantly heavier urban and road environment, commanders placed greater emphasis on survivability and increased the APL posture. Regardless, the current Marine Corps family of personal protective equipment is deliberately scalable to allow commanders flexibility in APL posture (see table 12-6).

Table 12-6. Armor Protective Level Chart.

APL	Description
Level 0	No body armor worn
Level 1	Vest/plate carrier with soft armor only
Level 2	Vest/plate carrier with front and back hard armor plates
Level 3	Vest/plate carrier with front, back, and side hard armor plates

Environment Risk Mitigation

Since the Marine Corps continues to operate in "every clime and place," the effects of various environments on the personnel and equipment of the infantry company remain a key component of FP. When determining how to mitigate those effects, company commanders consider preventing, mitigating, and recovering from the effects. Environmental effects are hot or cold, dry or wet, high or low, and many combinations thereof. Using this methodology, some of the mountains in Indonesia would be considered hot, wet, and high; whereas, the Gobi Desert would be considered cold, dry, and high.

Hot or Cold

The temperature of the body is regulated within very narrow limits: overheating can cause heat exhaustion and heat stroke; overcooling can cause hypothermia. Both conditions can occur in either hot or cold environments. Rather than approach the environment in terms of its temperature range, company commanders enact FP measures by approaching the environment in terms of the temperature of the company's personnel and equipment. For example, disciplined use of layering garments prevents heat exhaustion when conducting physical exertion in the cold in the same manner as it prevents hypothermia in the desert at night when at rest. While acclimatization *assists* the company when operating in extreme temperature environments, it is not a cure all. Measures, such as work rotation to manage physical exertion in both hot and cold, shelter availability (whether sunshade or a heating tent), hydration and diet regardless of temperature, and proper equipment maintenance, are appropriate considerations for the company commander.

Wet or Dry

While not readily apparent, the presence or lack of moisture in an environment can have just as many effects on personnel and equipment as temperature. Rather than approach the environment in terms of its humidity, rainfall, or aridness, company commanders enact FP measures by approaching the environment in terms of the humidity required by personnel and equipment. In wet environments, companies focus on keeping personnel as dry as possible to avoid fungal infections and disease, while keeping equipment lubricated to prevent rust. Companies may accomplish this through simple measures, such as dry socks, personnel shelters above the ground, and air conditioners to protect sensitive electronic equipment from moisture. While high humidity and the presence of large amounts of water present the greatest problems to the infantry company, overly dry environments can also cause issues that company commanders seek to mitigate through hydration of personnel and lubrication and maintenance of equipment.

High or Low

Altitude presents significantly greater concerns than other environments due to its immediate effects on the human body. Low altitudes present little or no problems for the infantry company;

however, as companies begin to operate in elevations over 6,500 feet, the effects of elevation on company personnel become an increasing challenge. Above 8,000 feet, companies can expect cases of altitude-related illness, which can result in death if left untreated. While gradual acclimatization to slowly increasing altitudes is a viable method for preventing altitude-related illnesses, companies may not have that luxury. In addition to deploying healthy and fit Marines, companies deploying into elevations above 6,500 feet should expect to have altitude-related casualties and conduct appropriate medical training for all company personnel.

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CHAPTER 13
LOGISTICS

The company commander is responsible for logistics, its associated functions, and the proper use and disposition of supplies and equipment. The relationship between logistics and military operations, according to MCDP 4, *Logistics*, is that logistics sets the outward limit on what is operationally possible. If logistics sets the limits, MCDP 4 continues, it follows that one of our key objectives must be to ensure that limits imposed by logistics do not inhibit effective operations. As a result, the publication instructs commanders to consider logistics in the development of plans and the allocation of resources.

In the austere logistic environment of the Marine infantry company, sustaining the company in combat provides company commanders with one of their greatest challenges and operational limits. Company commanders must be innovative and resource conscious in adopting company processes and techniques for supply, maintenance, and casualty treatment and evacuation. Supervision and key leadership engagement at all levels is critical. As discussed in chapter 1, the company staff supervises and executes administrative and logistical tasks at the company level. Company commanders who supervise and ensure the proper task organization and division of labor of the company staff will enable the company's success.

Logistic Functional Areas

Tactical logistics consists of six functional areas: supply, maintenance, transportation, general engineering, health services, and services. Table 13-1, on page 13-2, provides detailed information on the six functions of CSS and their associated subfunctions.

Supply

The supply function is a cyclic process of acquiring, issuing, and accounting for materiel used to sustain the company. This materiel may be consumable and expendable items, such as rations and cleaning supplies, or durable materiel, such as weapons and vehicles. Logisticians normally calculate requirements for each class and subclass of supply. Figure 13-1, on page 13-3, provides detailed information on the ten classes of supply.

Maintenance

Maintenance involves preventive maintenance (actions taken to keep materiel in serviceable condition) and corrective maintenance (actions required to return materiel to serviceable condition). By grouping maintenance tasks by levels of support, commanders determine who performs what maintenance. Company commanders must maintain situational awareness of the readiness of company assets, particularly since companies have larger tables of equipment than in the recent past. Typically, the company XO will manage and track company readiness via the battalion maintenance management officer. Table 13-2, on page 13-4, depicts the three levels of maintenance and their associated echelons of maintenance. In general, organizational and limited intermediate maintenance are the levels of maintenance found at the company and battalion level.

Health Service Support

Health service support seeks to minimize the effect that wounds, injuries, and disease have on unit effectiveness, readiness, and morale. The two requirements for HSS are a preventive medicine

Table 13-1. Functional Areas of Logistics.

Supply	Maintenance	Transportation
Determination of requirements	Inspection and classification	Embarkation
Procurement	Service, adjustment, and tuning	Landing support
Storage	Testing and calibration	Port and terminal operations
Distribution	Repair	Motor transport
Salvage	Modification	Air delivery
Disposal	Rebuilding and overhaul	Freight/passenger transportation
	Reclamation	Materials handling equipment
	Recovery and evacuation	
General Engineering	**Health Services**	**Services**
Engineer reconnaissance	Health maintenance	Command services
Horizontal/vertical construction	Casualty collection	Personnel administration
Facilities maintenance	Casualty treatment	Religious ministries support
Demolition and obstacle removal	Temporary casualty holding	Financial management
Explosive ordnance disposal	Casualty evacuation	Communications
Bridging		Billeting
		Messing
		Band
		Morale, welfare, and recreation
		CSS services
		Disbursing
		Postal services
		Exchange services
		Security support
		Legal services support
		Civil affairs support
		Graves registration

program that safeguards personnel against potential health risks and a system that provides medical support from the point of wounding, injury, or illness through evacuation. An infantry company will typically have a medical section of 11 corpsmen, one of whom being a petty officer who serves as the senior corpsman.

General Engineering

General engineering is distinct from combat engineering. General engineering is a CSS function, such as engineer support battalion, that addresses such things as construction, operation, repair of facilities, and terrain modification. Conversely, combat engineering is a CS function, such as a combat engineer battalion. In a more traditional combat environment, company commanders are likely to encounter general engineering assets when those assets augment combat engineers to support large combat engineering efforts, such as obstacle groups, strong point construction, or significant bridging. When employed in a more independent role, companies will frequently interact with general engineering assets in support of CMO, FOB, route clearance, maintenance, and other functions. Use of general engineering assets often involves more detailed planning and preparation and higher standards of design and construction than typical combat engineer tasks.

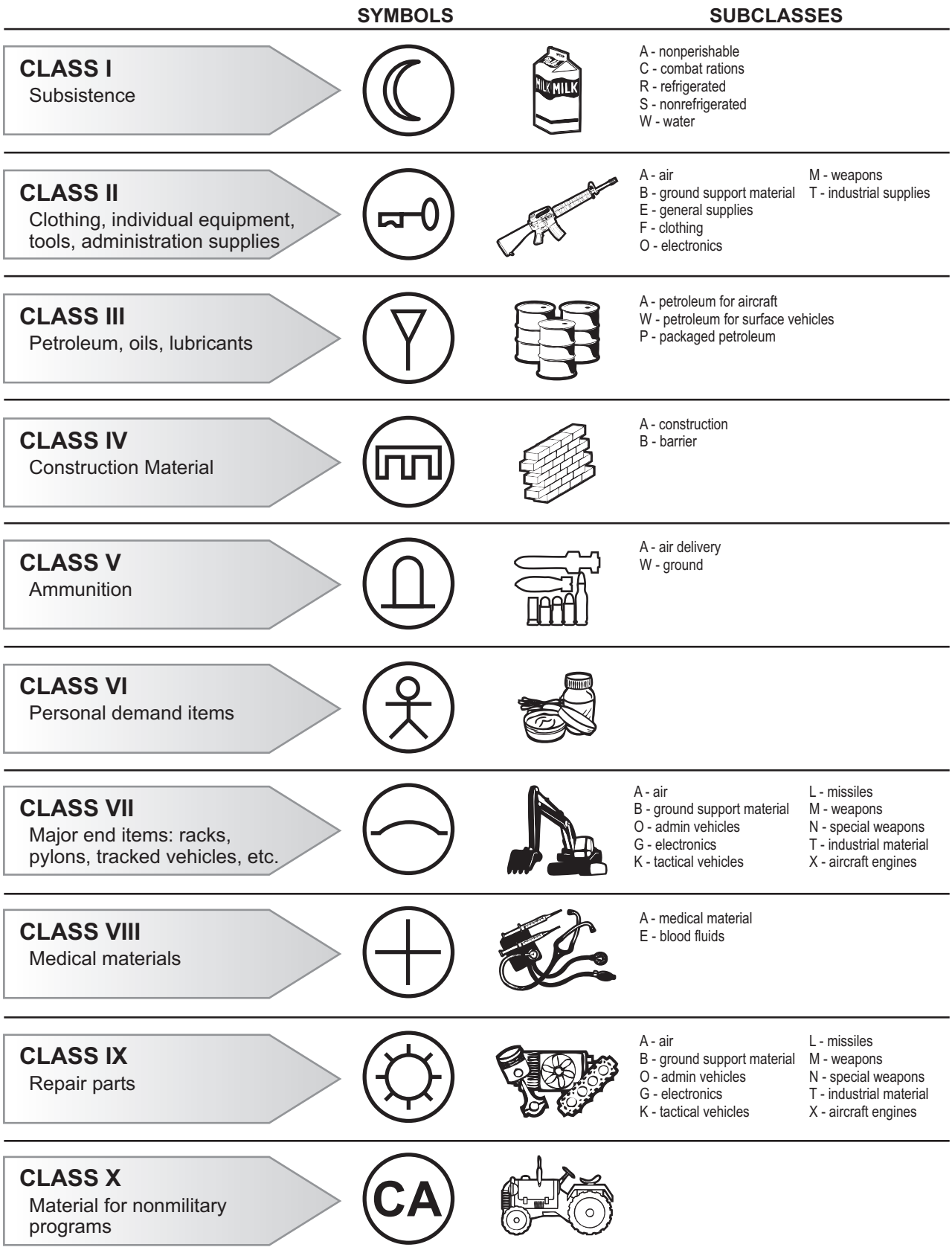


Figure 13-1. Classes and Subclasses of Supply.

Table 13-2. Levels and Echelons of Maintenance.

Levels of Maintenance	Echelons of Maintenance[1]
Organizational—Authorized at, performed by, and the responsibility of the using unit. Consists of cleaning, servicing, inspecting, lubricating, adjusting, and minor repair.	**First**—Limited action performed by crew or operator as prescribed by applicable manuals. **Second**—Limited action above the operator level performed by specialist personnel in the using unit.
Intermediate—Performed by designated agencies in support of the using unit or, for certain items of equipment, by specially authorized using units. Includes repair of subassemblies, assemblies, and major end items for return to lower echelons or to supply channels.	**Third**—Component replacement usually performed by specially trained personnel in owning or CSS units. **Fourth**—Component and end item overhaul and rebuilding performed by CSS units at semipermanent or fixed sites.
Depot—Major overhaul and complete rebuilding of parts, subassemblies, assemblies, and end items.	**Fifth**—End item overhaul and rebuilding performed by industrial-type activities using production line techniques, programs, and schedules.
1—Equipment technical manuals and stock lists specify echelon of repair for each item.	

Transportation

Transportation is moving something from one location to another by railway, highway, waterway, pipeline, ocean, or airway. The term "throughput" defines the amount of cargo and personnel passed through the transportation system. The term "transportation system" refers to the means and the controls for managing the means of transportation. All of these terms and definitions generally apply to all levels of support, although the actual execution of transportation will vary at each level. At the operational level, the means of transportation might consist of ships and planes, while it might consist of trucks and helicopters at the company level. Consequently, though transportation is a logistic function, the company commander often finds it to be a CS function that uses organic, attached, or supporting transportation assets.

Services

The services function accounts for all those things that affect the effective administration, management, and employment of military organizations and are generally administrative in nature. Command services, such as chaplains who provide religious support or morale, welfare, and recreation funds that allow a company to buy gym equipment, are those services provided by the command themselves. Combat service support services, such as legal support or a post exchange, are those services provided by LCE units.

Logistic Preparation and Planning

Infantry companies engage with all six functions of CSS in the execution of their missions. The following subparagraphs highlight logistic considerations that a company commander and staff should take into account when planning operations. When conducting logistical planning, companies should always adhere to the seven principles of CSS:

- Flexibility: the ability to tailor and rapidly change how logistic structure is set up to meet new missions, situations, and operations.
- Simplicity: the ability to foster efficiency in both planning and execution through mission-type orders and standardized procedures.
- Attainability: the ability to meet the basic and essential logistic requirements needed to conduct combat operations.
- Sustainability: the ability to maintain adequate and effective logistic support for all parties throughout the AO.
- Economy: stewarding resources to enable mission accomplishment through the most effective logistic support at the least cost.
- Responsiveness: ensuring the correct support arrives at the right time in the right place.
- Survivability: using various measures, from dispersion to fortification, to safeguard and protect logistical assets and resources.

General Considerations

The battalion normally accounts for the baseline CSS requirements of the companies. The basic planning unit is the combat day. From this baseline and through the planning process, the infantry company determines other CSS requirements and uses the battalion's request process to submit them to the battalion logistic section. Company commanders and their staffs must include CSS requirements and a support plan as part of problem framing and COA development by considering the following factors:

- *Mission*. The mission will dictate special equipment requirements, possible transportation needs, and CASEVAC augments.
- *Enemy*. The enemy's most likely COA, disposition, and other characteristics will dictate ammunition requirements (such as consumption and type), breaching requirements, and EPW considerations.
- *Terrain*. Terrain not only dictates mobility requirements, but also has immediate impacts on the means and ability to conduct all CSS functions. For example, jungles and similar foot-mobile environments drastically shrink the battlespace into terms of meters vice kilometers and, therefore, affect such things as the placement of casualty collection points, the means and rapidity of resupply, and equipment evacuation.
- *Weather*. In the same manner as terrain, weather directly affects the CSS plan. Examples include rain-generated mud that impedes mobility and the impact of dry heat on increased water consumption and equipment maintenance.
- *Transportation*. The presence of transportation is an obvious logistic consideration, but company commanders and staffs must take into account how transportation, if available, will operate in the battlespace. Helicopter resupply in a forested environment may appear simple until the company considers the requirement to cut LZs out of the forests and adds chainsaws and other special equipment to the prescribed load.
- *Ease of resupply*. Ease of resupply requires the company commander to consider all factors that influence the sustainment of the company and the direct effect on operations. The effect of distance and time on CASEVAC may limit how far the company can travel in its battlespace without augmentation. The amount of ammunition that each Marine carries in a mountain environment might limit the company's ability to maintain the assault or how much water can be carried in an arid environment. The ability to exploit success might require prestaging of CSS resources.

Supply

Through problem framing and COA development, the company commander determines and prescribes the supply load for the company and requisitions supplies accordingly. The prescribed load is not a fixed quantity and may change to meet new tactical and logistic conditions. When planning the prescribed load, company commanders and their staffs analyze the means of transportation. Companies should optimize the basic load for all supplies, including Class IX repair parts. The unit's load should not exceed the commander's anticipated requirements, even if additional quantities could be carried. When considering supply, company commanders always remember the big three—subsistence, fuel, and ammunition (see fig. 13-2 on page 13-6).

Class I (Subsistence)

Company planners must take into account the amount of water and food that company members will consume during operations, how to transport these items, and the methods of resupply. Higher headquarters often provides the means and guidance for infantry companies to meet their Class I needs, leaving infantry companies to plan only "by exception." However, when company commanders employ their companies semi-independently and dispersed, company planners take an active role in Class I management.

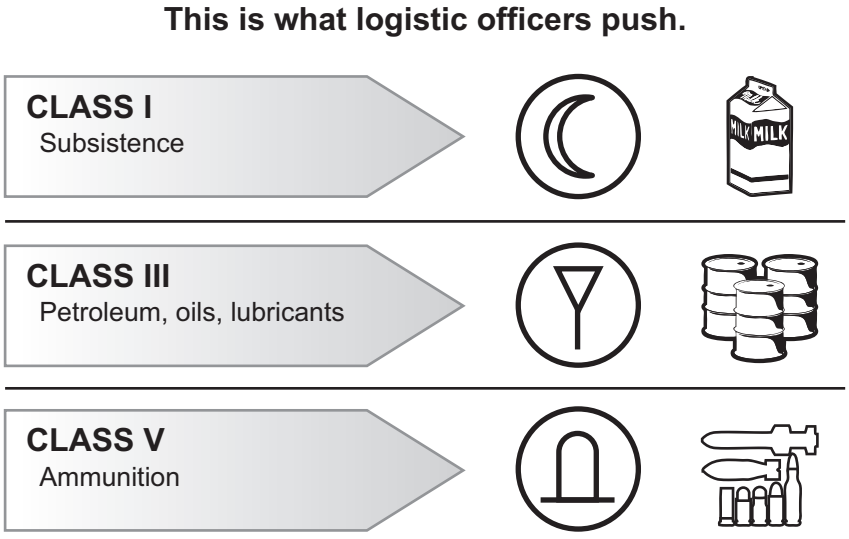


Figure 13-2. The Big Three.

Water. When developing load plans for company personnel and vehicles, infantry companies should expect each member of the company to carry no more than a one-day supply of water—less in some situations. Planners use averages (see table 13-3) in their calculations.

Table 13-3. Average Water Planning Rates Per Marine Per Day in Gallons.

Function	Sustaining	Minimum
Drinking	2.0	1.5
Hygiene	1.5	.5
Feeding	.8	.3
Waste	.4	.2
Totals	4.7	2.5

Note: In arid climates, consumption and planning rates will increase by roughly a gallon per day for drinking and marginally in other categories. Vehicle maintenance may require water from time to time for PMCS and water will need to be set aside to treat heat casualities in an arid or tropical environment.

Food. Infantry companies must consider the length of an operation and a feed plan to determine food consumption requirements. A feed plan is a prediction of what types of meals company personnel will consume and when. In a limited duration tactical environment, the company might use combat rationing consisting of three meals, ready to eat per day—two per day in extreme situations. In a more permanent FOB, the company might plan for hot meals in the morning and evening and a meal, ready to eat for lunch. Infantry companies should limit combat rationing to only those situations that truly require it. Whenever possible, companies should provide unitized group rations to offer company personnel a diet variety. The types of unitized group rations are A, B, and "heat and serve/tray rations." Unitized group ration B and tray rations are well suited for expeditionary and austere environments but require some preparation by trained food service personnel. The battalion S-4 can provide this type of support; one trained cook augmented with company mess staff can meet an infantry company's needs.

Class II (Clothing, Individual Equipment)

The infantry company identifies all requirements and submits requests for delivery through HHQ. In the case of specialized, newly identified items, such as gloves, pads, or some other specific piece of gear for which the company commander determines a requirement, the infantry company will need to submit a justification to HHQ in addition

to the request itself. Uniform items, clothing, and individual equipment are the Class II items of most interest to the infantry company, though a company possessing a substantial vehicle fleet may also require tool kits depending on the level of maintenance authorized.

Class III (Petroleum, Oils, Lubricants)

Infantry companies normally serve as customers for HHQ Class III use and distribution plans. The fundamental basis for an infantry company's Class III needs is the consumption rate of equipment and vehicles assigned, attached, or in DS of the company. If employed semi-independently, company planning staff work closely with HHQ logistic staffs in determining Class III requirements, including storage and distribution. In such cases, the company commander can assume a need for such augmentation to the company as personnel (such as bulk fuel personnel), technical manuals, tools, and repair parts. In cases when the infantry company must store its own POL resources, HHQ and companies determine storage capacity by multiplying daily usage by days between resupply.

Class IV (Construction Material)

The method of an infantry company's employment dictates if and how Class IV supply issues will affect company planning. Initial planning guidance originates from the battalion operations and logistic sections, while engineers provide expert advice.

Survivability. The mission and enemy threat determine the company's requirements to build and maintain positions. A company conducting a search and attack may carry only a few sandbags per Marine for basic night defense. A company tasked with building and securing a strong point may have sandbags, timber, prefabricated barriers, concertina wire, and many other Class IV requirements.

Countermobility. During problem framing and COA development, company commanders determine the number, depth, and complexity of obstacles needed to generate the effect required. Significant Class IV requirements will accompany companies given a block mission in an armored vehicle threat environment, while wire tanglefoot may be sufficient for night patrol base security.

Habitability. The more significant and permanent the position, the more equipment needed for life support. Fixed positions often generate continuous life support development, which then creates a greater CSS requirement. Company commanders should guard against "CSS creep," which can often change a company's operations if left unchecked. For example, austere outposts that gain greater creature comforts require more resupply and maintenance, which diverts more company combat power from other missions to support convoys, contractors, and other sustainment activities.

Storage. Company planners understand that the more developed the position, the greater the maintenance requirements and the need to preposition Class IV supplies. This requirement applies as equally to a strong point exposed to frequent enemy indirect fire impact as to well-developed FOBs.

Class V (Ammunition)

Ammunition planning factors for each weapon system is in the most recent version of Marine Corps Order (MCO) 8010.1_, *Class V(W) Planning Factors for Fleet Marine Force Combat Operations,* (commanders should use the assault planning factors when planning urban operations). When planning for ammunition consumption, usage, or storage, company commanders need to ensure that they have coordinated with the battalion gunner and battalion ammunition chief. The ammunition chief will help infantry companies comply with storage, transport, and handling regulations of specific ammunition types as moisture and other environmental conditions can have an adverse effect on the performance of certain ammunition items. Follow-on considerations for

Class V are lift and handling requirements and ammunition driver training qualifications.

Class VI (Personal Demand Items)

Infantry companies route all Class VI requirements and requests through HHQ. Particular items of interest to a company commander in this category include sundry packs, post exchange items, and waste bags for field sanitation use.

Class VII (Major End Items)

An infantry company manages all Class VII issues with HHQ, whether replacing company equipment from the table of equipment or equipment density list or identifying a need for a major end item not normally assigned to the company.

Class VIII (Medical Materials)

Medical personnel assigned to the infantry company possess complete medical and first aid kits. The company's senior corpsman coordinates Class VIII resupply through the BAS. The senior corpsman also serves as the company commander's senior medical representative for medically-related planning. The primary Class VIII planning consideration for the company is the replenishment of high demand items in the individual first aid kit. The company should ensure that it possesses enough litters to provide one per squad or section.

Class IX (Repair Parts)

The infantry company does not normally stock Class IX repair parts but may if separated from HHQ. Regardless of the method of employment, companies will normally seek to possess small amounts of pre-expended bin items, which are low cost/high use parts for armory, communications, and motor transport assets. The infantry company requisitions all required Class IX items through battalion supply. The greater the amount of logistic support pushed to the infantry company, the greater the need for the infantry company to possess appropriate personnel augmentation. Company commanders and their planners may request the assistance of subject matter experts, such as motor transport or communications personnel, at the company level.

Maintenance

With the increase in weapon and vehicle density within an infantry company, the importance of conducting and tracking maintenance becomes vital to mission accomplishment. The more austere the environment, the more important PMCS becomes to a successful operation. At a minimum, a company must conduct periodic and scheduled PMCS on its equipment and vehicles in addition to maintaining appropriate logs and records. The company commander should consider assigning a Marine to the XO to serve as a liaison with the battalion's logistic section and track company maintenance requirements and activities. Finally, infantry companies will frequently receive equipment under warranty or with contracted maintenance support. A focused maintenance effort within the company will ensure that company personnel receive appropriate training on the equipment, that unauthorized maintenance does not occur, that proper maintenance does occur, and that coordination with contracted maintenance occurs properly.

General Engineering

Since an infantry company does not have organic engineering assets, most engineering tasks require external support. An important planning step for a company is to identify its engineering requirements. Doing so may require subject matter experts from supporting engineer units, to include EOD. In the realm of general engineering, the infantry company faces its greatest challenges in terms of resources, resource management, and personnel augmentation when tasked with building and managing FOBs, COPs, expeditionary patrol bases, and other similar fixed sites. The company considers a variety of general engineering issues when dealing with these types of facilities.

Vertical and Horizontal Construction (Camp Commandant Functions)

When building, maintaining, or overseeing new construction, the relationship of buildings and functions to each other and to living spaces is critical. Ammunition, for example, needs a berm and access control features, standoff (depending on net explosive weight), and protection from the weather. Table 13-4 lists similar considerations for other functions.

Vehicle Staging Area

In addition to considerations listed in table 13-4, company planners also consider vehicle maintenance functions, such as location and protection from the weather, ease and safe movement of vehicles in the maintenance area, and the ability to effectively conduct maintenance in the space. Other considerations include hazardous material and POL storage and spill containment.

Field Mess

Location of the field mess includes being separate from but practically accessible to berthing areas. The company should require a trained electrician to conduct a survey of power requirements and a regularly scheduled review of power usage.

Table 13-4. Facility and Function Standoff Distances.

Keep These	This Far	From These
Food waste	30 m	Food preparation area Water source
Portable toilets, burn latrines	30 m and downwind	Water sources Billeting
Portable toilets, burn latrines	100 m and downwind	Food preparation area
Garbage collection	100 m and downwind	Food service area
Garbage pit/landfill	Safe distance and downwind	Water sources
POL	Safe distance and downhill	Water sources Food preparation area
Laundry soakage pit/shower area	100 m	Food preparation area
Laundry soakage pit/shower area	30 m	Billeting Water sources
Hazardous materials collection	100 m	Food preparation area Water sources

The field mess should not only have protection from the elements, but also overhead cover if possible. If storing perishables, refrigeration requirements are identified as well as the maintenance of these assets.

Hygiene Facility

While obviously kept separated from berthing and messing, hygiene facilities receive the same consideration in terms of power and protection. Further, company planners consider water requirements, how water is delivered, and how wastewater is removed. Hygiene facilities might require placement such that heavy trucks can access them regularly.

Forward Collecting Point

Forward collecting points must meet certain standards for treatment of detainees and EPWs. These standards include protection from the effects of combat (such as indirect fire), reasonable protection from the elements, clean water sources, and adequate hygiene facilities. These requirements occur within the context of proper security and segregation from friendly berthing, C2, medical, and other sensitive areas. Figure 13-3, on page 13-10, provides an example of a hasty forward collecting point.

Weapons Storage

The infantry company can approach weapons storage in two ways. The first is the system and procedures by which individuals secure their personal weapons. Depending on the operational and threat environment, individuals may carry their weapons. Similar to shipboard berthing, individuals may have their weapons stored and secured in living areas. Finally, it is possible that individuals will store their weapons in an armory. The armory is the second approach to weapons storage. Regardless of how the infantry company handles individual weapons storage, there will always be some requirement for an armory to store weapons for maintenance or evacuation and to hold extra weapons. The armory should be close to C2 areas and be securable.

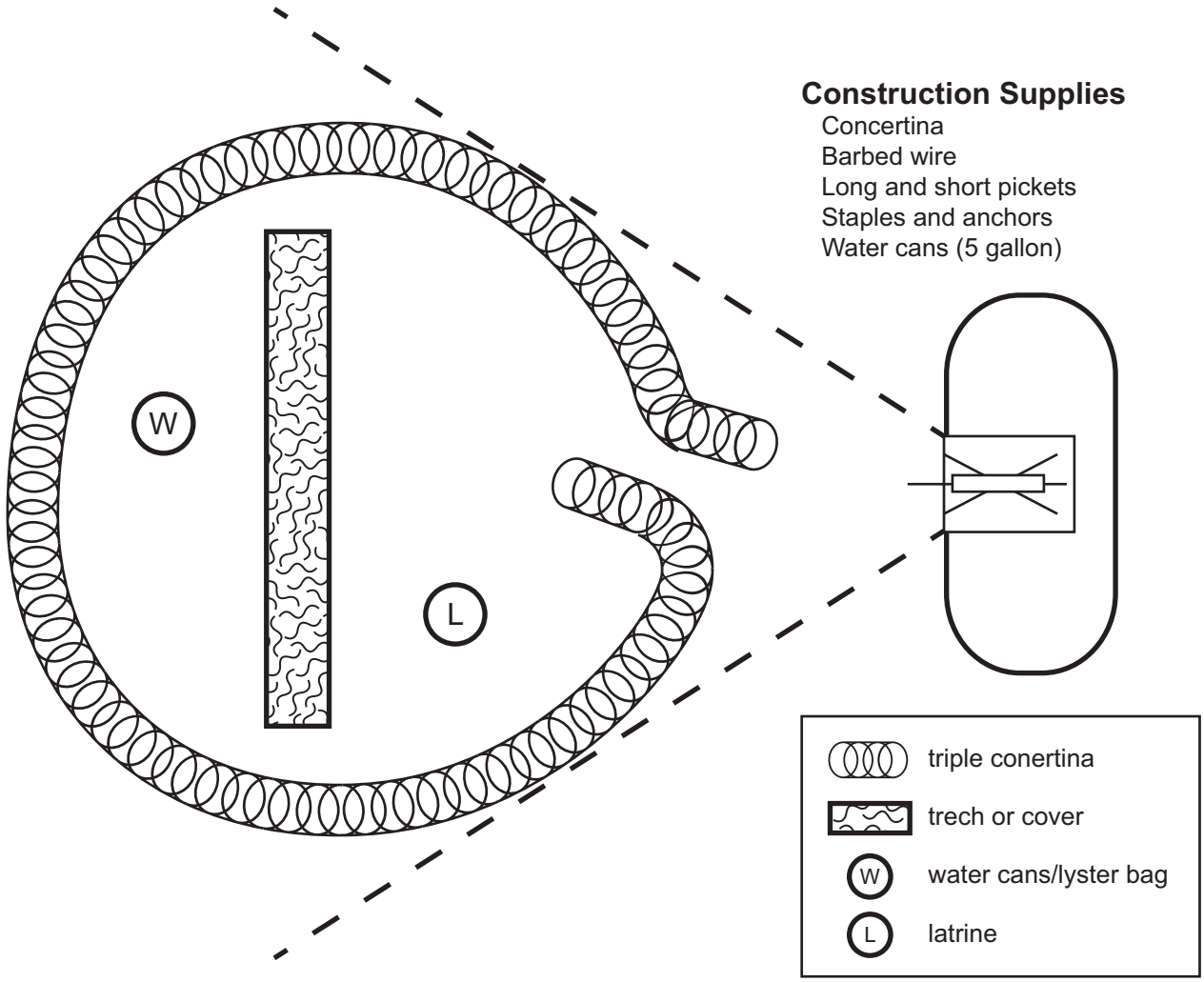


Figure 13-3. Forward Collecting Point.

Force Protection

Chapter 12 discusses FP issues in depth. For general engineering planning purposes, however, infantry companies consider a number of survivability issues. Most survivability issues at positions similar to a FOB require heavy equipment and engineers for such items as prefabricated barriers; defensive barriers; guard tower vertical construction; and semipermanent facilities, such as field messes. In addition to these items, the company must conduct position improvement as a continuing action. Position improvement and maintenance includes filling sandbags, maintaining sandbag positions, and establishing concertina wire fences and maintaining that wire.

Infrastructure

Infrastructure applies to the systems with which a facility operates. Water is such a system, as are power and communications. After water, the infantry company's next major concern is power. While HN power may be available as a convenient option, it is often unreliable so it becomes critical to maintain a tactical backup in the event of a power failure. Also, most countries operate on a different voltage and phase power than the United States, which requires transformers to avoid destroying assets.

Environmental Controls. The infantry company first determines power requirements and then fulfills those requirements by means of

prioritization. Communications and command and control represent priorities ahead of secondary requirements, such as billeting.

Generators. Generators affect the logistic systems through POL and maintenance requirements. The number of generators needed for a company position is greater than that determined purely by electrical needs. Planners consider fueling schedules, power loading, and maintenance rotation to ensure that the necessary number of generators runs at all times. Other generator concerns are spill containment, noise shielding, cable protection, and protection from the elements.

Communications. Not surprisingly, communications is a major infrastructure concern. In addition to power requirements, company planners consider the requirements to keep key systems cool, to store and recharge batteries, and to properly locate antenna farms.

Transportation

Commanders should use organic capability before soliciting additional support or resources for transportation. As a rule, when requesting external transportation assets, infantry companies provide what and who needs movement when, while the logistic experts determine the means of movement. Company commanders work closely with their logistic support in those other cases when operational concerns may influence transportation requests. For example, FP requirements might dictate the use of hardened vehicles. The mission may include GO/NO GO criteria that dictate the dedication of extra transportation assets for a "bump" capability. When requesting transportation, company planners consider the following:

- Cube, weight, and types of cargo, such as hazardous materials, explosives, and compatibility.
- Number of passengers and their combat equipment.
- Infantry companies normally receive light or medium lift assets.
- Close coordination with transportation units to account for altitude, lift capabilities, off-road lift limitations, and other considerations that may require the company to move in multiple trips or may require additional transportation assets if the mission dictates otherwise.

The unit movement control center controls movement through a battalion or HHQ AO. Because of the nature of its work, the center is generally located within or near the COC though it is staffed by the S-4. The unit movement control center is the battalion's single point for movement coordination with HHQ. It manages and coordinates logistical movements within the battalion AO and tracks logistical movements coming into the AO from other units. Nonorganic units moving through the infantry company's zone or sector should coordinate their movement (start point, route, and release point) with the company operations center and the battalion unit movement control center.

The embarkation section of the battalion S-4 will create and manage the battalion's embarkation scheme of maneuver (transportation of people and things). Company planners contribute to the success of the battalion's embarkation plan by providing an accurate and validated equipment density list. The company commander's consolidated memorandum of receipt is a good baseline from which to build the equipment density list. The company appoints one of its personnel to serve as the company embarkation representative who coordinates directly with the battalion embarkation chief and company XO.

Services

The company commander requests most supporting services needed by the company through the battalion S-4. The battalion makes decisions on how to meet these requests and, in some cases, may use contracted services to support the company. In these cases, it may be necessary to appoint and certify a contracting officer's representative to oversee completion and execution of

contracts. The appointment and training of this individual is coordinated with the battalion S-4. Services tend to be critical low-density capabilities that are often not readily available in an austere environment or early on in combat operations.

Health Services

Fielding healthy Marines directly affects the company's ability to conduct operations. While CASEVAC often receives the most attention, preventive medicine and health services do not. Health services consist of everything from avoiding immersion foot or malaria in a jungle environment to maintaining a rudimentary aid station and monitoring water quality in a FOB. The senior corpsman in the company, in addition to other duties, serves as the company's "special staff officer" for HSS and is tasked and positioned accordingly. The ability to exercise HSS within a company depends primarily on coordination with the battalion logistic section and BAS. As always, the first line of HSS is always the individual Marine, followed immediately by the vigilance of small unit leaders. Companies should ensure that their personnel receive the training and opportunity to practice self-aid and buddy aid skills.

As briefly discussed in this chapter, the company's senior line corpsman will be the company's interface with the BAS. The abilities of this individual can directly affect the company and should receive appropriate supervision. Specifically, the senior corpsman—

- Acts as the company commander's "special staff officer" for medical care.
- Works with the BAS to coordinate the replenishment of medical supplies and consumables.
- Coordinates the evacuation of routine and nonemergency cases to higher levels of care.
- Maintains company medical and dental records and coordinates for routine care, such as dental exams, medical exams, and vaccination updates.
- Conducts preventive medicine inspections.

Health Maintenance

Proper execution of health maintenance ensures the company and its personnel are medically prepared for combat operations. It begins at home station with maintenance of such records as dental health, immunizations, and scheduled physicals and continues while deployed through identification of hazards and mitigation, regular health inspections, and immunization maintenance. The company develops a regular health inspection plan of the company's positions by the battalion's preventive medicine technician. If deployed semi-independently, company commanders should seek augmentation of their staff with a preventive medicine technician or seek additional training for corpsmen assigned to the company.

Casualty Collection

Casualty collection is the assembly of casualties at a designated point and treatment site. Casualty collection points should—

- Be located in an area far enough from combat operations that the casualties are not in danger of being further injured.
- Provide a higher level of care than what is immediately available at the combat site.
- Prepare casualties for evacuation to higher levels of care.
- Provide protection to the casualties with available forces to prevent overrun and capture.

Casualty Treatment

Casualty treatment includes triage and all levels of care from self-aid to buddy aid to resuscitative care. It begins at the point of injury and continues until the injured individual leaves the company's control by CASEVAC. Triaging and classification of casualties begins with the first corpsmen on site and is a continual process. The levels of triage are—

- Routine (evacuation typically within 24 hours).
- Priority (evacuation typically within 6 hours).
- Urgent (immediate evacuation; "golden hour" requirement).

Casualty Evacuation

The evacuation of casualties is the movement of sick, wounded, or injured personnel from the point of injury or onset of disease to BAS or MTFs. It also includes the movement of personnel between MTFs. The parent battalion or HHQ provides the infantry company with direction and guidance regarding CASEVAC procedures. All units have an organic means to evacuate casualties.

Golden Hour. When addressing CASEVAC means and limitations, it is imperative to understand the "golden hour" requirement for urgent casualties. The golden hour begins at the point of injury and does not end until the arrival of the casualty at an MTF with a surgical capability (Level II or Role II North Atlantic Treaty Organization [NATO]). While HHQ will provide the infantry company guidance on CASEVAC procedures and requirements, company commanders must understand how their operations add or subtract from the golden hour and plan accordingly when they are operating semi-independently. The company commander should not let the golden hour restrict operations; rather, he/she should seek augmentation of personnel or assets to mitigate it. A company commander might request forward deployment of CASEVAC assets to cover a critical period of an operation when the assets normally available would fail to meet the golden hour. Shock trauma assets normally do not have a surgical capability and are Level I. Additional augmentation with assets, such as armored ambulances to get casualties safely to a designated LZ or ambulance exchange point, can also contribute to meeting golden hour requirements.

Vehicles. Any vehicle can serve as a means for evacuating casualties. A medical ambulance is the preferred surface means of transportation for casualties and transfer to that type of vehicle should occur as soon as practical in a ground-based CASEVAC plan. The battalion designates casualty and ambulance exchange points for removing casualties from company care and quickly returning ground CASEVAC assets to company control.

Air Casualty Evacuation. The use of aerial assets to conduct CASEVAC is a function of the enemy's air defense threat. Often, ground CASEVAC removes casualties to areas where aircraft can safely extract wounded personnel. For planning, aeromedical evacuation should replace surface means as soon as practical—especially for priority and urgent casualties.

Temporary Hospitalization

Temporary hospitalization refers to military treatment facilities that hold sick, wounded, and injured Marines for a limited time, usually not more than 96 hours. While at the MTF, patients are either released or are prepared for further evacuation to treatment centers. In combat, surgical companies or fleet hospitals often serve as centers for temporary hospitalization.

Load Planning

Company commanders may increase or decrease individual loads based on the specifics of the mission, the requirements of environment, the duration of the operation, and the timing and means of resupply. The basic rule for individual load planning is to carry only those things necessary to accomplish the mission; the company neither has enough time to plan for every contingency, nor can it carry everything it could conceivably need.

Unit Sustainment

The following subparagraphs cover various logistic actions taken by the infantry company during sustained operations, including those relating to reporting, distribution, convoys, and command and control.

Reporting

During operations, a company will be required to submit various reports. These reports provide the battalion and HHQ with information needed to make logistical and operational decisions. In a high operating tempo environment, accurate

reporting is even more critical due to potential resource constraints. The risk in taking shortcuts in reporting is that a company will not get the support that it requires in a suitable timeframe. The adage "garbage in, garbage out" applies to reporting. Especially as reporting becomes increasingly digitalized, accurate reporting allows the company commander to more easily use historical data to accurately plan and predict future usages and requirements.

The logistics status report (LOGSTAT) provides the battalion a picture of the infantry company's overall logistic status. It includes personnel and key equipment availability as well as food, water, fuel, and ammunition levels. This report provides a snapshot of the overall readiness of the company. It also allows the battalion to plan and act proactively to resupply a company. Submitting the LOGSTAT can occur via C2 systems, e-mail, courier, or radio and is typically done daily. Other supporting reports or supplements to a LOGSTAT include the ammunition expenditure report and the rapid request.

The ammunition expenditure report provides the Marine Corps a detailed list of ammunition issued, expended, and turned in. This report is required by MCO 8010.1_. This report is submitted through electronic or paper means with appropriate signatures required. During combat operations, this report becomes supplemental to the LOGSTAT that includes overall levels of ammunition. Regardless, certain items, such as Category I ammunition (rockets), are closely tracked by serial number, even in combat. Serial numbers of expended rockets must be provided either in the ammunition expenditure report or in the ammunition portion of the LOGSTAT.

A rapid request is an infantry company's method of requesting supplies and logistic services from the battalion or DS element of the LCE (typically a combat logistic battalion at the infantry company level). Submission of the rapid request can occur via courier, radio, e-mail, and increasingly via various computer-based applications. The LCE will provide the formats for rapid requests.

Distribution Methods

There are various methods to resupply a company and for a company to resupply platoons during operations. Most often, a company receives its resupply from the battalion combat trains. Other means of resupply, such as air, combat logistic convoys, or vertical replenishment, depend upon the proximity of a company to the battalion, the terrain, and the enemy situation.

Battalion Combat Train

The push method of resupply consists of the supporting element automatically sending supplies to a supported element based on LOGSTATs and other reporting. A "push" is generally a predetermined amount of supplies based upon historical data or prior requests. The pull method of resupply involves the supported element requesting specific items from the supporting element. In the pull method, requested items are either delivered to or picked up by the supported element. Most often, battalions use a combination of push and pull resupply to support the infantry companies. The method of resupply used depends upon a variety of factors, such as transportation assets available, the nature of the supplies provided, and the nature of the operation (offensive or defensive).

Company Resupply. The infantry company must closely supervise its supply status in light of current and future operations. If future operations necessitate movement, then the company must plan to avoid having surplus quantities beyond the company's ability to lift. Conversely, future operations dictate the types and quantities of supplies needed, so the company must possess those before the operation begins.

Platoon Resupply. In general, the infantry company holds all assets at its position until a platoon requests them using the pull resupply method; however, modification can occur in instances of distributed operations, but platoons normally have less ability to accumulate, move, and handle supplies in quantity than do companies. In some cases, a company may have its own

organic combat train, which can consist of several light and medium lift assets with trailers.

Repair and Replenishment Point

There will be times when a company may resupply itself from a repair and replenishment point (RRP). The company may provide its own security and move the supplies in organic transportation or have the supporting unit drop supplies at company and platoon positions. There are two standard configurations for an RRP: tailgate and service station. Both methods apply whether the infantry company is mounted, dismounted, or both.

Tailgate Method. A company using the tailgate method deploys its elements and vehicles into a perimeter defensive posture. The logistic element conducting the resupply then moves around the interior of the perimeter delivering all supplies to the "tailgates" of each vehicle and element. This method is typically less effective and more time consuming but may be more prudent due to the security situation on the ground. A commander would typically prefer this method during the consolidation phase of a battle when elements cannot leave their respective positions due to security concerns (see fig. 13-4).

Service Station Method. A company using the service station method of resupply approaches the RRP as a column of vehicles and elements. Within the RRP, the logistic element establishes separate areas for each class of supply. As the company's elements and vehicles move through the RRP, they stop at each area to pick up requested supplies or receive maintenance support. This resupply method is usually preferred as it is more efficient and quicker than the tailgate

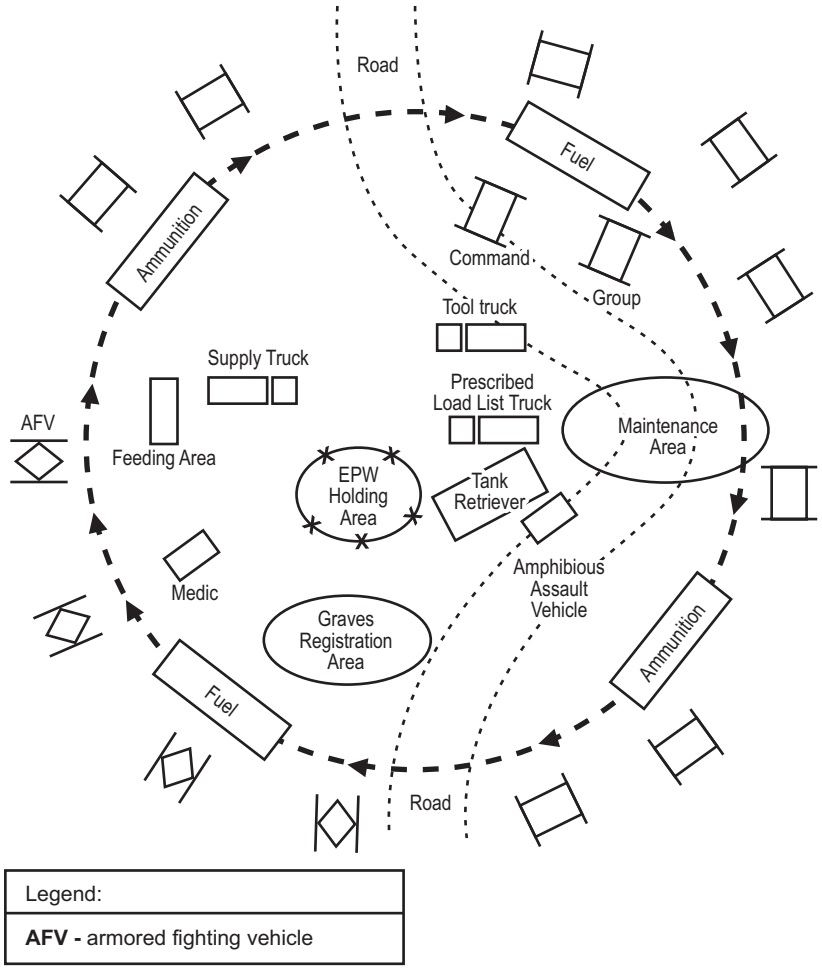


Figure 13-4. Tailgate Resupply Method.

method. The service station method becomes especially useful when the company is pressed for time and needs to get supplies and maintenance in the most expedient manner possible. It is also a good opportunity to take advantage of backhauling. Backhauling returns supplies, equipment, or trash to the rear for disposition (see fig. 13-5).

Air Delivery

In remote and inaccessible areas, due to terrain or enemy situation, there are times when resupply via airdrop is the only solution. Airdrops need to be coordinated with the battalion S-4 section. Additionally, a suitable drop zone will need to be established and secured. Typical container delivery systems are GPS [global positioning system]-guided and have low cost parachute systems. Local policies and procedures will determine if the infantry company must recover any portions of the container delivery system. Depending on the size of the cargo dropped, companies may need materials handling equipment augmentation, such as cranes or forklifts, to move the cargo. Emergency air delivery is reserved for extraordinary situations. As a rule, normal air delivery missions typically take several days for planning and preparation. Companies should expect a certain amount of damage to supplies delivered in this manner.

Vertical Replenishment or Helicopter Support Teams Missions

Resupply may occur via assault support aircraft that carry equipment and supplies either internally or externally. Such support requires prior coordination and external support from a DS LCE with trained landing support personnel. Companies will need the augmentation of LCE personnel or choose members of the company for appropriate

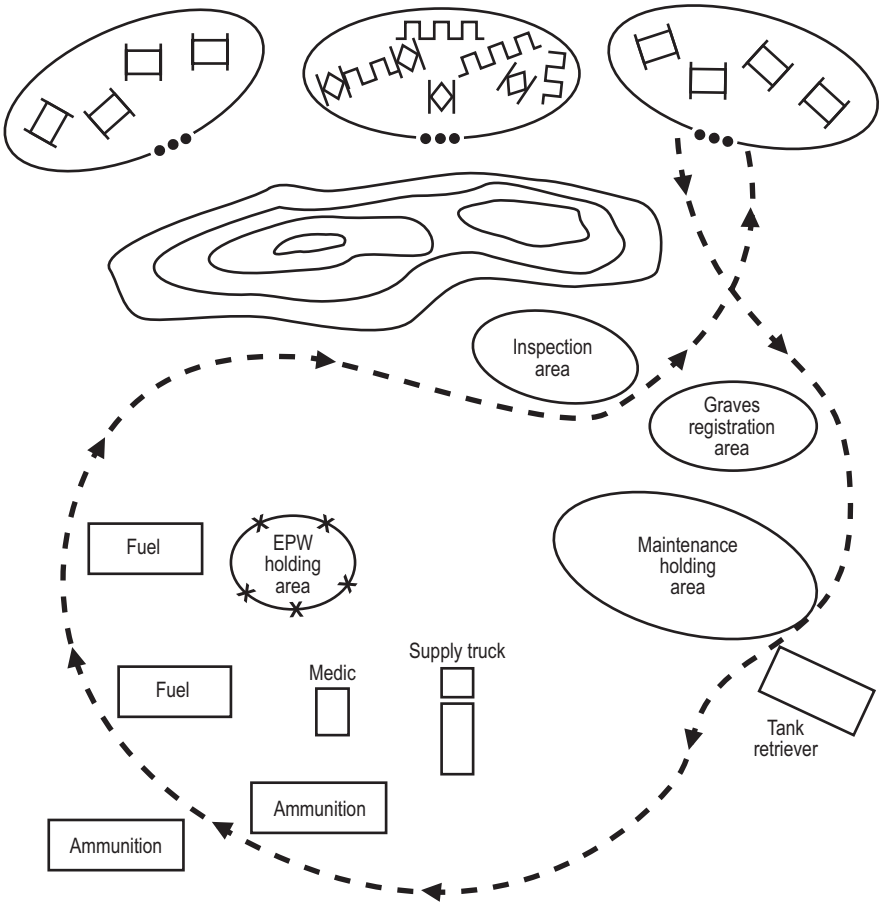


Figure 13-5. Service Station Resupply Method.

training. These personnel will assist in receiving the supplies safely and recovering slings and cargo nets used to carry external cargo. This method of resupply can be used in emergencies as long as the antiair threat is not too high.

Emergency Resupply

Commanders will encounter situations in combat when supplies run out faster than anticipated for various reasons, some which are beyond anyone's control. Emergency resupply usually focuses on the "Big Three"—food, fuel, and ammunition. Commanders should push these requests up through appropriate C2 means for immediate action by the S-4. Situations will dictate whether the resupply comes by air, ground, or a combination of the two. Emergency resupply focuses on items that, if not received, will adversely affect the company's ability to conduct its assigned mission. Sometimes a technique called cross-leveling will be required as an interim solution.

Cross-leveling is a redistribution of supplies throughout the unit. Usually done automatically between fire teams and squads after every engagement, the company may cross-level supplies among platoons when resupply cannot occur. In some instances, supplies may be weighted vice evenly redistributed. For example, during preparation for an assault of an enemy trench system, the platoon with the task of SBF may be required to give its hand grenades to the platoon with the task of clearing the trench.

Convoys

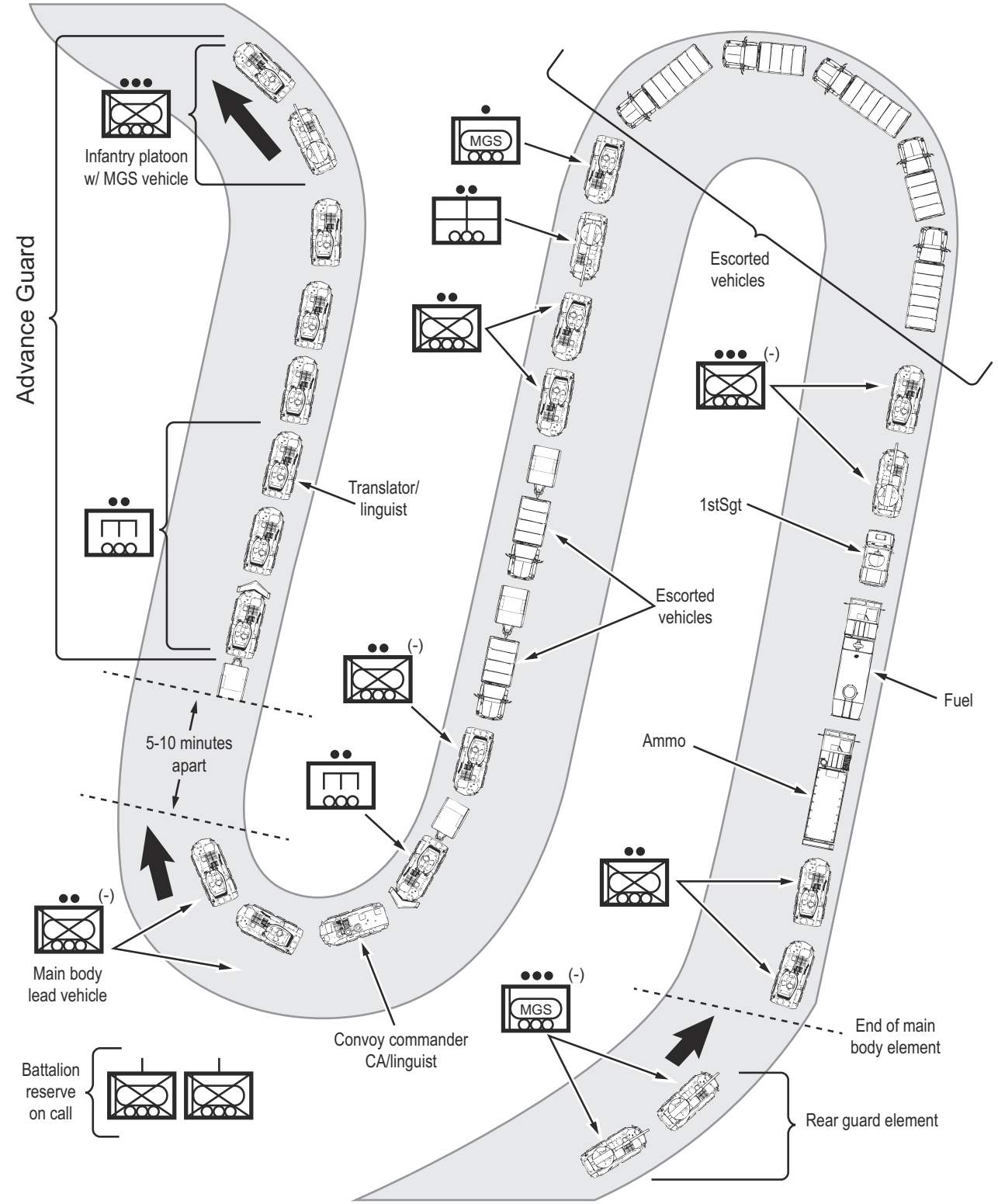
Convoys differ from mounted movement or motorized patrols based on size and purpose. A convoy is a large, orderly, movement of vehicles for a logistical or administrative purpose. Convoys may operate in permissive or uncertain environments. Convoys are not designed for combat operations, but may conduct combat operations as a function of accomplishing their larger purpose and mission. The infantry company may receive the mission to provide the combat power to a convoy through an escort mission.

Convoy Organization

The convoy possesses a headquarters element, a security element, a transport element, and a support element. Because of its size, the convoy organizes these elements into a head, main body, and tail. The convoy escort mirrors this organization: an advance guard with the head of the convoy, an escort main body with the convoy's main body, a rear guard with the convoy's tail element (see fig. 13-6 on page 13-18). The escort commander may designate an additional reserve as necessary.

Each convoy is led by a convoy commander. The company commander may fill that role; however, if he/she does not, then he/she serves as the convoy security or convoy escort commander. Tasking the company commander as the convoy commander greatly simplifies command and control, especially if enemy contact is likely or imminent. Conversely, tasking company commanders as convoy commanders tasks them with the mission of the convoy, which could consist of hundreds of vehicles belonging to different organizations with various CS and LCE attachments. So, in addition to managing the company, the company commander must manage the convoy. The convoy's mission and size and the likelihood and nature of enemy contact should drive decisions about which persons occupy which roles in a convoy's command and control.

The advance guard reconnoiters and proofs the convoy route. It searches for signs of enemy activity, such as ambushes and obstacles. Within its capabilities, it attempts to clear the route. The distance and time separation between the advance guard and the main body should be sufficient to allow the lead element to react to problems without involving the main body. However, the separation should be short enough that the enemy cannot interdict the route between the passage of the advance guard and the arrival of the main body. The advance guard should be task-organized with reconnaissance and mobility assets.



Legend:	
1stSgt - first sergeant **ammo** - ammunition	**CA** - civil affairs **MGS** - machine gun system

Figure 13-6. Convoy Organization.

The company commander may choose to intersperse security elements with the vehicles of the convoy main body. These elements may include combat elements (including the rear guard), the convoy commander, additional linguists, mobility assets, and medical and maintenance support assets. Depending on METT-T, the convoy escort commander may also consider the employment of flank security.

The rear guard generally serves as a reserve positioned to react forward as a maneuver element against enemy actions or threat contact. Located in the convoy tail, the rear guard moves with various additional mobility, medical, and maintenance support assets that increase its flexibility and effectiveness.

Convoy Planning

Convoy planning takes into account the mission, the makeup of the convoy, the route required (bridges and underpasses may dictate certain routes and eliminate others), and the enemy threat. These preliminary factors dictate the size and composition of an escort; C2 arrangements; and the ability, way, and means with which the convoy will react to situations it encounters. An exceptionally large convoy consisting of contracted drivers without radios from various other countries is unlikely to be able to do more than go or stop. The convoy, escort, and support element commanders must consider this when choosing routes. They also consider pass times (the amount of time it takes the convoy to pass one point) and plan the methods with which they will react to such things as enemy actions and mechanical failure.

Prior to the convoy, the convoy commander issues a complete OPORD. Ideally, the OPORD is issued to all the vehicle commanders in the convoy, but, at a minimum, to all element leaders. In the order, the convoy commander addresses command and control, order and routes of march, actions at halts, actions on contact, actions for a break in the convoy, marshalling plan, and dispersal plan upon arrival.

Due to the purpose of a convoy, enablers are likely to be different than those normally associated with the infantry company. While the company will benefit from the presence of interpreters, a convoy is not a combat operation, so military working dog teams, CI/HUMINT exploitation teams, and similar assets are superfluous. However, the company commander should be interested in the presence of wreckers, maintenance contact teams, medical support, and route clearance assets. In particular, if the operational environment does not support reasonable response times for route clearance assets to move to the assistance of a convoy, then the company commander should seek to have those assets augment the convoy. If a convoy must wait for route clearance assets, securing the convoy for a long period of time becomes another consideration for the company commander.

A convoy is large, unwieldy, and slow to respond; conversely, an infantry company places a premium on finishing the fight and operates in a mounted environment in which every vehicle is a weapon and participates in combat. The infantry company commander tasked to escort convoys must reconcile these divergences. The actions the escorting infantry company takes upon contact must place the safety and continued movement of the convoy as its priority.

When reacting to an ambush, the company commander seeks to accomplish three things: suppress and fix the enemy, maintain an open window through which the convoy commander can push the convoy, and prevent fratricide. This is generally accomplished by placing the infantry's combat power between the enemy and the convoy and—by either leapfrogging other security elements forward or conducting battle handovers between sequential security elements—to continue to provide convoy security as it passes the ambush. The convoy escort finishes the fight through either the destruction of the enemy or by breaking contact.

Depending on the operational environment, company commanders escorting convoys may

encounter many different forms of obstacles, including deliberate roadblocks, IEDs, and large groups of demonstrators. Ideally, route reconnaissance and the advanced guard will identify and dispose of obstacles early or find bypasses. If that is not possible, then the company commanders must quickly reduce or bypass the obstacle and provide security for the halted convoy. The longer the convoy sits, the greater the security risk it assumes. If the obstacle presents a greater challenge than the convoy can handle organically or no bypass or negotiable solution is possible, then aerial overwatch, route clearing assets, and security augmentation should be requested.

During halts, the infantry company escort remains vigilant regardless of what the rest of the convoy does. The company provides 360-degree security in the best manner possible, taking advantage of terrain to provide clear, interlocking fields of fire and observation. The company should endeavor to move at least 100 meters from the convoy to provide some standoff from enemy small arms.

Logistic Command and Control

The requirements associated with distributed company operations dictate a more robust C2 capability for the company commander. This capability plus the increased responsibility for CSS that exists at the company when conducting semi-independent operations result in the company exercising logistical functions normally associated with the battalion and above. The use of computer-based logistic systems requires the same attention to detail and accurate reporting needed by radio and paper-based systems. Indeed, as the ability to more effectively track and collect information increases, the requirement for accurate reporting increases. It is more important to put energy into properly using all reporting systems and getting CSS support in a timely manner, than to attempt to circumvent or shortcut the system and waste the company's energies on mitigating the inevitable poor effects.

Planning

The *existence* of logistic C2 systems and the *capability* to use them do not automatically translate into the *ability* to do so. As the communications plan is developed during problem framing and COA development, company leadership must ensure the battalion communications section is aware of the company's requirements. The battalion's communicators must account and plan for the additional computer assets, additional software and network requirements, and additional bandwidth demand the company will require. If the company does not plan appropriately, it will be unable to access desired systems or, in doing so, find that all other C2 systems are degraded.

In-Transit Visibility Systems

In-transit visibility systems allow a user to track the actual location of supplies and equipment while they are shipped. The system allows for tracking items embarked on ship, located in staging areas, and moved across the AO. Additionally, by tracking the location of specific items, the company can track the location of the assets carrying them, such as the location of the company's trains or other logistic vehicles transiting the company's battlespace. As with any similar system, the quality of the information input into the system affects the quality of the information from the system. In this case, a key component to the system is radio frequency identification tags assigned to items; poor or nonexistent labeling results in poor or nonexistent information.

Request Management Systems

Request management systems allow for the organized, automated management and tracking of a company's CSS-related requests across supporting agencies and functions. The company may track the progress of a request through its lifecycle without the need to call or radio back to the supporting element. It allows the company to view where the request is in its cycle, follow up if nothing has happened, view who has acted on it, and provide historical data after an operation. This, of

course, is only possible with the appropriate level of automated equipment and connectivity.

Consolidation and Transition

The following subparagraphs address logistic considerations that accompany consolidation on the objective, transition to follow-on operations, and transition to redeployment.

Battle Damage Repair

After an operation, the company commander must conduct an immediate assessment of the company's equipment and supply. The battalion logistic section must receive a rapid report on equipment damaged beyond the company's ability to immediately repair and place it back into service. Timely reporting leads to more effective repair and replacement of damaged equipment, but it also allows for dropping equipment deemed a "combat loss," such as captured, destroyed, abandoned, or lost equipment, from the company's property records. In many cases, the loss or degradation of certain pieces of equipment is one of the battalion CCIRs, which also dictates timely and accurate reporting. Accurate documentation and aggressive follow-up with the battalion supply officer is sometimes necessary to ensure that lost assets are properly removed from a company commander's property records, such as the Consolidated Memorandum of Receipt or Naval Surface Warfare Center Crane Report, prior to the next reconciliation or turnover to a relieving unit. It is best to document a loss and ensure the correct steps are taken to reconcile it while the memory of the events leading to that loss is still fresh and can be accurately recorded.

Equipment Accountability and Turnover

Company commanders are responsible to their battalion commanders for accurate accounting and maintenance of company equipment. While company commanders and their staffs frequently work with the battalion's logistic, maintenance, and supply officers for technical and procedural issues related to company equipment records and files, those officers work on behalf of the battalion commander who will hold company commanders responsible for success or failure in this regard.

Relief In Place Equipment Turnover

By their expeditionary natures, infantry companies often deploy and fall in on equipment already forward deployed, whether in peacetime or in combat. Sometimes this equipment might originate from a maritime prepositioning ship or because of a turnover with a unit in place. There is a good chance that company commanders might turn over substantial amounts of equipment and supplies, such as Class I or Class V, to a unit relieving them. Reliefs in place are difficult operations, made more so when the relieved unit is in contact with the enemy. It is undesirable to complicate the operational situation with distracting logistical issues. Having accurate property records and knowing the status and location of all the company's equipment and supplies prior to the RIP is essential to a successful turnover. Critical items that can cause delays and even disciplinary action include the following:

- Serialized small arms accountability. Ensure records are accurate and that the serial numbers on the weapons match them. Regular inspections, combat loss reporting, and other measures ensure accuracy.
- Electronic key management system equipment accountability.
- Serialized ammunition accountability. Keep detailed inventory records of all rockets and missiles and track their expenditure by serial number.

Equipment Record Jackets

In addition to the actual equipment, companies must ensure the turnover of all relevant record jackets, PMCS records, pending maintenance, and supply transactions/requests to the relieving unit. This precludes the follow-on force from having to recreate historical data.

Redeployment Operations

Most of the factors already discussed in previous paragraphs apply to companies preparing to redeploy; however, redeployment does offer several other unique factors to consider, such as environmental washdown, ordnance removal, and maintenance.

On those occasions when a company is redeploying with its equipment, a washdown of that equipment is required, regardless of whether embarked aboard naval ships, commercial lift, strategic lift, or maritime prepositioning force assets. In order to enforce various rules and regulations, certified agricultural inspectors will supervise and inspect the washdowns. While the battalion logistic section will normally coordinate these actions, company commanders can expect to provide the manpower and supervision to conduct the washdown.

Through proper leadership, company commanders create an environment in their companies that encourages proper storage, handling, and accountability of ammunition and ordnance. In addition, a rigorous and thorough inspection must occur in order to ensure that all ammunition and ordnance is removed from equipment prior to redeployment and embarkation.

As practical, commanders should identify and mitigate all equipment maintenance issues prior to embarkation. Broken equipment, equipment leaks, and other issues may result in embarkation delay.

Orders Process and Logistics

Commanders can enhance the quality of the support they receive by working closely with unit logisticians and providing requirements for support, but not necessarily requesting specific assets. Additionally, regularly referencing unit SOPs and thoroughly reading OPORDs, particularly Paragraph 4 (Administration and Logistics) of Annex D (Logistics/Combat Service Support), will provide logistical situational awareness. Logistics is a commander's responsibility and sets his/her operational limits. When company commanders develop their OPORDs, they do not omit paragraph 4, reference annex D, or state "by SOP" because not everyone will always know the SOP, and SOPs cannot cover every possible situation.

Within paragraph 4, the logistic portions consist of a logistic paragraph (subparagraph B) and a medical services paragraph (subparagraph G). At the infantry company level, especially when conducting semi-independent or dispersed operations, it is not enough to only consider the four Bs—beans, bullets, Band-Aids, and bad guys—that are often sufficient at lower echelons. The company commander, at a minimum, addresses the concept of logistic support that covers who, what, when, where, why, and how.

The logistic concept of support should read similarly to an operational concept of support and should address logistic issues before, during, and after the mission. It should describe how the infantry company will be supported, the relationship between the LCE and the infantry company, the use of organic assets (if any), and days of supply issues. In addition, company commanders offer guidance on the following:

- Logistic and transportation assumptions, if any.
- Sustainment priorities and resources.
- Priority and movement of major logistic items for each phase of the concept.
- HN, joint, and coalition support as applicable.
- Location and priority of main resupply points.
- Transportation policies, guidance, and procedures.
- Detailed planning requirements and subordinate unit tasking.

In addition to the logistic concept of support, company commanders add the following guidance:

- Prescribed load.
- Planned resupply.
- CASEVAC procedures and control points.
- Repair/recovery procedures.

- EPW handling and collection points.
- Mortuary affairs guidance.
- CSS request methods.

Captured Personnel

Captured personnel are EPWs and detainees. The two groups are legally different categories, though both groups are treated in accordance with the law of war and the Geneva Conventions. Enemy prisoners of war, detainees, and captured enemy equipment and materiel often provide excellent combat information. This information is of tactical value only if the infantry company processes and evacuates captured personnel and materiel to the rear quickly. The infantry company can expect detailed and specific guidance from HHQ on handling captured personnel and material.

All persons captured, detained, or retained by the infantry company during the course of military operations are considered "detained" persons until their status is determined by higher military and civilian authorities. Higher echelons of command possess military police units to take control and evacuate detainees; however, for practical purposes, the infantry company must provide professional initial processing and handling of captured personnel and equipment. Detainee handling is a resource intensive and politically sensitive operation that requires detailed training, guidance, and supervision.

Detention Methodology

Figure 13-7 addresses the procedures and methodology executed by the infantry company from the decision to detain an individual through final disposition. The actual time associated with this methodology can vary widely depending on the theater, operation, and guidance of HHQ.

Detention Criteria

The infantry company can detain any person who is a security threat or identified as a HVT or HVI. Detention of women, children (normally defined as 15 years old or younger), and religious and political leaders must be approved by HHQ. Tactical patience and discrimination on the part of the commander needs to be employed. Since a pattern of detaining and releasing persons for no apparent purpose can create far more problems than it solves, detentions should only be conducted when there is a considerable amount of evidence of wrongdoing or the detainee is caught in the act. "First, do no harm" is a principle that applies here.

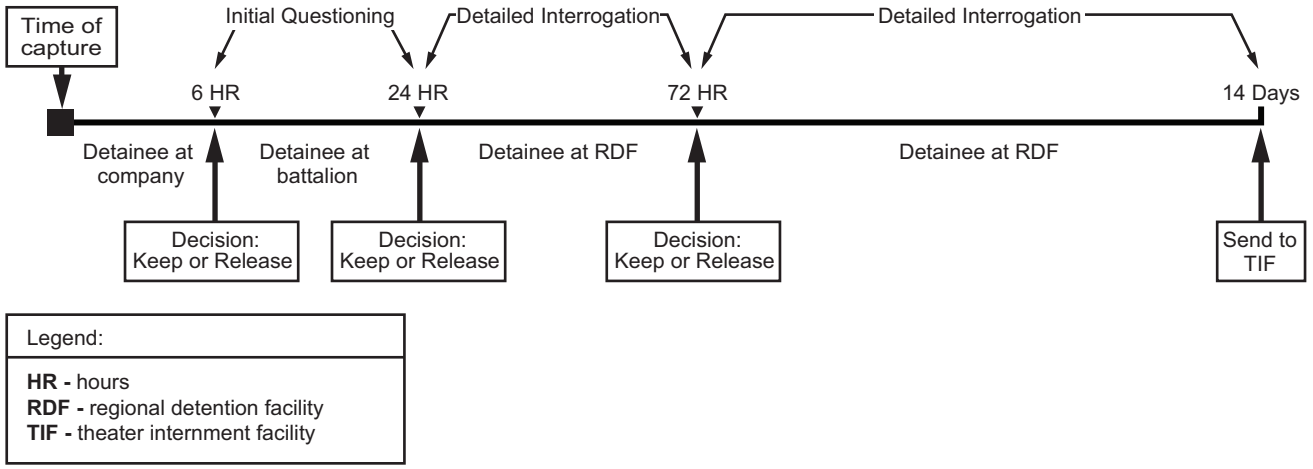


Figure 13-7. Detainee Timeline Example.

Apprehending the Detainee

While subject to some modification, handling of personnel generally follows the same process—search, silence, safeguard, segregate, speedy evacuation, and tag. At the point of detention, photographs are taken of each of the captured personnel; any evidence associated with them; and any suspicious things in the vicinity, such as firing ports in a wall. Detainees are flexcuffed and blindfolded (not hooded) with blacked-out goggles, engineer tape, or something similar and guarded by not less than two Marines (injured detainees are guarded as well). If at all possible, the company solicits statements from witnesses (preferably more than one) present at the time of the detention. Vehicles or similar items that belong to captured personnel, but do not possess evidence value, are secured and left at the point of detention. Photographs will be taken of such items. Vehicle photographs include license plates and any special or notable features. These photographs are essential for countering any false claims of abuse or damage from the enemy.

Detention Facility Procedures

Depending upon the operational environment, the infantry company may not have a "facility" per se. At a minimum, the company will establish a holding area with at least the same level of comfort and shelter as that enjoyed by the company itself. The company logs the arrival of captured personnel per the format in table 13-5. After being logged in, each detainee receives a medical screening by the senior line corpsman. The corpsman administers another medical screening when a detainee exits the company area, whether released or forwarded to the next HHQ. This screening is also important to counter false claims of abuse. The company must also follow specific rules regarding chain of custody; reports; and the treatment, evacuation, and release of detainees.

The company tags all evidence with a custody document to facilitate tracking the chain of custody. When transfers occur, the receiving unit provides a receipt for the detainee, their possessions, and associated evidence to the transferring unit.

At the point of detention, the detaining unit reports the occurrence immediately to the company COC in terms of who, what, where, when, why, and how. The company COC immediately informs battalion headquarters and proactively follows up with relevant additional information as it becomes available. In turn, the battalion WO follows local reporting requirements to HHQ and appropriate intelligence, judge advocate, medical, and detention elements.

While local conditions may dictate specific requirements, all captured personnel are treated with respect and dignity and given water and culturally appropriate food. Marines use "touch and tell" translation graphic aids to enable communication regarding medical requirements, life support, and hygiene needs. Marines assigned to the company holding area or detention facility receive use of force and facility procedures training, and they must sign to acknowledge receipt of the training. If assigned for anything more than short duration, these Marines will receive regular sustainment training. Companies operating detention facilities for any appreciable length of time should develop written manuals to properly codify procedures.

Table 13-5. Company Detainee Logbook Format.

DETAINEE #	DETAINEE NAME	DTG OF DETENTION	REASON FOR DETENTION	DD 2745 #	WITNESS NAMES
2/7-E0001					
2/7-E0002					
2/7-E0003					

Legend
DTG date-time group

If the decision is to retain the captured personnel, the company evacuates them to HHQ as soon as possible. Depending on the operational environment, there may be specific periods associated with how long a detainee may remain at each level of command. In operations with high volumes of captured personnel, HHQ will generally push forward to evacuate EPWs and detainees to relieve the company from extraordinary transportation requirements. Upon arrival at the battalion, captured personnel undergo a similar acceptance process as that at the company level. The battalion follows the chain of custody procedures outlined previously.

The manner in which detainees are released is just as important as how they are detained and handled during detention. Companies should develop a "release plan" that provides for the detainee's immediate needs upon release from custody and places their detention in context. The detainee receives an exit medical screening from the company's senior corpsman. Both entry and exit screenings, along with all associated documentation, is retained by the company. Upon release, the company makes a reasonable effort to return the detainee to the point of detention. The company may do this through physical transportation or may release the detainee to local security forces, civic leadership, or family members. Simply releasing detainees without any consideration of their personal needs generates anger and resentment and is a good way to make another enemy if the person was not one in the first place.

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APPENDIX A
ENVIRONMENT

The infantry company is deployable worldwide and, therefore, company commanders expect the requirement to operate in "every clime and place." As discussed in chapter 12, environments generally are hot or cold, wet or dry, and high or low in altitude. Within these general classifications are rural, urban, jungle, mountain, or desert settings and conditions. To approach all of these various conditions, the Marine Corps produces a family of warfighting publications that address each. This appendix covers the most common environments. Finally, companies must train and plan as able for the environments they are likely to encounter. At a minimum, company commanders should seek to ensure that their companies—

- Possess cadres of personnel with specialized skills sets, such as assault climbers, jungle leaders, and urban warfare specialists.
- Conduct environmentally appropriate medical training, such as how to recognize and treat altitude sickness, various jungle diseases, and parasites.
- Possess a fundamental understanding of unique equipment requirements, such as assault ladders, cold weather clothing, and jungle appropriate footwear.

Urban Operations

Since urban areas have traditionally held enemy centers of gravity, such as government, wealth, concentrations of population, and communications infrastructure, and the worldwide trend is toward increased urbanization especially in the littorals, it is likely that infantry companies can expect to operate across a range of military operations in urban environments.

Urban Considerations

The urban environment is complex and challenging, combining manmade features with the terrain and climate of nature. In general, the concentration of structures, facilities, and populations make an environment urban. Population centers, such as villages, towns, and cities, are all urban environments. Commanders use METT-T and civil considerations when planning for urban environments.

Mission

As expected, the company's mission, along with HHQ intent and end state, is a critical starting point for urban mission planning. Planners must determine specific aspects of the mission, such as whether the tactical task "clear" means every building along a route or just key terrain, or whether the company needs to leave behind security detachments along a route. Company commanders consider the concept of the three-block war, command and control, and movement.

Three-Block War. Commanders must determine if the company is prepared to execute within the three-block war concept. Missions that begin against prepared enemy positions, requiring repetitive explosive breaching against barricaded rooms, can quickly demand precision engagement due to the unexpected presence of civilians on the battlefield. Similarly, company members must possess the necessary equipment to move from permissive searching of a city block to high intensity operations if, for example, they discover an enemy safe house. Among the many considerations regarding the three-block war are BSG, the penetration effects of weapons, and plans for handling refugees and displaced persons.

Command and Control. Due to the dispersed nature of urban operations, command and control is difficult and radio and verbal communications, line of sight, and various pyrotechnic signals are made more complicated. While the defense, even a mobile defense, can mitigate some of these issues through such techniques as field telephones, the company commander must generally rely on a combination of mission tactics and top-down planning to exercise effective command and control. Extensive use of tactical control measures, such as boundaries, phase lines, checkpoints, and event-driven brevity codes, help build situational awareness across the force. In addition to operation-specific rehearsals, a well-rehearsed company SOP (that addresses such routine activities as contact drills, building entry and clearing, linkup procedures, CASEVAC, and resupply) simplifies operations, builds confidence, and avoids adding further confusion to the urban environment.

Movement. Due to the heightened three-dimensional nature of the urban environment, the danger of movement in the open becomes ever greater in proportion to the level of threat. Terrain study is the first critical step in determining what movement is necessary and where and which structures require such actions as occupation, overwatch, suppression, or obscuration in order to provide an advantage to the infantry company. Company commanders allow subordinate elements to take maximum advantage of covered and concealed routes within the urban area. If mounted, infantry uses tanks or other armored vehicles to assist its movement through the firepower and armor shielding of the vehicles.

Enemy

Key factors that affect the company commander's problem framing are the type of enemy force expected in the urban area, the enemy's probable COAs, and the ROE. Rules of engagement that are more restrictive work to a defender's advantage; conversely, less restrictive ROE work to an attacker's advantage. An enemy working in a permissive or uncertain environment directly influences the company commander's choices on movement techniques, FP, and use of firepower; such choices would change in a hostile environment. The urban environment often enhances the inherent advantages of the tactical defense: if the infantry company is defending, it benefits; if company commanders are executing offensive or stability operations, they must acknowledge the defender's advantage and plan accordingly. The enemy defending in an urban environment can quickly teach a company commander the difference between bold and calculated COAs and rash COAs based on chance.

Terrain

The urban environment consists not only of the natural terrain upon which it is built—hills, valleys, flat land—but also layers of manmade terrain both above and below ground. Commanders and subordinate leaders must consider all aspects of terrain, environment, and climate when conducting urban operations across the conflict continuum.

Maps may neither provide enough detail for urban terrain analysis nor reflect significant infrastructure, such as sewer, water, and gas systems; subways; railroads; and electrical and communication infrastructure. For all types of operations, satellite and grid reference graphic imagery is preferred. When available, commanders should use such aids as building or city plans, engineering prints, aerial photographs, or tourist maps that may assist them in their analysis of the terrain.

Key and decisive terrain are not always the same. Key terrain may consist of buildings, high ground, and other aspects that provide security, overwatch, and fields of fire; it enables safer movement. Decisive terrain may refer to control of a local market that is surrounded by high buildings and is extremely vulnerable to multiple avenues of approach. Control of decisive terrain may require identification and control of the key terrain that affects it

In addition to major routes of movement within the urban area, infantry companies must gain awareness and, when possible, intimate knowledge of alleys, throughways, footpaths, and other covered and concealed routes within the built-up area. Intentional or unintentional rubbling is another route consideration.

Troops and Support Available

In large scale, conventional operations against significant urban areas, infantry companies conduct offensive and defensive tasks within the context of battalion operations. For most other situations, companies work semi-independently and the company commander assesses the company's relative combat power in the same manner as for other operations. Working in urban environments generally requires company augmentation in terms of combat engineers, medical capability, translators, and firepower from HMGs, ATGMs, tanks, and occasionally even direct fire artillery. The urban environment is complex and the hazards, such as electricity, gas leaks, water, and weakened structures, are greater than merely the enemy. Company commanders should seek necessary support beyond the company.

Across a range of military operations, the urban environment demands more troops than other environments do. In the offense, this need is particularly acute to meet relative combat power requirements and to accomplish the number of other tasks required, such as clearing buildings, providing security, controlling civilians, evacuating casualties, and conducting resupply.

Due to the complexities of employing supporting arms within the urban environment, fire support coordination tends to occur at HHQ levels where such issues as collateral damage, weaponeering, and airspace coordination are more easily resolved. Collateral damage estimates in the urban environment take into account the difficulty of tracking friendly unit location, ROE and the presence of civilians, and the general desire not to rubble the urban environment (from both the standpoint of future use and the desire not to aid enemy defensive efforts). Weaponeering issues to consider are not only collateral damage estimates, but also penetration, building composition, and changes to airspace controls due to high trajectory artillery fires. The FST is an integral component in planning offensive, defensive, and on-call fires and their associated communication, target identification, and control issues.

Regardless of the type of operation, armor often proves a valuable tool due to its firepower, ability to shield dismounts, psychological effect, and lift capability. The basics of armor and infantry coordination apply in the urban environment as well. If tanks and infantry cooperate to mitigate armor's vulnerability to enemy antitank weapons, then armor can greatly assist the company commander's requirements to isolate and suppress objectives since it is able to expose itself in open areas where infantry could not survive. Company commanders should work closely with attached armor to ensure that tanks bring the right ammunition mix into the urban environment.

Time

Despite the deceptive presence of roads and the traditional fast pace of life associated with urban areas, combat operations in built-up areas have a slower pace and operating tempo than those in other environments. As the level of threat increases, so does the need for security, which slows down movement; bounding overwatch is inherently slower than traveling overwatch. Clearing and searching multiple buildings, rooms, garages, yards, or alleys is slow even without the presence of a defending enemy. Finally, the mere physical exertion and stress associated with urban combat quickly fatigues and slows company personnel. Commanders must plan accordingly in order to mitigate these factors and to maintain relative momentum and speed over the enemy, who must also deal with the same problems. Slowdowns are mitigated by keeping plans simple: preplanning resupply, rotating the main effort frequently, and maintaining and using a reserve.

Civil Considerations

When conducting operations across a range of military operations in urban environments, contact with some portion of the populace will occur. In stability and similar operations, contact with the populace is desired and sought. In these operations, civilian considerations, such as legitimate governance or quality of life, become part of the commander's mission. In conflicts of higher intensity, contact with the population is likely to come in the form of displaced persons or refugees. Populations may be friendly, neutral, or hostile. Infantry company commanders must plan to encounter civilians on the battlefield and remain flexible, using combat power accordingly. Commanders must provide a plan and specific guidance to company personnel regarding civilians.

Offensive Considerations

In the attack, the company commander focuses planning on how best to get the main effort to the decisive point. Actions on the objective often splinter into small unit engagements, when intent and purpose provide the uniformity needed for what becomes a squad fight. The urban environment is no different. Committing to offensive operations in an urban environment results from situations in which the particular area offers the following:

- *Tactical advantage.* Road or railway infrastructure increases friendly mobility or reduces enemy mobility.
- *Political advantage.* The possession of the urban area itself represents an IO victory or might increase the legitimacy of the HN government.
- *Economic advantage.* Perhaps the designated urban area contains an important banking center or a key industry that, if denied to the enemy, directly impacts their ability to wage war.
- *Potential threat to further operations.* A potential threat, such as the enemy presents in the urban area, represents too great a threat to bypass or perhaps the terrain canalizes friendly operations and makes bypassing an urban area infeasible.

Regardless of the operational area (offense, defense, or stability), infantry company commanders consider the mission and its related execution points when conducting offensive actions in an urban environment.

The doctrine of maneuver warfare finds some of its greatest applicability in the urban environment when limited resources coupled with unit isolation place a premium on leadership, task and purpose, and commander's intent. The use of attachments and enablers, such as combat engineers, medical augmentation, and translators, are critical. Regardless of where they find themselves along a range of military operations, company commanders can generally expect to execute the following missions either individually or in conjunction with other companies and battalions: isolation of an urban objective, attack of an enemy outpost, attack of a block or group of buildings, assault of a building, movement to contact, seizure of key urban terrain, and raids.

Isolation of an Urban Objective

Unlike a cordon, which occurs in a permissive or uncertain environment, isolation of an urban objective more closely resembles the isolation requirements for attacking a strong point. The company may serve as the isolation element for a battalion-sized attack or the company commander may assign this mission to a platoon for a company assault. The purpose of isolation is to limit the enemy's options on the objective by cutting off their escape or reinforcement. Company commanders and their platoons use observed fire, direct fire, physical occupation, or appropriate combinations thereof to achieve the isolation effect. In hostile environments, company commanders remain mindful of how they move to and occupy assigned positions in order to preserve surprise and avoid the risk of moving in open areas.

Attack of an Enemy Outpost

An infantry company may encounter enemy outposts, checkpoints, or strong points in its advance.

A company may conduct a hasty attack over a substantially weaker enemy, it may bypass the outpost, or it may attack and reduce the outpost using classic strong point reduction tactics—isolate, suppress, breach, and assault—in conjunction with urban tactics, techniques, and procedures regarding such actions as urban movement, building entry, and room clearing.

Attack of a Block or Group of Buildings

Companies may attack a block or group of buildings. The size of the block or group of buildings determines the company's mission. A suburban, residential block consisting of single-family dwellings might be an appropriate mission for a company to isolate and clear on its own. However, even in an uncertain or permissive environment, an infantry company is unlikely to receive a mission to clear a city block with multiple buildings of varying construction and size on its own. In such cases, the company will more likely serve as the main effort or a supporting effort, such as an isolation force, for a battalion operation.

Assault of a Building

Companies normally conduct this mission as part of a battalion operation when the building is too large for a platoon to assault and clear (vice search). The company must enter the building, gain a foothold, and clear the building. This action could be the main effort of the battalion or the company could conduct this mission as part of a supporting effort, such as passing the main effort company through the newly cleared building so they can assault the main objective beyond.

Movement to Contact

Companies may use one of the two movement to contact methods in urban operations. One of the principal considerations of the company commander is command and control and the nature of the enemy threat. Using search and attack methodology in an urban environment risks significant C2 issues. If used against a strong and organized enemy force, a search and attack may prove problematic to the survival of the company's elements. On the other hand, while an approach march technique greatly reinforces command and control, company commanders face the fact that a smaller, defused enemy threat in an uncertain environment will easily evade this method.

Seizure of Key Urban Terrain

Companies may seize key terrain in order to provide an advantage to friendly forces. Key terrain may be overpasses, building complexes, traffic circles, surrounding natural terrain, bridges, or transmitters. The company usually conducts this mission independently to facilitate movement or other operations.

Raids

Companies may perform raids on urban terrain, which they plan similarly to raids on other terrain. Objectives may be located in built-up areas and the company may have to move through urban and other terrain in order to arrive at them. The company normally conducts this mission independently, but it may also conduct a raid in support of a battalion area raid.

Defensive Considerations

The general considerations for establishing the defense in an urban environment are no different from those covered in chapter 7. The urban environment greatly favors the defender, especially a defender who possesses the time to prepare and intimately knows the terrain being defended. The reasons an infantry company may defend in an urban environment are—

- *Tactical advantage.* Retaining an urban area may allow friendly forces to control key avenues of approach, block movement, or threaten the enemy's flank or rear if bypassed. Further, continuing to hold an urban area with important rail and road networks increases friendly mobility while restricting the enemy's movement.
- *Deny the enemy an important strategic or political objective.* Even though any particular urban area may lack tactical importance, it may possess important political, psychological,

cultural, and national morale factors that are worth denying the enemy or retaining for friendly purposes.

- *Retain economic capacity.* An urban area may possess key industry, port, finance, and other wealth-related capacity that is important to retain.
- *Economy of force.* Since the urban area favors the defender, who can effectively engage a numerically superior attacker, a defense in an urban environment can free friendly forces for offensive action elsewhere. Similarly, by forcing the enemy to commit large amounts of resources to an assault in an urban environment, the enemy must weaken forces elsewhere, creating opportunities for friendly action.
- *Logistics.* Cities often form logistical hubs due to the presence of port, rail, and air facilities. In addition, due to the complex nature of the terrain, CSS units can increase concealment and survivability by moving their functions into an urban environment. Such resources, once created, often drive a requirement for defense since they are not easily displaced or recreated elsewhere.

Patrol Considerations

Patrolling in the urban environment accomplishes all of those tasks discussed in chapter 8 in addition to remaining the company commander's only organic intelligence collection asset (see chap. 4). Whether conducting patrols in a peacekeeping operation or conducting a reconnaissance on a prepared enemy position, the company's patrol plan in the urban environment faces the same challenges present in all urban operations—command and control and movement. In the case of patrolling, company commanders must determine how the company maintains communications with its dismounted or mounted patrols and how it moves to support those patrols in both routine and emergency matters. Company commanders should consider increased contact with the populace, use of the reserve, and communications.

Increased Contact with the Populace

Regardless of the level of conflict in which the company is participating, patrols are likely to encounter the local population. In many operations, the entire purpose of the patrol is to make such contact. It is important that patrols leave with detailed, specific instructions on how to deal with friendly, neutral, and hostile populations.

Use of the Reserve

Company commanders make difficult patrol plan decisions about how, when, and if to support patrols with the use of a reserve. In stability operations, COIN, and similar environments, committing a reserve to take advantage of a contact or discovery made by a patrol or to extricate a patrol from an enemy threat beyond its ability is a matter of course. However, at the higher end of the conflict continuum, that may not always be the case. Regardless, if committing the reserve in support of patrols is part of the patrol plan, then such issues as urban movement, command and control, CASEVAC, and linkup procedures must receive the attention of the company planners.

Communications

The urban environment already challenges radio communications within the company. This problem increases considerably with the use of dismounted patrols moving any appreciable distance from the company lines. Company commanders must consider the ways in which they can establish continuous communications coverage, such as by conducting a communications survey as part of patrol route planning, requesting additional communication assets, or bulking up patrols with additional personnel to establish retransmission points.

Mountain Warfare

Major mountain ranges are found across the world in desert, jungle, and cold climate areas. Traditional operations in the mountains focus on controlling heights and passes, since mountains

normally presented an obstacle to mobility and were not objectives themselves. Even when conducting stability, COIN, or similar operations, the focus on control of local heights and passes has not changed significantly. Infantry company commanders operating in mountainous environments must expect significant limitations on operations; specifically, the impact on the company and its equipment of severe environmental conditions and the extraordinary challenges to ground mobility.

Mountain Considerations

The complex, compartmentalized nature of mountainous terrain changes the fundamental nature of tasks, techniques, and procedures across all six of the warfighting functions and aviation. Units and personnel may require specialized training in such skills as military mountaineering, snow mobility, and appropriate field craft. Mountain considerations can also be thought of in terms of METT-T and its effects on civilians.

Mission

When conducting problem framing, infantry company commanders must remember that the mountain environment not only slows movement, but also increases the difficulty of providing normal levels of support and conducting simple tasks: patrolling becomes more support intensive; the nature of the terrain significantly influences patrol route selection and effectiveness; and the altitude and the nature of airflow in the mountains may preclude UA support. On the other hand, due to limits on mobility and canalization caused by terrain, such items as avenues of approach and key terrain become easier to analyze than in environments that are more open.

Since terrain limits VHF [very high frequency] communications, infantry companies will rely on HF [high frequency] and satellite communications assets that drive a training requirement for the company commander's consideration. Increased use of retransmission sites, HF, and satellite communications will mitigate communication difficulties, but will also drive greater FP requirements and create a need for more communication resources than the infantry company normally possesses.

Movement becomes more difficult in a mountainous environment, but it does not become impossible. Similar to other complex terrain, mountain movement is methodical, well thought out in advance, well supported, and slower. Since the mountains penalize all movement equally, infantry company commanders can maintain tempo and momentum dominance over the enemy, but must adjust their timeline expectations and fully appreciate the support in terms of resources now associated with even simple movements. Due to limited mobility corridors and canalization, company commanders consider the ability of units to mass combat power if they are widely spread out.

The amount of time the company has to prepare for mountain operations is an important planning consideration. Company commanders tailor operational expectations accordingly. An infantry company deploying directly into a high altitude environment, for example, will suffer from failing to conduct the preferred methods of gradual high altitude acclimatization. In such a case, company commanders would modify their operational expectations because company personnel would initially be ineffective due to oxygen depletion and potential altitude sicknesses.

Enemy

The enemy faces the same issues as the infantry company when operating in mountainous environments. Regardless of whether enemies are natural mountain warriors or not, they must resolve and mitigate the limitations of mountain warfare in the same manner as the infantry company. They are just as likely to seek the easiest paths of movement and to balk at and require technical resources to climb cliff faces. In determining likely enemy COAs, the company commander takes into account the enemy's effectiveness in dealing with mountainous environments and their capabilities, such as training and equipment necessary for cliff

assaults. As in all operations, the company commander strives to be more effective at these same tasks than the enemy so as to seize or maintain the initiative and dictate tempo.

Terrain and Weather

Infantry companies operating in the mountains prepare for increased casualties. Complex terrain always generates additional casualties, especially lower-body musculoskeletal injuries. At altitudes above 8,000 feet, company commanders can expect some altitude-related illnesses among the company's personnel. If not considered in planning, the combination of these factors plus casualties occurring as part of combat operations can rapidly overwhelm medical response and CASEVAC capacity, especially when the mountain environment already reduces the effectiveness of that capacity. Training, clothing, and proper resources can mitigate these terrain and climate-related issues.

Troops and Support Available

Company commanders who may operate in the mountains seek specialized and general training for their company and additional equipment and personnel resources. Though task organization of the company remains largely unchanged, commanders consider the employment of critical skills and enablers. For example, company commanders should ensure that all company subelements include trained mountain leaders and that company commanders task-organize skill specialties, such as animal packers or assault climbers, to support specific company functions.

The terrain, a relatively small force-to-space ratio, and generally uninhabited nature of the mountainous environment dictates decentralized fire support techniques. Companies must train to develop the ability to control both indirect and direct fires in terrain where the firing agency, target, and observer are at different altitudes. Decentralization applies to nonlethal fires in the same manner. Due to the nature of mountainous terrains, a relatively small area can contain numerous population groups who require specifically tailored IO messages.

Motor vehicles can operate in mountainous environments, but are normally restricted to specific areas and routes. Even specialized vehicles, such as snowcats and off-road vehicles, experience such terrain limitations as slope and ground and snow composition. Vehicles operating at the extremes of their operating parameters are more likely to break down, requiring greater preventive maintenance and increased resources.

The higher the altitude at which the infantry company operates, the greater the limitations on some forms of aviation support, specifically rotary-wing support in terms of lift capacity and access. The ability of fixed-wing aircraft to work at high altitudes helps offset this loss, but company commanders need to consider and request the extra personnel and training resources needed to make effective use of fixed-wing support as aerial delivery.

A dismounted infantry company operating in the mountains will automatically consume greater quantities of such expendables as food, water, and medical supplies. Adding to the burden of logistics in mountainous environments are restrictions imposed by the terrain and altitude that affect the means of resupply and movement. Company commanders mitigate these issues through prepositioning and stockpiling supplies; methodical and well-thought-out operations; use of pack animals, porters, and other means of supply movement; and increased resources in terms of personnel, such as corpsmen and mechanics, to achieve higher levels of self-sufficiency.

Time

Overcoming the many obstacles and challenges in a mountain environment demands increased planning time. Moving troops and supplies, prestaging caches, and preparing routes all demand increased preparation time for any type of operation. When conducting movement, the planning assumption is that movement will be slow. Even if the company's inclusion of trained assault

climbers open up mobility "possibilities," the existence of a new way to approach the enemy does not negate the slow, methodical nature of conducting that approach. Company commanders must, even if portions of the movement occur mounted, make accurate time-distance planning assessments when determining their own movement rates and those of the enemy (see fig. A-1).

Civil Considerations

The complex and compartmentalized terrain of the mountains often results in large numbers of diverse people grouped in a relatively small, two dimensional area. Since easy mobility between the different groups is limited, populations tend to develop in different ways, particular to the land they occupy. Even when population groups in the mountains can be lumped into large population, tribal, or language groups, company commanders should not assume that these groups are therefore homogeneous. They possess extensive knowledge of local terrain, including routes that might not appear on maps. Civilians living in the mountains tend to cluster in valleys, near any arable land, and along mobility corridors.

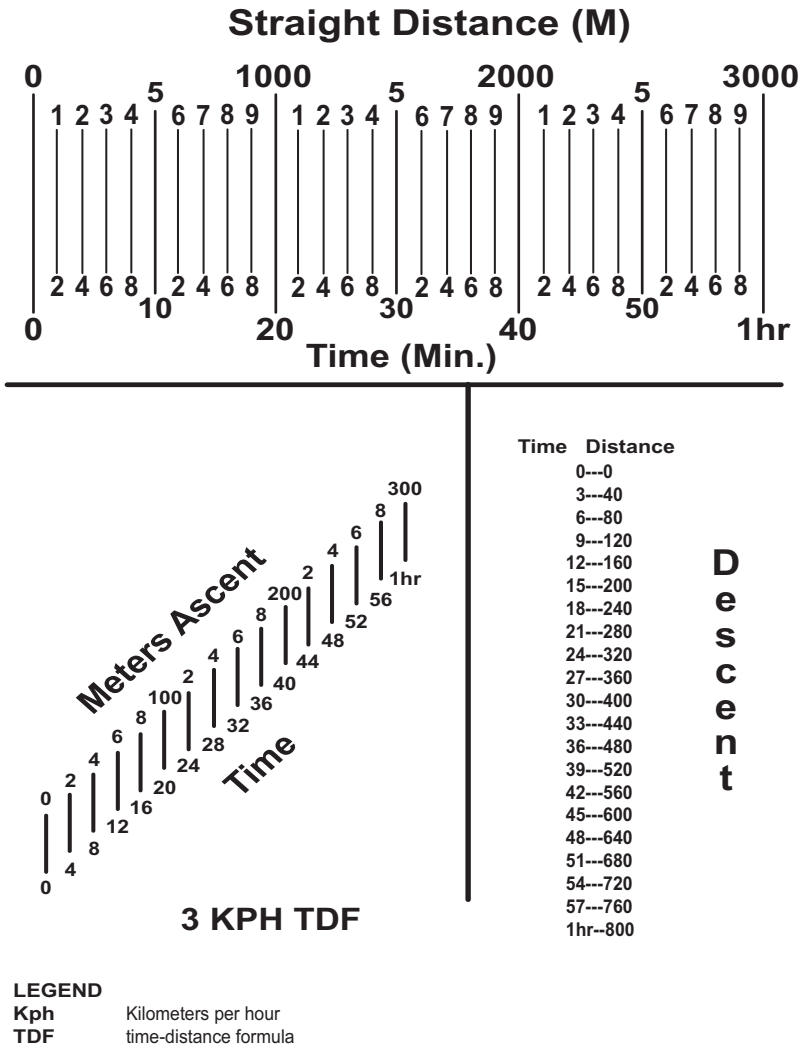


Figure A-1. Mountain Time-Distance Formula Chart.

Offense Considerations

In a mountainous environment, the infantry company generally executes attacks and movements to contact because exploitation and pursuit remain exceptionally difficult due to terrain and altitude restrictions on movement, resupply, and command and control. Offensive operations avoid frontal attacks, seek surprise, try to place friendly forces on the flank or rear of enemy positions; they attempt, whenever possible, to attack downward from heights. Mountain warfare tends to center on terrain that supports mobility, such as passes and LOCs, and the terrain that controls that mobility, such as ridges, chokepoints, and high ground. Due to the methodical nature of operations dictated by mountain restrictions, infantry company commanders tend to seek objectives that are important for setting successful conditions for the next step of the battle. Other considerations include the following:

- Conduct operations in limited visibility to maximize surprise.
- Focus on mobility and survivability both in the assault and during consolidation and reorganization.
- Maintain friendly LOCs while destroying those of the enemy.
- Maintain a robust reconnaissance and security posture throughout the offensive action to protect friendly actions from discovery.
- Mitigate difficulties in concentrating combat power through centralized planning and decentralized small unit actions.
- Seek to mitigate such issues as supply and environmental FP by executing operations of short duration and violent execution.

Defense Considerations

Complex terrain favors the defender and the same applies in the mountainous environment. While an attacker seeks key and decisive terrain important to the next phase of the battle, the defender seeks to retain that terrain in order to deny it to the enemy and preserve it for use in taking the offense—the decisive method of war. Observation, fields of fire, ability to fortify, opportunity to stockpile supplies, and preparation of internal routes for the quick movement of troops within the defense all work to the defender's advantage. In the defense, infantry company commanders also consider the following:

- Using camouflage and concealment extensively to retain surprise.
- Conducting a careful analysis of the terrain to determine avenues of approach and guard against enemy use of impossible or unlikely routes.
- Conducting an aggressive reconnaissance effort to prevent surprise while denying the enemy that ability to discover the nature, location, and strengths of the friendly defense.
- Determining the requirement for perimeter defenses to defend against an assault from any direction.
- Using delaying tactics to disrupt the attacker as delaying tactics are particularly effective in complex terrain.
- Developing routes, rehearsals, and mobility resources.

Patrol Considerations

While the formations and fundamentals of patrolling do not significantly change in a mountainous environment, additional planning and supervision by company commanders will ensure that the task and purpose of the patrolling plan is met while the effects of terrain, weather, and altitude are mitigated. When conducting stability or defensive operations, it is likely that company commanders will make increased use of OP/LP or mountain pickets to overwatch avenues of approach, dead space, and critical pieces of terrain within the defense. The patrolling and reconnaissance plan should integrate these types of positions to shorten the length and ease the difficulty of patrol routes; to provide overwatch of patrols; and to provide temporary patrol bases for

FP, supply, and emergencies. In addition, leaders must make the following considerations:

- Due to the inherent risks of inclement weather, it is necessary that the commander possesses both a meticulously planned extract and an alternative sustainment plan, such as identified food and water sources along patrol routes.
- The company's patrol plan includes detailed, rehearsed, and properly resourced secondary and tertiary communications plans to mitigate the effects that mountainous terrain will have on all communications assets.
- Patrols receive necessary fire control augmentation in the form of equipment and personnel in order to allow fire control at the lowest level possible.

Desert Warfare

Deserts or arid environments make up a larger portion of the world's various climates than any other, making it very likely that infantry companies will deploy into desert environments. As the term arid suggests, deserts are defined by their lack of water and moisture and not by their temperatures, which can vary (sometimes within a matter of hours) from extreme cold to extreme heat. Deserts are generally open, sometimes rugged, terrain that demands mobility. From the beginning of warfare, the lack of restricted terrain in the desert has favored horse mounted over foot soldiers and armor over infantry. Infantry company commanders expecting to operate in the desert must plan and train for the impact of dry, arid, rugged, and dusty conditions on personnel, equipment, and vehicles.

Desert Considerations

From the sweeping operations of Bedouin tribesman in World War I to the North African tank battles of World War II and the modern mechanized warfare of Operations Desert Storm and Iraqi Freedom, the open terrain of the desert is ideal for mobile maneuver warfare between opposing conventional forces. It is far less suitable for COINs, as it offers no real permanent sanctuary. The successes that desert-based insurgencies have achieved have been against static enemies who, for a variety of reasons, largely ceded the desert terrain to the insurgents. Any force capable and confident enough to journey into the desert effectively either forces battle or drives smaller enemy threats into the population centers to seek shelter there. Commanders must consider METT-T and civil considerations when planning desert operations.

Mission

Infantry companies participate in major offensive and defensive operations as a maneuver element for the parent battalion. In stability operations, companies will more frequently act semi-independently. When conducting problem framing, infantry company commanders must first consider mobility issues. First, the type of vehicles provided to companies influence the capabilities and survivability tactics the company commander can choose. Second, the type of vehicle and the nature of the trafficability of the desert affects mobility. Deserts can contain wadis, deep sand, salt marshes, and similar features that can quickly bog down wheeled and tracked vehicles. When addressing various mission profiles in offensive, defensive, and stability operations, company commanders next consider environmental FP for the company's personnel (such as water, food, and shade) and maintenance support for vehicles (such as parts, fuel, and recovery).

The relatively open nature of the desert, the advantages provided by vehicular and aerial mobility, and the ability to employ weapon systems at their maximum effective ranges offer opportunities and challenges for defender and attacker alike. Attackers possess superior initiative while defenders benefit from a mobile defense with its inherent chances for offensive action. Company commanders operating in the desert must ensure that subordinates are thoroughly capable of conducting both aided and unaided land navigation across large and featureless areas. Formations for movement

stress flexibility and the ability to rapidly respond to contact to the front and flanks.

The more static the operational stance of the infantry company, the easier the support considerations. Stability operations with significant, complex, and mature logistical nets ease the company commander's burdens though such infrastructure carries the risk of self-imposed paralysis and lack of aggression. Conversely, the infantry company in the attack in the deep desert must bring its support with it, often over considerable distances. In desert warfare, the defender tends to fall back on supply sources while the attacker continues to move away from them. While vehicles increase the amount of resources the company can haul, there is a limit to their haul capacity. Also, the mere presence of vehicles adds considerable limitations in terms of maintenance and fuel.

Reconnaissance remains important to the company commander in the desert as elsewhere. However, without dominating terrain features from which to achieve observation points, company commanders must use aggressive patrolling for both reconnaissance and security purposes as well as aerial platforms and imagery to see the enemy in depth.

Given the chaos possible with multiple maneuvering units, the dust and obscuration associated with desert movement, and the lack of intervening terrain that might limit the effects of weapons, fratricide is of even greater concern on the desert battlefield. Accurate location reporting, schemes of maneuver that limit the chances of fratricide, and effective methods of identifying friendly vehicles and troops are important.

Enemy

An enemy capable of matching the technical and tactical prowess of the infantry company in the open desert is a dangerous foe. Such an enemy is likely to make extensive use of antitank weapons, obstacles, and fire support in conjunction with maneuver. They are likely to possess counterbattery fire capabilities that will require not only frequent displacement of friendly artillery, but also more detailed planning and coordination in order to maintain friendly fire support during displacement. Less robust enemy forces will likely use the desert as a mobility corridor and temporary sanctuary. They will seek to mass unexpectedly to achieve local combat superiority, create decisive effects, and disperse using their relatively unobservable routes as a form of concealment.

Terrain and Weather

Heat and arid environments can adversely affect all sorts of equipment, but communications and computer equipment is particularly vulnerable and must be guarded and maintained accordingly. While the desert is generally open terrain, it is rarely as trackless and featureless as it appears. Company commanders must consider the natural and manmade features of the desert.

Natural desert features can make visibility and determining distance challenging. Distances in the desert are deceptive due to the lack of terrain features available to provide scale, which affects combat reporting and control of supporting arms. Company commanders must consider distance in terms of how far they can travel from reliable combat logistic support. Finally, infantry companies must appreciate that desert distances and openness enable the employment of weapon systems at their maximum effective ranges.

Dust clouds, the reflection of sunlight off vehicles, and daylight use of headlights can make friendly forces visible for vast distances. Night movement, though concealing, carries with it its own risks, such as separated vehicles due to darkness and dust.

Such desert features as wadis, oases, sand dunes, salt marshes, rocks, and flooding during rainy seasons all impact desert operations. All can contain considerable tactical value, such as an oasis as a population center and water source or a flooded

salt marsh protecting a flank. Many of these features shift based on weather patterns and do not appear on maps. Finally, company commanders should not discount the presence of microterrain. While not on a map and maybe not visible at a distance, the presence of a ten foot sand dune can conceal a friendly or an enemy vehicle.

Manmade terrain features in the desert consist of improved water sources, such as canals or wells, roads, airfields, or population centers, that create tactical and support considerations in what might have otherwise been open desert.

Troops and Support Available

When conducting desert operations that favor mobile operations, company commanders do not discount the requirement for dismounted infantry. Dismounted infantry, when properly supported by antiarmor weapons, survivable fortifications, obstacles, and fire support, are the force of choice for strong point operations and the defense of logistical nodes or fixed sites. In the offense, dismounted infantry is critical to armor survivability in the close assault and can often precede armor to infiltrate and weaken enemy defenses. Company teams also receive greater combat engineer support as the need is greater in desert operations due to heavy demands for mobility, countermobility, and survivability.

Supporting arms in the desert greatly assist the infantry company in creating the suppressive effects necessary to safely enter and transit through enemy weapon system threat rings that, in the open desert, can reach into the thousands of meters. Company commanders plan their operations carefully to avoid outrunning indirect fires.

Aviation in the desert environment greatly aids company reconnaissance efforts and fire plans. Due to the inability of ground-based observers to see into the depth of enemy positions, aviation assets aid reconnaissance and, with the use of FAC (airborne) capabilities, infantry companies can enhance the effectiveness of their company fire plans. Close air support in its different roles can aid fire support gaps created by displacing artillery or mortar assets. Used creatively, assault support assets can add flexibility and depth to friendly plans. They can conduct limited emergency resupplies and create supply caches in support of offensive operations. With the ability to lift troops, light vehicles, and even artillery, assault support can insert friendly forces into the rear area of the enemy to create significant blocking positions.

Company commanders must confront the much greater logistical requirements associated with mobile warfare and maintaining forces in the desert. The quantities required for sustained desert operations dictate ground over aerial movement as the rule. Ground movement is always vulnerable to enemy attack, especially in COIN or "behind the lines" operations. The more complex the logistical infrastructure and the greater the enemy's ability to disrupt it, the greater the demand on friendly security elements to secure logistic trains.

Time Available

Company commanders carefully consider time and speed in the desert, especially as they relate to supporting arms. In the attack, the company commander must consider the speed of maneuver elements in order to avoid driving into supporting fires or lifting supporting fires too soon. In the defense, the use of TRPs and similar manmade features help time supporting arms so that they fall on to moving enemy targets instead of ahead of or behind them. In addition to these considerations, the mobile nature of desert warfare generally leads to a significantly higher operating tempo than that found in other environments. The result is the risk of fatigue in both personnel and vehicles. Limited only by supply and enemy action, units can quite easily conduct continuous operations. Company commanders must consider rest plans, incorporating them into operations in the same manner as such actions as refueling, resupply, and security halts.

Civil Considerations

While the desert is not empty of population, those peoples who live in the desert tend to be nomadic. Like mountain environments, permanent populations tend to cluster around terrain favorable to life, such as oases, trade routes, seasonal water sources, or narrow agricultural strips on rivers. Since the nature of desert warfare often lends tactical value to population centers and their associated terrain, such as airfields or roads, infantry companies should expect to encounter civilians across all types of operations.

Offense Considerations

The focus of offensive action, like other environments, is the destruction of the enemy or the bending of their will. As is the case in many harsh environments where support is a constant issue, the goal of the infantry company in offensive combat frequently centers on seizing objectives that enable further offensive action, such as airfields, communication and logistical nodes, and water sources. Company commanders in the offense must plan to avoid the culmination point, while maintaining mobility, suppression, and the defense.

Avoid the Culmination Point

As the attack progresses, friendly forces become further and further removed from their supply bases and, therefore, vulnerable to enemy counterattacks and actions against friendly supply lines. When planning offensive actions as part of a battalion or when conducting semi-independent operations, company commanders must plan on how to overcome an early culmination point in the attack.

Maintain Mobility

Company commanders maintain mobility in two ways—through the maintenance and supply of their vehicles and through a robust breaching capability to maintain mobility against fortified enemy positions. The company must be able to conduct local breaches of protective obstacles down to the platoon level. In addition, the company may serve as the battalion's breaching element, providing security for an obstacle-clearing detachment that is creating a breach in the enemy's defense.

Maintain Suppression

Because of the open nature of desert terrain and the ability for weapon systems to engage at their maximum ranges, suppression of enemy defenses as friendly maneuver closes in on them is critical. Establishing direct fire suppression alone risks a survivability fight in which friendly forces opposing dug-in, well-equipped enemy forces are likely to lose. The fire support plan for the company must take into account suppression, destruction criteria, and similar considerations that allow the infantry company to maneuver in relative safety to the objective and assault it successfully.

Maintain the Defense

Defensive tasks are inherent in the offense. In the mobile desert fight and when engaging an enemy likely to defend in depth and maintain a counterattack capability, companies will need to consider flank security. As part of a battalion, the company may conduct screen or cover missions as a supporting effort. When conducting their own operations and as the enemy position is penetrated, company commanders consider posting flank security as part of the scheme of maneuver.

Defense Considerations

For the same reasons that an attacker seeks desert terrain that furthers his/her operations against the enemy, the infantry company in the defense seeks to deny those same assets to the enemy by retaining them. In the defense, the infantry company commander considers mobile defense in depth.

When assigned missions not associated with terrain or fixed sites, the company commander makes maximum use of depth and mobility to attrit, disrupt, and draw the enemy deep into his/her sector before executing decisive offensive actions, such as counterattacks, to destroy them. When assigned defensive tasks

that orient on terrain or if in a dismounted role, company commanders rely on extensive use of such tactics as obstacles, fire support, and antitank weapons to disrupt the enemy in the security area and destroy them in a series of EAs, ideally sited in depth. Whether part of a battalion defense or conducting their own operations, company commanders make maximum use of obstacles and any existing terrain to limit the maneuver options of the enemy.

Patrol Considerations

Though UA may be available, company commanders should continue to plan much of their reconnaissance efforts based on their own, organic patrol capability. Since the desert lacks terrain from which to observe the enemy, friendly patrolling is aggressive. Patrols may often combine mounted and dismounted methods to get close enough to enemy positions to conduct reconnaissance without risking the destruction of friendly vehicles. Due to the same survivability concerns, company commanders should consider patrolling at night and in conditions of limited visibility.

Jungle Warfare

Army Field Manual 90-5, Jungle Operations, observes the following:

> *Jungle fighting is not new to US soldiers, nor does the enemy have a monopoly on jungle know-how. US units adapted well to jungle fighting, and when we operated against the North Vietnamese Army along the Cambodian border we found that they had as much difficulty operating in the area as we did. The prisoners we captured were, as a rule, undernourished, emaciated, and sick with malaria. They stated that almost everyone in their unit had malaria, and many had died from it.*

The jungle environment occurs on or near the equator. Large swaths of this environment lie in the littorals and support large populations throughout Africa, Central and South America, Indonesia and northern Australia, and in southern and southeast Asia. Because of their location along the littorals and near very large population centers, jungles remain very likely environments in which Marine Corps forces will continue to operate.

Jungle Considerations

Jungles generally consist of thick foliage and persistent heat and, though varying by location, all jungles receive significant rainfall. Jungles along the equator experience rainfall throughout the year; whereas, jungles further from the equator, such as those in southeast Asia, have distinct monsoon and dry seasons. Combat in the jungle consists of long periods of looking for the enemy followed by short periods of violent, close combat. The jungle's limitations on maneuver, speed, and visibility significantly influence combat in this environment. Infantry companies find themselves in jungles when—

- Protecting important economic, political, and psychological assets requires engaging a jungle based enemy force.
- Denying the jungle as an enemy sanctuary or means of cover and concealed movement.
- Using the jungle as a covered and concealed route to approach and engage an enemy force.

Commanders must consider METT-T and civil considerations when planning jungle operations.

Mission

Whether operating semi-independently or in conjunction with a parent battalion, most company operations occur without physically tying into units on the flanks or to the rear due to the nature of the jungle environment. Regardless of employment methodology, the primary issue facing the infantry company commander in the jungle is either finding the enemy or avoiding being found by the enemy until he/she chooses to be found. This applies across a range of military operations. When conducting operations within the jungle,

infantry companies use mission tactics to establish control, remain flexible, and stress security and intelligence.

Because of the limited visibility and restrictive terrain, most jungle fighting takes place at close range. Whether defending or attacking when facing a conventional, insurgent, or asymmetrical foe, finding the enemy is often the task and purpose of the infantry company. Actual movement is slow and units disperse to find the enemy. Mission type orders, immediate action drills, and "marching to the sound of the guns" allow units to rapidly concentrate when contact occurs. Because the jungle limits the use of vehicles and the effectiveness of heavy weapons, the tactical face of the infantry company often comes to resemble that of the enemy—light infantry relying on small arms, mortars, and artillery. The infantry company commander can use rotary-wing CAS to ease fire support limitations and assault support aircraft to add significant mobility.

As in all preparations for environments containing climatic extremes, healthy and fit company personnel provide a baseline for deployment to the jungle—such fitness includes swimming skills. Company commanders should develop jungle and field craft skills within a select cadre of personnel in case preparation time for the company is short. When possible, company commanders seek to acclimate the company to the new environment before committing them to operations. The keys to preparation for the jungle environment remain the same as elsewhere: develop aggressive patrolling and field craft skills; individual and unit discipline; solid SOPs continually adapted and improved upon; and tough, focused leadership.

Enemy

Most potential enemies in the jungle, regardless of organization, purpose, and equipment, consist of light infantry augmented with mortars and, perhaps, artillery. The enemy operating in the jungle faces the same challenges as friendly forces do. They seek to camouflage their activities and use infiltration and breaching operations in the attack. Company commanders can expect that the enemy will maintain the offensive, close with US forces, infiltrate, use periods of limited visibility, and use surprise.

Maintain the Offensive. The enemy recognizes the superiority of the offense as the decisive action on the battlefield, and defends only to gain time or survive to gain an advantage elsewhere.

Close with US Forces. The enemy will exploit close jungle contact due to limited visibility in an attempt to mitigate the effects of US supporting arms. By remaining within hand grenade range of friendly forces, the enemy seeks to create a situation in which the use of supporting arms will likely endanger Marine Corps forces as well.

Infiltrate. Regardless of the enemy's combat power, they will make every effort to use the jungle to their advantage, to include infiltration vice attacking into possible friendly strengths.

Use Periods of Limited Visibility. The enemy uses every advantage offered by the jungle and nature to close with friendly positions and negate the infantry company's strength in supporting arms.

Use Surprise. Enemy forces will use surprise, especially those enemy forces for whom meeting the infantry company on equal terms is not possible. Enemy forces will choose to remain dispersed, mass to conduct raids or ambushes as it suits them, and then disperse again.

Terrain and Weather

The jungle environment contains many different types of landscapes, including dense forest, swamps, savannahs, bamboo thickets, plantations, and other forms of vegetation. Other considerations of the jungle terrain and weather are key terrain, observation, moisture, disease, and navigation.

Traditional definitions of key terrain, such as high ground, do not possess the same importance

in the jungle due to thick vegetation precluding observation and fire. Terrain features that support mobility and resupply, such as roads, rivers and streams, LZs, clear firing positions, and fording sites, are likely key terrain in the jungle fight.

Line of sight and observation distances are minimal in the jungle. Regarding visibility, night in jungle regions is roughly 12 hours long. Coupled with the density of jungle canopies in primary jungle, nights are extremely dark. Company commanders plan to use NVDs to take advantage of this darkness.

Jungle climates are characterized by high temperatures, high humidity, and the potential for heavy rain throughout the year. All three seriously affect company personnel, equipment, weapons, vehicles, maintenance, and tactics. Company commanders must plan methods to keep personnel, weapons, and equipment dry, such as frequent changes in clothing and construction of survivable shelters above ground. Since much of the technology, such as radios and individual laser sights, that increase the lethality of the infantry company are vulnerable to moisture, the company prepares and trains to operate without them.

Jungles contain various wildlife that may be harmful to company personnel; however, the chances of being injured are remote, especially if the company is trained on and remains disciplined about basic field craft and precautions, such as looking before sitting or checking boots before wearing. A larger and more significant menace to the company is insect-carried, waterborne, and fungal diseases as well as the threat of heat-related illnesses. Preventive medicine, field craft discipline, supervised use of prophylaxis, and the availability of potable water demand the attention of company leadership when conducting operations.

Navigating through the jungle environment is challenging even for the most proficient land navigator and frequently requires advanced techniques, such as offsets, terrain association in limited visibility, and “hand-railing” ridgelines and contours. The ability to use electronic assistance, such as GPS, is frequently limited or blocked altogether by the thick jungle canopy that prevents satellite reception.

Troops and Support Available

The primary jungle weapons of the infantry company are their small arms and mortars, since artillery can be difficult to employ effectively in the jungle environment. There may be an insufficient number of clearings available to position artillery units and the jungle canopy provides natural cover for enemy forces, diminishing the effectiveness of artillery fires. Rotary-wing aviation assets can be of great assistance in positioning and resupplying artillery units and can provide observation of fires. However, the jungle can provide covered avenues of approach for the enemy to attack artillery firing positions with small arms.

The company commander considers organizing personnel who normally employ heavy weapons, such as antitank missiles or HMGs (largely ineffective in the close jungle fight), as additional infantry maneuver elements. Since the techniques by which an infantry company organizes itself and conducts movement in the jungle environment can mean the difference between success and failure, commanders must consider the following when planning to use any movement technique:

- Centralized control of direction and goal.
- Ability to rapidly deploy in order to maneuver or reinforce.
- Ability to ease movement by dispersing along different, if parallel routes.
- Maintenance of 360-degree security during movement and at halts.
- Multiple and redundant navigational aids.
- Ability to transition between different formations at danger areas.

Due to limited visibility and tricks of sound in foliage, fire support is difficult to observe and adjust. Depending on the nature of the jungle, the ability to fire through the canopy can make indirect fire support questionable. Company mortars

must possess overhead clearance, in all probable firing directions. Given the propensity of the enemy to attempt to get close enough to friendly positions to render fires ineffective, fires must be accurate and adjusted out and then toward friendly positions. Friendly defensive positions must also be survivable with overhead cover.

The flexibility, responsiveness, loiter time, and ability to more easily identify friendly positions and signals makes rotary-wing aviation an ideal asset to make up for fire support gaps and lack of infantry heavy weapons. These benefits to the company commander's combat power must be weighted against the survivability of these aircraft against enemy small arms; however, the ability for rotary-wing gunships to rapidly identify enemy firing positions and destroy them should not be discounted. In addition to rotary-wing CAS, assault support often plays an integral role in troop lift and resupply, both of which can add significant mobility to friendly forces.

Aerial resupply is the major way of supplying infantry companies and conducting CASEVACs in the jungle environment, even when operating in relative proximity to a battalion. While operating in a light infantry environment in some ways eases the resupply burden, the lack of an extensive all-weather transportation network in many jungle areas makes the logistic mission more difficult and often requires animal or human portage if aerial assets are unavailable or inappropriate to the situation, particularly with communications equipment and weapons.

Most radios, computers, and similar data systems are extremely vulnerable to the moisture prevalent in the jungle environment. Companies must consider ways to protect these assets and be prepared to fight without them. In jungle environments, weapons will quickly rust. In addition, optical, sensor, laser sighting systems, and other weapon augmentation will be vulnerable to the continuous wet environment to which they are exposed. Maintenance on these systems is continuous and the company must be prepared to fight without them.

Time Available

Jungle movement, even if aided by aerial troop lift, is slow. When planning on how to use available time, company commanders must make considerable allowances for movement and security. This may leave less time for planning and preparation.

Civil Considerations

As with other challenging environments, infantry companies are not likely to encounter civilians deep in the primary jungle. They may encounter plantations and agricultural cultivation as they approach population centers. If the population is the company's center of gravity, then the company's operations in the jungle will be a function of the requirement to protect the population by challenging the enemy's ability to move and seek sanctuary in the jungle.

Offense Considerations

While the added mobility and firepower of rotary-wing CAS and assault support can dramatically increase the overall tempo of jungle operations— the requirement to *find* the enemy as a precursor to attacking them remains. When fighting in the jungle, orientation is on the enemy rather than on terrain. Reconnaissance remains paramount. Once the enemy is found, they must be destroyed or they will have to be found again, as discussed in Marshall's *Bird: The Christmastide Battle*:

> *It is a situation that too frequently occurs in the Vietnam fighting. The forward element, losing men and becoming pinned down, compromises the position of all others. What has started out as an attack loses all form and deteriorates into a costly rescue act.*

Reconnaissance

The difficulties of locating the enemy, even a heavily armed conventional enemy, in the jungle should not be underestimated. Even if the general location of the enemy is known, such as a sanctuary in a valley, the nature of jungle terrain

and vegetation foil aerial imagery and direct observation, and can result in the details of the location remaining hidden until contact is made. This inherent camouflage, coupled with an active enemy willing to begin the fight in their security area, makes it clear that company commanders must make every effort to discover the nature and depth of enemy positions prior to the assault.

Meeting Engagements

Even in the major conventional jungle battles of World War II and Vietnam, combat in the jungle environment did not consist of conventional attacks against conventional defenses so much as it consisted of a running series of ambushes, raids, and meeting engagements. Victory in such warfare goes to the side that responds more quickly, more effectively, more aggressively, and more violently to contacts.

Successful attacks in the jungle combine surprise, dispersion, and the ability to rapidly concentrate when contact occurs. Because seeing and engaging the enemy at distances more than 50 meters away are rare, normal tactics, such as emplacing SBF positions or using refined artillery preparations, are ineffective. So, even when reconnaissance reveals the position of the enemy and uncovers some detail about their position, prudence still dictates that the company conduct a dispersed approach march and expect that the opening moments of contact will resemble a meeting engagement. Once contact is made, the company closes from different directions, massing combat power while offering mutual support among the different elements.

Since the jungle is largely a light infantry fight, infantry companies should actively employ the classic tactics available to the rifleman in restricted terrain—infiltration, rear area harassment, ambushes, aggressive use of surprise, and periods of limited visibility. The infantry company, aware of the limits of technology in the jungle environment, uses the technology it has to multiply the effects of, not displace, light infantry tactics

Defense Considerations

The infantry company in the defense uses extensive camouflage of its positions, designs its positions to trap the enemy in prepared fields of fire, and conducts aggressive security operations to disrupt and delay the enemy's attack.

Defensive Maneuver

Since uncertainty and surprise are an attacker's greatest enemies in the jungle, company commanders plan their defenses to increase those factors. Simultaneously, since the jungle limits friendly observation while providing the attacker many different avenues of approach, the infantry company plans for all-around defense, even when defending as part of a larger battalion position. Within the defensive position, routes take advantage of cover and concealment, while resupply, preparations, and other housekeeping chores take place during periods of limited visibility. A small, centrally located reserve enables the company commander to react to penetrations of the defense or counterattack opportunities. The reserve must rehearse day and night movement throughout the defensive position.

Patrolling

In the defense, the infantry company patrols aggressively. While the attacker patrols to find the company's defense, the infantry company in the defense patrols to foil this effort, to disrupt and delay the attacker's movements, and to defeat attempts at infiltration. Company commanders make appropriate use of OP/LPs to augment their patrolling effort and to provide advanced warning of enemy attacks.

Visibility and Camouflage

Regardless of the operational environment, camouflage, deceiving the enemy, and hiding friendly intentions and movements always play an important role in the defense. More than most other places, however, the jungle's requirements for individual position and unit camouflage are paramount. Since most engagements are at close

range and relatively unexpected, good use of camouflage provides the company a critical advantage in the opening moments of contact with the attacker. Bunkers and positions are built low to the ground to make them difficult to see and decrease the ability of the attacker to engage them effectively. Vegetation may be cleared below the waist to provide fields of fire for small arms and principal directions of fire for machine guns, while hiding those measures from a standing enemy.

Patrol Considerations

Expertise in field craft characterizes successful patrolling in the jungle. Most combat in the jungle is short, intense, unexpected, and conducted by opposing bands of soldiers and Marines who actively move through the environment seeking to do harm while avoiding harm. The force that wins the jungle fight possesses the discipline to move without being seen; detect without being detected; react without causing a reaction; and, when necessary, act swiftly and violently at a place of its choosing. Infantry company commanders must prepare their companies to be that force.

Route Planning

In planning patrol routes, company commanders consider the slow and often exhausting demands of jungle movement, the ability to support patrols requiring assistance or extraction, and the ability of the patrols to maintain communication. As in other demanding environments, depending on the enemy situation and company resources, patrols might need to receive the task organization to self-extract. Different kinds of patrol techniques, such as satellite patrols from a central patrol base, offer a classic way of providing patrols with enough combat power and logistical resources to support themselves temporarily, while still being able to take advantage of small unit stealth and concealment.

Communications

Communications is difficult in the jungle environment, where heat, obstructions, and foliage can derail VHF assets and preclude radios that require clear lines of sight. Communication is critical so the patrol can contact supporting arms or conduct a CASEVAC. Company commanders consider measures, such as emplacing retransmission sites and using OP/LPs to assist in communications. Other measures might be maneuver based, such as sending out patrols that are large enough to set up temporary patrol bases. These bases maintain overall communications with the company while sending out smaller satellite patrols that only need to communicate with the patrol base.

APPENDIX B
TRAINING MANAGEMENT

Training consists of learning and, from an instructional perspective, teaching a skill or skills. Use of the word "training" over other terms for learning, generally denotes the involvement of practical experience or application. In the same way doctors learn their profession but train on certain surgical skills, Marines learn many things through the professional military education system, but train on billet, rank, and occupational specialty skills. Within the infantry company, the priority of the company commander is training. Coherently and efficiently determining the training requirements of the company, meeting those requirements through the correct application of time and resources, and maintaining proficiency in those requirements constitutes the practice of training management.

Training management is the methodology by which company commanders use training systems to ensure their companies are mission capable. Done correctly, training management balances time, resources, and mission requirements to produce the most efficient results possible within local limitations. Done improperly, poor training management results in the loss of time, the squandering of resources, and a failure to produce a mission capable infantry company. Proper training management requires energy, focus, and discipline from the company commander who sets the tone for success or failure within the company.

Company commanders must ensure that they do not confuse efforts with results. While the combination of hard work and failure does produce learning among the staff, consistently ineffective training will result in mission failure within the company. Training management methodology allows the company commander to measure the effectiveness of company training and prevent poor training

Training management allows company commanders to confront the fact that there will never be enough time or resources to train to perfection. Training management allows commanders to determine training priorities and find the time and resources to produce a company capable of accomplishing the tasks assigned to it. A company commander facing deployment to a peacekeeping environment would be more likely to spend precious training time and resources on tactical road marches and fixed site security than on attack of a strong point or conducting an explosive breach.

By maintaining a positive training management environment, company commanders create multiechelon training opportunities and develop subordinates. In such an environment, an event as simple as a combat pistol course can encompass opportunities to practice COC procedures, conduct tactical road marches, and meet ancillary training requirements during downtime. Subordinates, by planning, preparing, executing, supervising, and assessing the training event at all levels of responsibility, receive valuable lessons on leadership, resource management, risk mitigation and consequence management, and the training management process.

Marine Corps Training Principles

For a company commander's purposes, MCRP 3-0A, Unit Training Management Guide, lists the following eight training principles:

- Train as you fight.
- Commanders are responsible for training.
- Standards-based training.
- Performance-oriented training.
- Mission-oriented training.
- Train the MAGTF to fight as a combined arms team.

- Train to sustain proficiency.
- Train to challenge.

Train as You Fight

This principle undergirds all others because it is the reason for the existence of the Marine Corps: to fight and win the country's battles. This applies to matching a unit's physical training program with the types of tasks expected of it in combat, such as individuals wearing the actual combat load required of a training skill in combat conditions or ensuring that the combat engineer squad with which a company will deploy is present for company training exercises. Depending on the skill set, the training environment may be an important portion of this principle, though company commanders must understand that the training environment does not necessarily yield good training. Commanders at all levels must also remember that they sometimes constitute the training audience and should not remove themselves from these opportunities.

Commanders are Responsible for Training

Company commanders are ultimately responsible for the training of their companies. This responsibility includes not only the internal training the company commander can directly affect, but also ensuring that the company takes proper advantage of those opportunities afforded by various courses and exercises sponsored by higher and service headquarters. The failure of a company commander to ensure all company personnel qualify on their personal weapons is just as egregious as failing to ensure the company sends the right personnel to foreign language courses or is prepared to take advantage of Service-level exercises.

Standards-Based Training

Training to standards represents one of the largest challenges for company commanders because the demands of time, resources, and understanding tempt many to either ignore standards or modify them inappropriately. Good organizations train to standard, not time. Company commanders must understand the requirements for standards and how standard development occurs. Such understanding not only ensures their companies can actually perform the skills for which they are training, but also allows company commanders to develop their own training standards when necessary, such as training personnel to execute a unique set of ROE in their deployment theater. Training standards provide measurements for performance, foster flexibility by reducing the need for complex orders, and teach Marines to respond to changes in combat reflexively and automatically.

Performance-Oriented Training

Company commanders make certain that quality training is conducted by the company. Performance-oriented training refers to the proper selection and prioritization of training tasks within the company training plan and ensures those tasks are oriented on mission accomplishment. Performance-oriented training refers to conducting quality training that is properly resourced, led, and supervised and that produces the results desired.

Mission-Oriented Training

One of the initial challenges facing the company commander is balancing those requirements demanded for successful mission accomplishment with the time available, the company personnel available, and the many training requirements necessitated by Service order and HHQ policy. Prioritization is not enough. Only through a well-thought-out training management system can company commanders meet external requirements and those internal training requirements necessary for the company to perform the most likely missions required of it. Company commanders understand that their focus is training for the METs directed by their battalion commanders—not trying to execute the exhaustive list of company tasks listed in the Navy/Marine Corps Publication (NAVMC) 3500.44, *Infantry Training and Readiness Manual.*

Train the MAGTF to Fight as a Combined Arms Team

The combined arms team is the cornerstone of the way the Marine Corps fights. At the infantry company, combined arms training focuses on gaining and retaining those skills that integrate lethal and nonlethal fire support, combat logistic support, aviation, and other elements with the company's weapons and maneuver capabilities. Company commanders work diligently to exercise these capabilities whenever possible, develop the skill sets within the company to integrate them, and work directly with the units that provide them.

Train to Sustain Proficiency

Good training management ensures that both learning and retention occur. Company commanders ensure that their training plans provide for remediation and sustainment. A variety of factors, such as stand-alone events, multiechelon training, exercises, or a combination of all of these, may meet remediation and sustainment requirements. While the company headquarters may practice setting up the COC on its own initially, the company commander ensures that the headquarters personnel become and remain proficient in setting up, operating, and redeploying the COC and its systems by requiring a functioning COC at every training event in which the company participates, to include ranges.

Train to Challenge

Good training challenges and inspires company personnel by building upon current skills, increasing the complexity of training problems, and demanding progressively greater levels of performance. This is not a prescription for automatically moving forward on a training schedule regardless of past performance; it is a caution against unnecessary repetition, failure to apply standards as a measurement of success, unimaginative static and lecture-based instruction, and ill-prepared training. Members of any unit instinctively recognize wasted time the same way that they reflexively flourish when challenged to excel.

Training Management Terminology

Not surprisingly, training management possesses its own language and terminology. Important terms and brief definitions are discussed in the following subparagraphs.

Systems Approach to Training

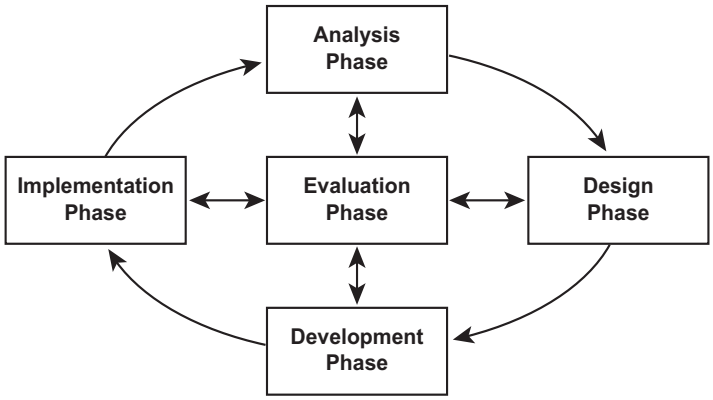
As the name indicates, systems approach to training (SAT) represents an orderly, organized, and coherent process for conducting training (see fig. B-1 on page B-4). The Marine Corps, throughout its training and doctrine publications, uses SAT methodology exclusively. In addition to providing a framework for the company's training, the company commander can use SAT while analyzing and designing training. He/She can determine if the proposed training event honestly nests with the company's training priorities or if it is merely training occurring for the sake of saying it occurred.

Mission-Essential Task

A MET is a specific, collective task at which the infantry company must be proficient to accomplish its combat mission. The company commander should expect guidance from the battalion commander regarding MET priorities based on the battalion commander's analysis of the battalion's operational mission. While there is a list of core METs in the NAVMC 3500.44, company commanders may receive nonstandard METs specific to unique missions the parent battalion might receive.

Mission-Essential Task List

As the name indicates, a list of METs forms a mission-essential task list (METL). Depending on the mission, the commander is assigned METLs by HHQ from three potential sources: the core METL (used to develop the training and readiness); named mission METL (e.g., Operation Enduring Freedom); or an operation METL associated with a major operation or contingency plan. The core METL lists all of the METs that infantry companies must demonstrate to achieve competency in



Analysis Phase

Review Marine Corps doctrine:
- Campaign plans
- Contingency plans
- T/O mission statement for type of units
- Combat plans

Review higher headquarters, supported unit, and supporting unit MFTLs

Determine all specified and implied tasks for all units

Select METL

Design Phase

Relate mission-essential tasks to MPSs from MCCRES volumes

List collective and individual tasks for subordinate units and Marines that support METL tasks

Evaluate/assess unit strengths and deficiencies

Prioritize training of mission-essential tasks

Design appropriate training plans for units and individuals

Ensure that all training tasks/objectives are stated as performance, condition, and standards statements

Development Phase

Develop training materials arid secure support

Train the trainers

Staff rehearsal of training plans and lesson plans

Implementation Phase

Implement training plans

Conduct battle staff exercises, unit exercises, FTXs, drills, and individual training as scheduled

Evaluation Phase

Conduct internal after-action reviews

Review MCCRES/external evaluation feedback

Review training deficiencies of subordinate units and individuals.

Reprioritize tasks in training plans based on assessment of deficiencies.

Additionally, evaluation is conducted concurrently throughout all phases.

Legend:

FTX - field training exercise
MCCRES - Marine Corps Combat Readiness Evaluation System
METL - mission-essential task list
MPS - mission performance standards
T/O - table of organization

Figure B-1. Training Cycle.

their basic combat mission. Lacking any other guidance, company commanders should build their training plans around the core METL. The named mission or operation plan METL provides all of the METs that a unit must demonstrate to achieve competency for a specific mission. A company whose parent battalion is a reaction force for domestic crisis response operations will likely

have training based on named mission or operation plan METL.

Training Plans, Tasks, and Standards

The training plan is the baseline document a company commander creates to outline how the conduct of individual and collective training will occur over time. At a minimum, the training plan provides short- and long-term guidance. Training bulletins, letters of instruction, and other similar local documents provide planning guidance to execute the short- and mid-term training plan.

This document provides immediate and short-term training execution guidance and is usually published weekly or monthly. While the schedule should receive broad dissemination, version control constitutes a continuous challenge. At a minimum, training schedules should provide information on the personnel receiving training; training subjects; instructors; references for instruction; date, time, and place of instruction; uniform and equipment; and any administrative comments.

When determining what training needs to occur, the company commander begins with tasks. In technical terms, a task is measurable work performed in a short period with a fixed beginning and ending that is necessary for unit performance. Training tasks are not training standards. Training tasks determine what training needs to occur; training standards determine what is needed and what level of performance is required to train to those tasks. Tasks with an "E" designator (an E-code) require evaluation, which means that individuals and units must receive this training. It is for this reason that the "E" designator is sometimes confused as an indicator for "essential." For the infantry company, "conduct an attack" is an E-coded event.

Training standards are not training tasks. A training standard relates to a specific task and delineates how and how well that task is performed. Standards may apply to an individual or they may apply to an organization or unit (collective). Regardless of the audience, standards consist of six parts:

- Code: the unique training standard designator.
- Task: the specific task to which a standard refers.
- Condition: in what environment with what equipment or material a task is performed.
- Standard: how well the specific task must be performed.
- Performance steps: the various steps that are taken to perform the task.
- References: publications and other sources of information on the task.

Individual and Collective Training

Training focuses on either the individual or the collective unit. For individuals, training tasks and standards fall into three categories: rank related, billet related, and occupational specialty related. A company commander will personally possess both Service and infantry tasks appropriate to captains and infantry tasks appropriate to an infantry company commander. Similarly, collective tasks and standards fall into two categories: type of unit and size of unit (see table B-1 on page B-6 and fig. B-2 on page B-7). Based on the type of unit, an infantry squad will have specific collective tasks that differentiate it from a combat engineer or machine gun squad. Based on the size of unit, the task "conduct an attack" for the squad will consist of different requirements and performance steps than the same task at the company or battalion level.

Task Chains and Branches

In the same manner that unit missions nest vertically (the main effort) and horizontally (supporting the main effort), determining what unit tasks must occur in order to gain proficiency in collective tasks results in similar nesting. Within SAT terminology, this is chaining and branching as seen in figures B-3, B-4, B-5, and B-6 on

pages B-8 through B-9. Such nesting ensures proficiency across the force. It allows multiechelon training to occur. Additionally, when used during analysis, the company commander can readily create the outline of a training plan, to include time and resources required

Table B-1. List of Company Collective Tasks Example

5002. INDEX OF COMPANY COLLECTIVE EVENTS BY FUNCTIONAL AREA

Event Code	Eval Code	Event	Page
		MANEUVER	
INF-MAN-6101		Process detainees (D)	5-5
INF-MAN-6102		Conduct obstacle breaching (D)	5-6
INF-MAN-6103		Conduct a Passage of Lines (POL) (D)	5-7
INF-MAN-6105		Occupy an assembly area (D)	5-8
INF-MAN-6106		Support by fire/Overwatch (D)	5-9
INF-MAN-6107		React to a meeting engagement (D) 5	5-10
INF-MAN-6108		Conduct a patrol (D)	5-11
INF-MAN-6109		Occupy a patrol base (B)	5-12
INF-MAN-6110		Conduct a relief in place (RIP) (B)	5-13
INF-MAN-6111	YES	Conduct an attack (B)	5-14
INF-MAN-6112		Conduct a night attack (B)	5-15
INF-MAN-6113	YES	Conduct a raid (B)	5-16
INF-MAN-6114	YES	Conduct a motorized attack (B)	5-17
INF-MAN-6115	YES	Conduct tank-infantry integration (B)	5-19
INF-MAN-6116	YES	Conduct a mechanized attack (B)	5-21
INF-MAN-6117	YES	Conduct a helicopter-borne assault (B)	5-22
INF-MAN-6118		Consolidate and reorganize (B)	5-24
INF-MAN-6120		Conduct a movement to contact (B)	5-25
INF-MAN-6132	YES	Conduct a defense (D)	5-26
INF-MAN-6133		Conduct a withdrawal (D)	5-27

INF-MAN-6111: Conduct an attack (B)

SUPPORTED MET(S): 1

EVALUATION-CODED: YES SUSTAINMENT INTERVAL: 12 months

CONDITION: Given a unit, equipment, a mission, and commander's intent.

STANDARD: To accomplish the mission and meet commander's intent.

EVENT COMPONENTS:

1. Conduct planning, inspections, rehearsals, and preparations.
2. Task organize.
3. Employ reconnaissance and surveillance elements to detect enemy forces, positions, movement, and obstacles, and submit reports in a timely manner.
4. Initiate preparatory fires, if applicable.
5. Occupy assembly area.
6. Cross the line of departure at the specified time.
7. Employ appropriate formations and tactics to approach the objective.
8. Bypass or rapidly breach obstacles encountered enroute to the objective.
9. Occupy attack position and conduct final preparations and leader's reconnaissance.
10. Use/coordinate indirect and direct fires to suppress enemy during final maneuver to objective and to gain and maintain fire superiority during the assault.
11. Leaders position themselves to observe and assess fires/suppression, and control timing, distribution, and rates of fire to best integrate fire and maneuver.
12. Position crew-served weapons, maximizing the effectiveness of their fires with respect to the target/ground.
13. Employ supporting arms to engage targets of opportunity.
14. Displace crew-served weapons to provide continuous support.
15. Establish communications/signal plan for initiation, shifting, and ceasing of fires.
16. Treat and evacuate casualties.
17. Handle detainees.
18. Reduce fortified positions and clear trench lines, if applicable.
19. Conduct consolidation or continuation of the attack.
20. Issue fragmentary order, as necessary, to alter the plan of attack.
21. Send and receive required reports.

CHAINED EVENTS:

INF-MAN-5111

RELATED EVENTS:

INF-MAN-6112 INF-MAN-6114 INF-MAN-6115
INF-MAN-7111 INF-MAN-6117 INF-MAN-6118
INF-MAN-6120 INF-MAN-6116

REFERENCES:

1. FMFM 6-4 Marine Rifle Company/Platoon

Figure B-2. Company Collective Task.

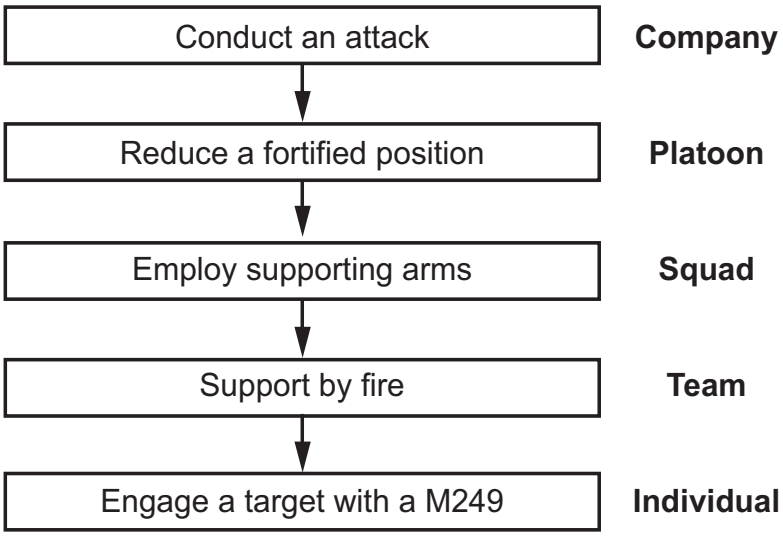


Figure B-3. Tasks in a Chain Sequence.

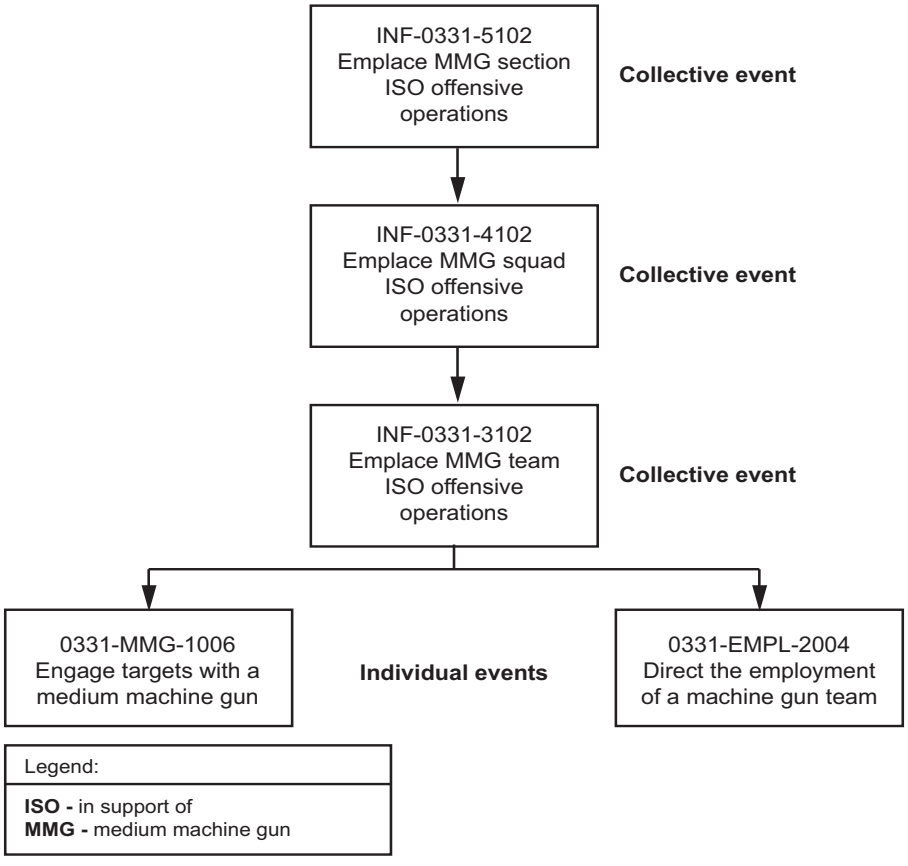


Figure B-4. Tasks in a Chain and Branch Sequence.

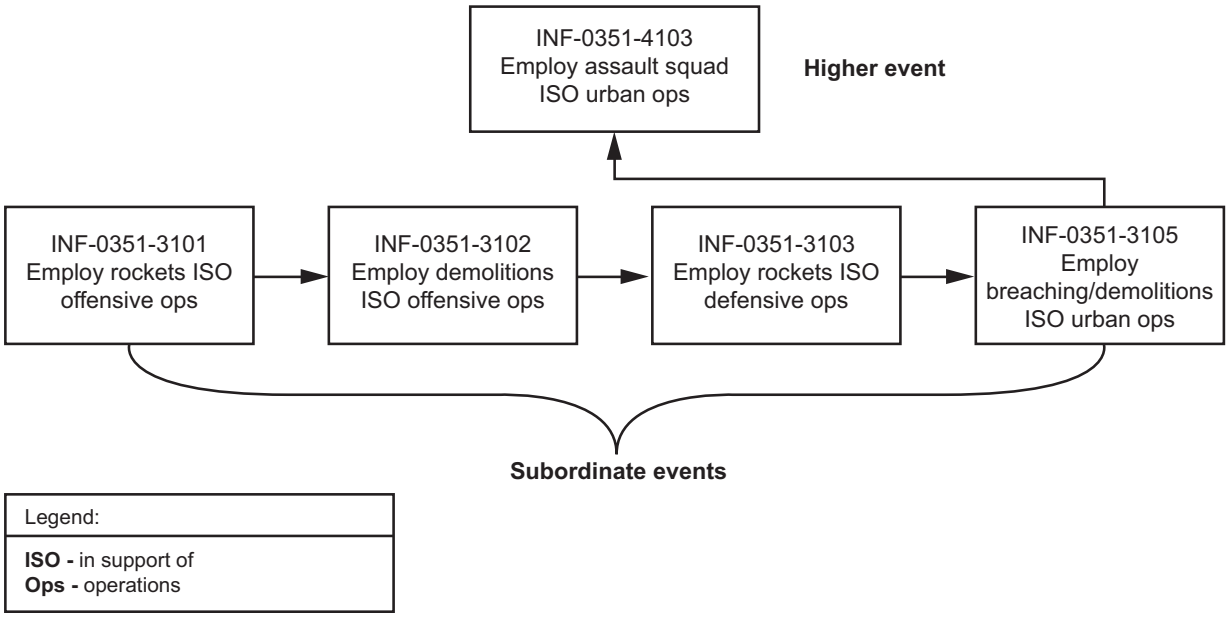


Figure B-5. Tasks in a Branch Sequence.

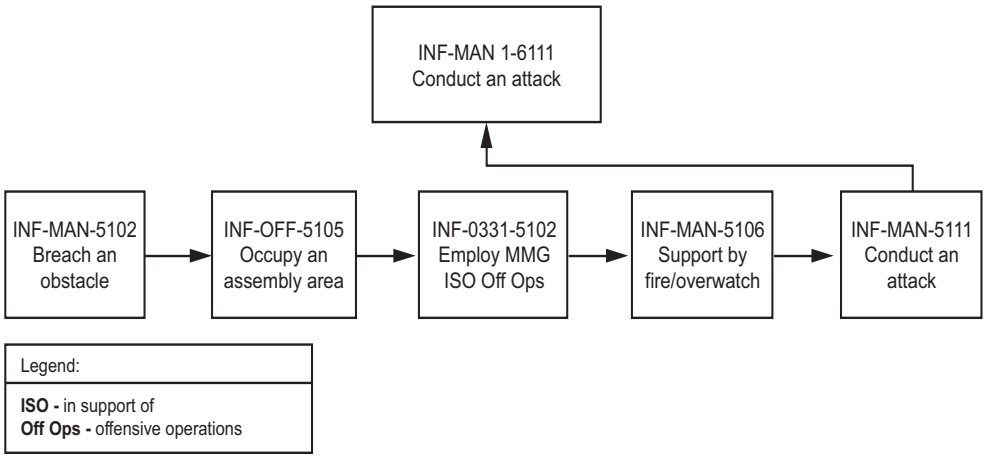


Figure B-6. Figure B-6. Tasks in a Branch Sequence

Roles and Responsibilities

As discussed in chapter 1, members of the company staff and platoon leadership possess important training responsibilities. Primary responsibility for training continues to rest with the commander who oversees success. The company commander—

- Provides clear intent and guidance throughout the training process.
- Clearly identifies training objectives.

- Plans training events and activities.
- Arranges for support.
- Ensures that resources needed to conduct training are available.
- Ensures that training is conducted.
- Supervises and evaluates individual and unit proficiency.
- Supervises and evaluates training sessions, instructional quality, and UTM procedures.

The XO—

- Supervises company preparations to execute training in support of the company commander's plans and goals.
- Serves as the company training officer and supervises all aspects of unit training and UTM in support of the company commander's training plan.

The first sergeant—

- Is the senior tactical and technical advisor to the company commander.
- Ensures the training and mentoring of SNCOs, NCOs, and junior Marines.
- Ensures a quality training environment to include balancing and deconflicting company administrative requirements with company training events as much as possible.
- Ensures training readiness of the company's personnel.
- Is always present at major training events.

The company gunnery sergeant—

- In training, continues role as a tactical and technical advisor to the company and platoon commanders and platoon sergeants.
- Serves as company duty expert on all weapons organic to the company.
- Coordinates operational and support requirements in support of the company's training plan.

The platoon commander—

- Is responsible for the training of the platoon.
- Determines platoon, squad, and individual training requirement in support of the company commander's training plan.

The platoon sergeant—

- In training, continues role as the senior tactical and technical advisor in the platoon.
- Assists the squad leaders in training their squads.
- Assists the platoon commander in identifying platoon training requirements and planning for them.
- Coordinates operational and support requirements in support of the platoon's training.

The squad leader—

- Serves as a primary trainer/instructor within the platoon.
- Is responsible for the actual training of individual and collective events within the squad.

Conducting Unit Training Management

Training management consists of an understanding of training required; a plan to execute and evaluate that training; and a record system that allows the company commander to track what training the company conducted, when it was conducted, who attended, the level of proficiency achieved, and a prediction of sustainment requirements.

Sources of Training Requirements

Company commanders face a large demand on their training time due to multiple training requirements from multiple sources. An awareness of the sources of these training requirements will assist training planners in properly identifying all of them and integrating them into the company

training plan. Training planners should identify the following training requirements:

- Predeployment.
- Formal.
- Ancillary.
- Professional military education.
- Marine Corps common skills.

Reference Tools

In addition to Service doctrine, company commanders and trainers have a large number of references at their disposal to address all of the training requirements demanded of them. Many of the following references also include the required information for the creation of nonstandard and mission-specific training requirements not addressed in the Marine Corps' Training and Readiness Manual system.

Unit Training Management Specific Doctrinal Publications

The MCRP 3-0A, and MCRP 3-0B, How to Conduct Training, are the core doctrinal references on conducting training and training management in the Marine Corps. They are replete with examples and specific systematic instructions.

Training and Readiness Manuals

The Marine Corps develops training and readiness manuals for most skill sets found in the Marine Corps. Just because a particular skill set does not exist in NAVMC 3500.44A does not mean it does not exist elsewhere. An infantry company deploying to conduct crisis response and limited contingency operations might find many appropriate standards within NAVMC 3500.10B, Military Police and Corrections Training and Readiness Manual.

Technical Manuals

Marine Corps technical manuals provide ready sources for performance steps and standards on equipment-related training needs.

Marine Corps Reference Publications

Marine Corps reference publications contain significant practical resources on how to conduct tasks from managing training to conducting mechanical breaching. These publications can serve as ready source material for classes and training, provide insight into performance steps and evaluations, and act as the basis for nonstandard training.

Marine Corps Center for Lessons Learned

The Marine Corps Center for Lessons Learned deploys representatives at all major commands, bases, Service-level training organizations, and forward deployed operating forces. The purpose of the organization is to cull, validate, and publish lessons learned across the six warfighting functions. Their publications and Web site provide a means of maintaining currency of instruction and training for specific theaters.

Other Service Publications

The Marine Corps partners with the United States Army on many publications and documents and actively endorses and uses joint publications. For company commanders operating with other Services or conducting missions not normally associated with the Marine Corps, joint and other Services' publications and manuals prove invaluable. Some such publications are—

- *Army field manuals and tactics, techniques, and procedures.* These publications are similar and often shared with MCWPs and MCRPs.
- *Air Land Sea Application Center publications.* This organization sponsors multi-Service publications, of which many are recognized as Marine Corps Service doctrine.
- *Joint doctrinal publications.* Joint publications are foundational documents for the Services.

Center for Army Lessons Learned publications. The center is similar to the Marine Corps Center for Lessons Learned and provides an extensive list of documents, pamphlets, and Web-based information.

Event Training Development

Developing training, to include a training plan spanning a company's deployment cycle, is based upon the analyze, design, develop, implement, and evaluate training cycle, which was shown in figure B-1. The following subparagraphs address the cycle at the specific training event level. The cycle discussed assumes that a proper, intelligent, and comprehensive training plan already exists.

Analyze

As the long-term training plan becomes mid- and short-term planning, evaluation and assessment of previous training and unit/individual proficiency is a continuous process. In designing the next logical training event in the training plan, company commanders assess the ability of the individual or unit not only to conduct the training, but also to reach proficiency in it (see tables B-2 and B-3). Training planners identify any deficiencies and develop review and refresher training as part of the event. Subordinate commanders receive guidance on preparing for the event, to include prioritization, and specific branched and chained events the platoons will address on their own prior to the training event. Finally, training planners analyze time, ranges, facilities, logistics, and other administrative requirements to ensure proper support.

Develop

After analysis validates the necessity and applicability of a training event, development continues.

Required Resources. Training planners initially determine required resources by reviewing such information as training standards, their conditions, and their performance steps. As they develop the training event, the resource requirements translate into such things as—

- Facilities, such as classrooms, simulators, and maintenance bays.
- Ranges specific to the training, such as those appropriate to the maneuver, ammunition, or weapon systems.
- Equipment, such as electronic media devices and practical application platforms.
- Personnel, including the target audience, special skill instructors, an opposing force, or role players.

Table B-2. Platoon Proficiency Example.

Company B Proficiency Assessment for INF-MAN-6111, Conduct an Attack				
Event	1st Platoon	2nd Platoon	3rd Platoon	Weapoons Platoon
INF-MAN-5111 Conduct an attack (chained event)	P	U	P	U
INF-MAN-5102 Breach an obstacle (branched event)	P	U	P	T
INF-MAN-5106 SBF overwatch (branched event)	U	P	P	T
INF-MAN-5107 React to a meeting engagement (branched event)	P	P	T	U
INF-0331-5102 Employ MMG ISO offensive operations (branched event)	U	U	P	T
INF-MAN-5133 Conduct a withdrawal (branched event)	U	U	U	U

Legend
ISO in support of
MMG medium machine gun
P partially trained
T trained
U untrained

Table B-3. Squad Proficiency Example.

1st Squad, 3d Proficiency in Individual Events for INF-MAN-4111	
Event	Squad Proficiency
0311-PAT-2001 Lead a fire team as an element of a patrol	33%
0300-PAT-1009 Conduct aided observation	44%
0300-PAT-1009 Perform immediate actions	50%
0311-PAT-1002 Perform individual actions	55%
0311-OFF-2007 Lead the breach of an obstacle	22%
0300-WPNS-1002 Engage target with a light antiarmor weapon	44%
0300-DEMO-1004 Probe for a mine	55%
0300-DEMO-1002 Engage targets with an M67 hand grenade	55%
0311-OFF-2001 Control a fire team in the offense	22%
0311-OFF-1001 Perform individual actions in a fire team	55%
0300-M16-1026 Engage targets with an M16 at unknown distances	66%

Limitations. In keeping with the MCPP, training planners identify what must be done (such as training standards) and what cannot be done (such as range restrictions). Failure to identify limitations and conduct mitigation planning has direct and immediate negative impact on training execution.

Administration. Identifying the administrative requirements for a training event and publishing those requirements early allows subordinate elements and members of the training audience to properly prepare in order to gain the most effect from the training time and resources expended. Prepared units understand the following:

- Personal protective equipment and uniform requirements.
- Target audience (the persons or units that will participate).
- Prequalification, refresh, or review requirements prior to the event.
- Document publication, such as an event-specific letter of instruction and updated training schedule with appropriate version controls in place.

Logistics. Logistics will often determine the success or failure of training. Great classes, superior instructors, and an outstanding range may be worthless if ammunition or transport to move the training audience do not arrive. The following are logistic considerations:

- Transport.
- Ammunition.
- Targetry.
- Feed plan.
- Weapons.
- Safety equipment.

Communications. Training planners concern themselves with large amounts of communication requirements—sometimes beyond the ability of the company to resource organically. Planning must meet administrative communication requirements that address the ability to speak to HHQ, range control, and instructor and controller nets. Planning must also address training communication requirements that allow training units to communicate within the context of the training event.

Inspections/Supervision. Rehearsals, the safety plan, and the personnel that will oversee and supervise these functions should be considered early in the planning process because they will drive their own personnel, communications, and logistic requirements that are then integrated into

the overall training plan. Recognizing these needs too late often delays or cancels training.

Design

If the analyze and development phases of training development resemble the problem framing step of the MCPP, then the design phase is COA development. Just like the MCPP process, large portions of training design may leap out immediately during development. A live fire presentation drill automatically generates a requirement for a range; experienced trainers will rapidly recognize what the range will look like, how it will operate, and what local ranges will best serve the training purpose. However, the more complicated the training event, the more important the design phase becomes, especially for teasing out additional resource requirements not immediately identified during the development phase.

Reconnaissance. Training planners and, ideally, those principle persons tasked with executing and controlling the training should endeavor to visit the ranges, facilities, and training areas available to determine how best to proceed and use the resources available.

Lanes. Planners should consider the following questions regarding lanes:

- Will the training event require individual or unit lanes?
- How will the lanes be phased and timed?
- Can the lanes run simultaneously or must skills develop sequentially?
- What physical lay down is necessary and how much terrain is required overall?
- How will lanes be controlled and movement between lanes monitored and tracked (see fig. B-7 and figs. B-8 through B-11 on pages B-15 and B-16)?

Downtime Plan. Every training event has down time. Training planners must determine the down time acceptable for rest, organization, and efficiency, and the time that should become part of the training plan.

After Action Plan. Unorganized after action events can quickly become aimless and general and are usually of little value. Such an event is unacceptable, especially during UTM when the effectiveness of any given training must be measured in order to determine whether the training plan can continue or should be modified.

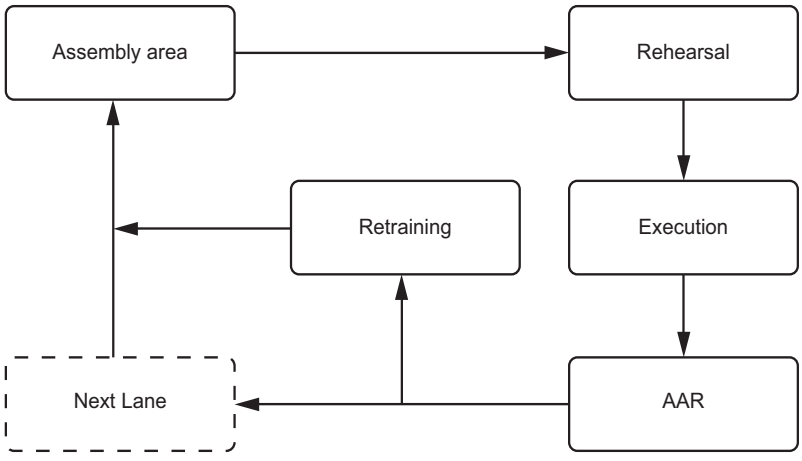


Figure B-7. Basic Lane Layout.

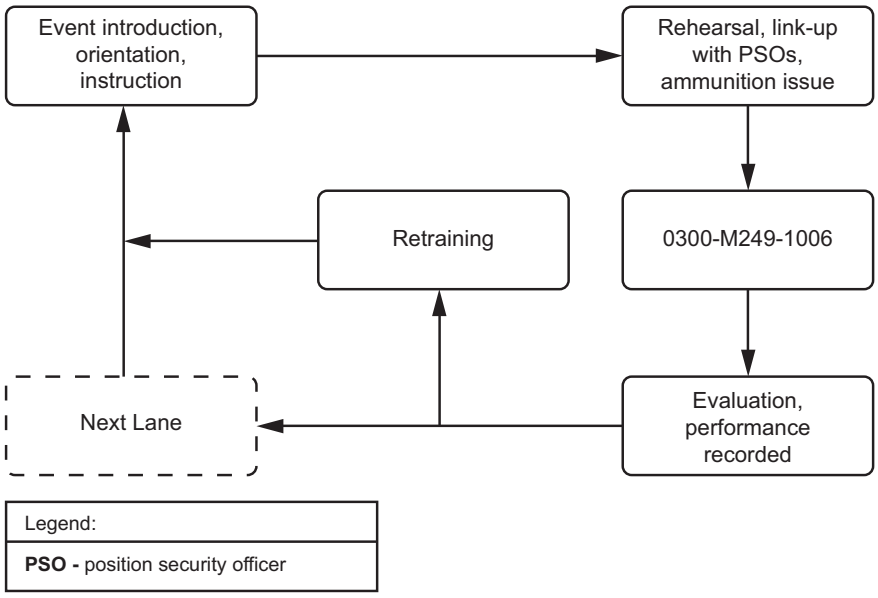


Figure B-8. Single Event Lane.

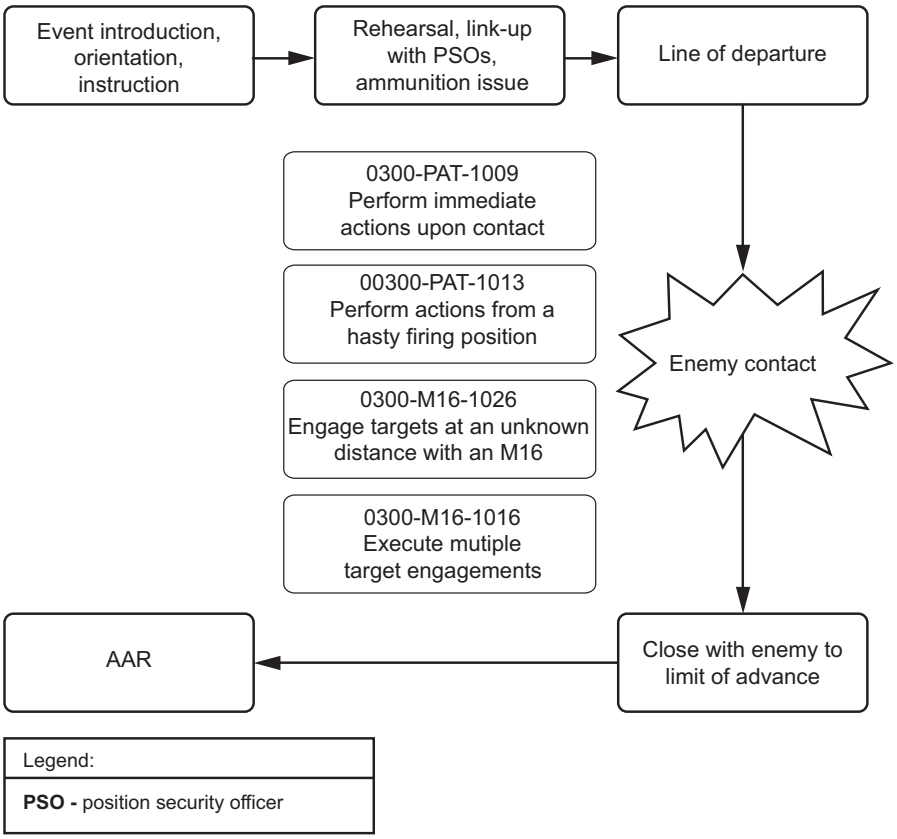


Figure B-9. Multiple Event Lane.

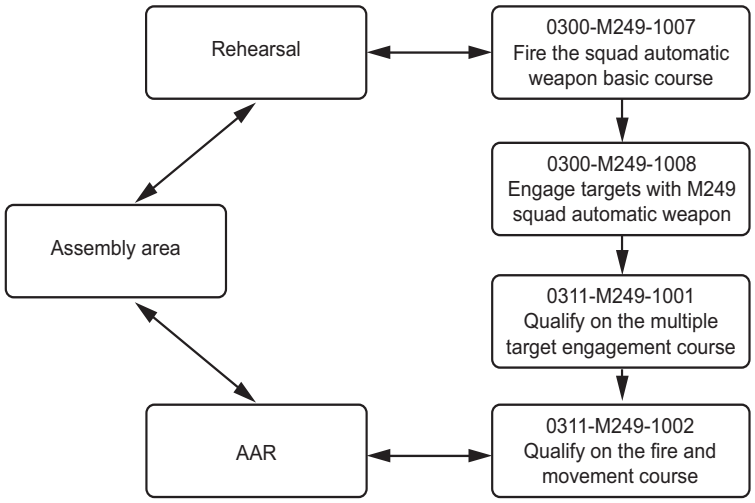


Figure B-10. Figure B-10. Multiple Firing Points.

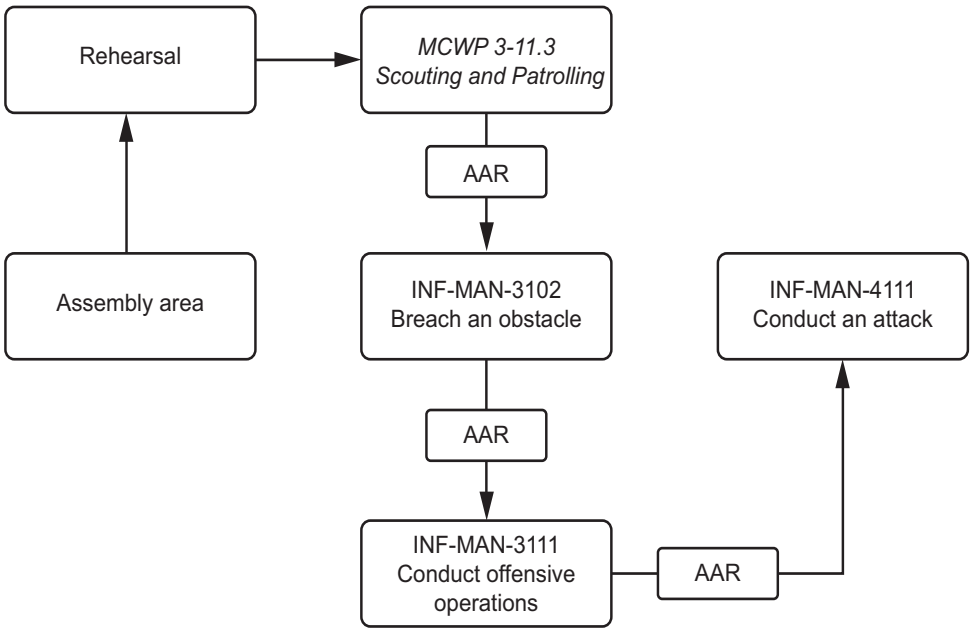


Figure B-11. Collective Event.

Throughout the training event, effectiveness and proficiency is collected and, upon its completion, a guided AAR is conducted.

Performance Evaluation Checklist. Performance evaluation checklists (PECLs) provide evaluators and controllers with a performance step checklist with which to determine the proficiency of a unit or individual at a given task (see table B-4 and table B-5 on page B-19). Training planners normally find PECLs within the training and readiness publications or create them from appropriate references or subject matter experts. If the analysis and development has failed to locate appropriate

Table B-4. Single Standard Performance Evaluation Checklist Example.

INF-0331-4100: Deliver machine gun overhead fire		
Condition: A machine gun unit is supporting offensive operations. The unit has been tasked to deliver overhead fire. The machine guns are mounted on tripods.		
Standard: Per the references.		
Reference: MCWP 3-15.1, Machine Guns and Machine Gun Gunnery	GO	NO GO
Component Events:	GO	NO GO
1. Identify target(s) and estimate range to within 50 meters.	GO	NO GO
2. Select a safety limit after the exact positions of the guns have been established and identify a readily identifiable terrain feature that corresponds to the safety limit.	GO	NO GO
3. Prepare a sketch of the overhead fire situation	GO	NO GO
4. Deliver effective overhead fire (between ranges of 350 and 850 meters only) until friendly troops reach the safety limit on the ground, ceasing or shifting fires as directed.	GO	NO GO
5. Employ overhead fire in a safe and controlled manner, using depression stops, observing the safety limit, and not firing if the gun-target range exceeds the maximum effective range of the gun	GO	NO GO
	Mastered	Not Mastered

existing PECLs, then local creation is necessary. Regardless of origin, personnel selected to assess and evaluate the training must receive instruction on what they are assessing, how they are assessing it, and the function of the PECL in the process.

Remediation Plan. For a variety of reasons, from logistical limitations resulting in delayed or cancelled training to lack of unit or individual proficiency, it is likely that some remediation must occur. During the development phase, planners determine the amount of remediation required and the resources available. The remediation plan is formalized during the design phase.

Conduct Operational Risk Management. Training planners conduct ORM according to MCO 3500.27B, Operational Risk Management (ORM), and develop/implement appropriate risk controls within training design. Range and personnel safety briefs, instructions to key personnel, and other similar actions fall within ORM.

Implement

Planning is continuous and the actual implementation of training will contain some planning and briefing requirements, such as training and briefing of key personnel and occupation of the training area. The following are roles and responsibilities of key personnel during implementation:

- *Officers in charge.* Depending on the size and nature of the event, officers in charge may include NCOs through field grade officers who are responsible for the overall safe and efficient conduct of the training event.
- *Range safety officer.* Local range regulations and MCO 3570.1B w/Ch 1, Range Safety, determine which personnel may serve as range safety officers; regardless, these safety officers are nontraining persons directly responsible for the safe conduct of the training event.
- *Position safety officer.* Position safety officers may also serve as controllers and assessors. They are also responsible for the safe conduct of training within their specific position, such as an SBF position or a portion of a lane.
- *Ammunition NCO.* Normally NCOs, these personnel do not participate in training. Instead, they ensure the safe storage, issue, and deissue of ammunition and the proper separation of ammunition, dunnage, and trash.

- Instructors/trainers. These personnel may also serve as position safety officers. They are the primary agents who conduct the training for units or individuals.
- Controllers. Controllers do not necessarily train or instruct, but serve during larger unit exercises to help facilitate the training and conduct of the exercise. Quite often, they execute position safety officer functions as part of their duties.
- Demonstrators. As required, demonstrators do not participate in training, but work with instructors and trainers to demonstrate proper techniques prior to the beginning of a particular training event; they may also serve other training functions as required.

Even with a reconnaissance, the occupation of a range or training area leads to some modification on the ground. For those training events conducted in the field or on a range, planners must consider the following aspects of the range:

- Staging area: an area in which the training audience or units can assemble and conduct basic internal procedures without disrupting or being disrupted by training.
- Ammunition staging area: a physical area that ensures proper ammunition control and separation. It is often reinforced with some sort of temporary barrier, such as fencing or concertina wire.
- Targetry: may consist of actual targets, but often refers to effects, simulators, and other such devices that facilitate training. Such devices must be controlled, placed, and maintained throughout the training event.

Physical control measures: those methods, barriers, and instructions that ensure the smooth flow of training while preventing disruption by personnel or units inadvertently moving through or occupying an area.

Table B-5. Event Perfomance Evaluation Checklist Example.

Event: Conduct combat tracking		
Condition: Given a unit wearing fighting loads, a mission, and an area containing tracks		
Standard: Gain contact with the enemy or gather actionable information, mitigate enemy countermeasures, mitigate the enemy's ability to track or obtain actionable information, and satisfy the commander's intent.		
References: 1. Combat Hunter Program of Instruction CID M10KZ1M 2. NAVMC 3500.44, Infantry Training and Readiness Manual 3. MCWL 3-35.3X, Combat Hunter; Observe, Move and Act 4. Randy Merriman (Combat Tracker)		
Performance Steps:		
1. Identify the three dynamics of a footprint	GO	NO GO
a. Primary impact point	GO	NO GO
b. Foot roll	GO	NO GO
c. Terminal point	GO	NO GO
2. Interpret action indicators	GO	NO GO
3. Determine the number of quarry	GO	NO GO
4. Apply the ten rules of tracking	GO	NO GO
a. Tracker sets the pace	GO	NO GO
b. Record the ICP	GO	NO GO
c. Always know where you are	GO	NO GO
d. Always confirm on aerial spoor	GO	NO GO
e. Maintain visual contact of all team members	GO	NO GO
f. Never force a track	GO	NO GO
g. Never walk on top of ground spoor	GO	NO GO
h. Never overshoot the last known spoor	GO	NO GO
i. Get into the mind of your quarry	GO	NO GO
j. Correctly identify the tracks you wish to follow	GO	NO GO
5. Identify observable indicators	GO	NO GO
6. Identify unobservable indicators	GO	NO GO
7. Demonstrate proficiency in all assigned positions of a tracking team	GO	NO GO
8. Apply the correct tracking team formations under current conditions and terrain	GO	NO GO
9. Conduct lost spoor procedures or shortcuts	GO	NO GO
10. Correctly identify antitracking techniques	GO	NO GO
11. React to enemy actions with proper encounter actions	GO	NO GO
12. Correctly submit a LNDATA report	GO	NO GO
a. Location	GO	NO GO
b. Number of quarry	GO	NO GO
c. Direction of travel (quarry)	GO	NO GO
d. Always confirm on aerial spoor	GO	NO GO
e. Age of spoor	GO	NO GO
f. Type of print	GO	NO GO
g. Amplifying remarks	GO	NO GO
13. Use proper hand and arm signals	GO	NO GO
14. Track the quarry	GO	NO GO
15. Employ antitracking techniques against the enemy	GO	NO GO
	MASTERED	NO MASTERED

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APPENDIX C
FOREIGN WEAPONS CAPABILITIES

This appendix addresses the general characteristics and capabilities of the most common weapon variants found among enemy forces. This appendix is not all inclusive, nor does it address the NATO or US weapons and their variants that enemy forces may also carry.

AK Series Weapons

Figure C-1. AK-47.

Figure C-2. AK-74.

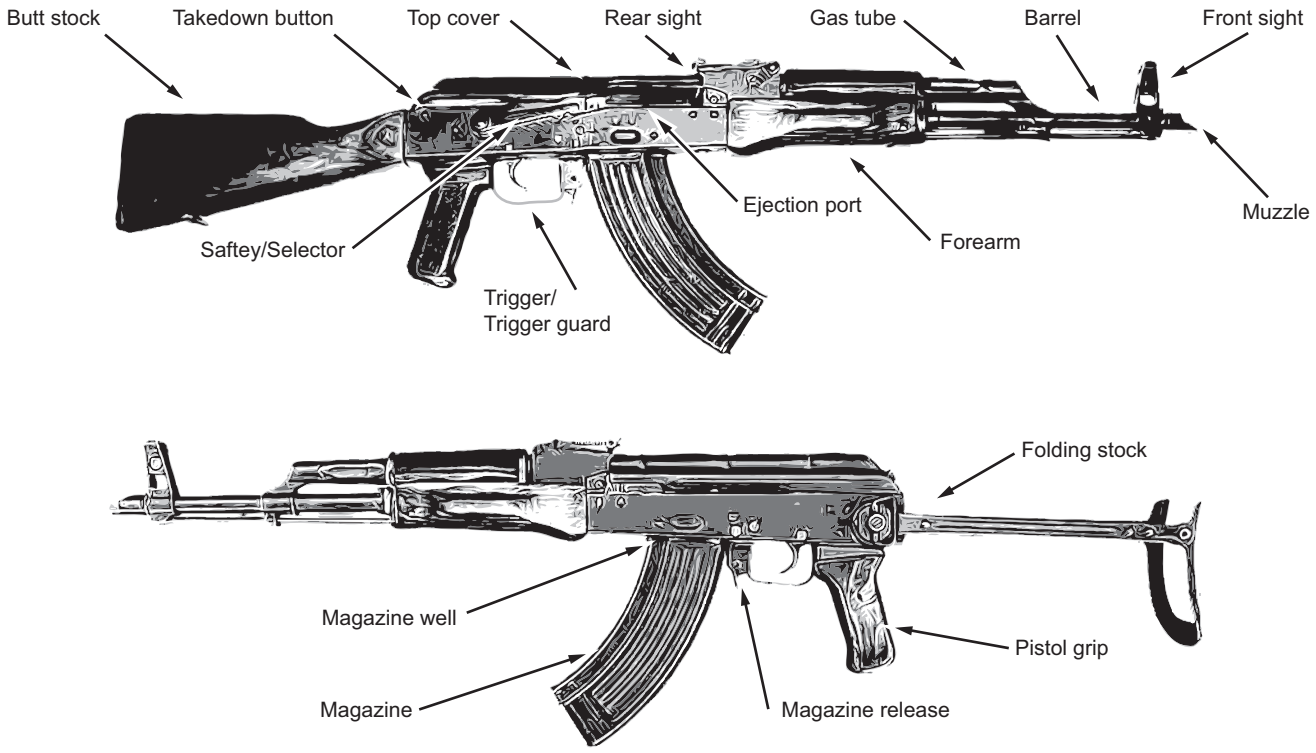

Figure C-3. AKM.

Caliber: 7.62 x 39 mm (AK-47/AKM); 5.45 x 39 mm (AK-74)

Action: gas operated, rotating bolt with 2 lugs Overall length: 870 mm

Barrel length: 415 mm Weight: 3.14 kg empty

Magazine capacity: 30 rounds (40-round box magazines and 75-round drums) Maximum range: 800 m (AK-47); 1,000 m (AKM/AK-74)

Maximum effective range: 300 m (AK-47/AKM); 500 m (AK-74) Cyclic rate of fire: 600 rds/min

Practical rate of fire: 90–100 rds/min

Muzzle velocity: 2,345 fps (AK-47/AKM); 2,953 fps (AK-74) Stock: fixed or collapsible

Mikhail Kalashnikov designed the AK-47 (Avtomat Kalashnikova model 1947) assault rifle in 1947. The Russian manufacturer Izhevsk Machine-Building Plant produced the weapon, which saw use in many Eastern bloc nations during the Cold War. Compared to the rifles used in World War II, the AK-47 was lighter and more compact, with a shorter range, a smaller 7.62 x 39 mm cartridge, and capable of selective fire, making it one of the first assault rifles. It was also produced in greater numbers than any other assault rifle in the 20th century, with more than 100 million manufactured.

AKS-74U

Figure C-4. AKS-74U.

Caliber: 5.45 x 39 mm or 7.62 x 39 mm Action: gas operated, rotating bolt with 2 lugs

Overall length: 735 mm (490 mm with folded buttstock) Barrel length: 210 mm

Magazine capacity: 30 rounds standard Weight empty: 2.71 kg

Effective range: about 200 meters Cyclic rate of fire: 650–735 rds/min

The AKS-74U is a modified version of the AK-74 assault rifle with a much shorter barrel (210 mm versus 415 mm) and a conical flash suppressor instead of a muzzle brake. Like the AKS-74, it has a folding metal stock. The overall length of the submachine gun is only 490 mm with stock folded or 735 mm with it extended. The rear sight is a flip-type U-notch; the front sight is a cylindrical post. The Soviets designed the AKS-74U as a weapon short enough to be handled easily when the crew enters and exits vehicles. The device at the end of the barrel functions as an expansion chamber to bleed off gases, which would otherwise cause excessive recoil. With a loaded weight of 3.106 kg, the AK-74U is considerably lighter than the AK-74 and has a somewhat higher rate of fire.

SVD Sniper Rifle

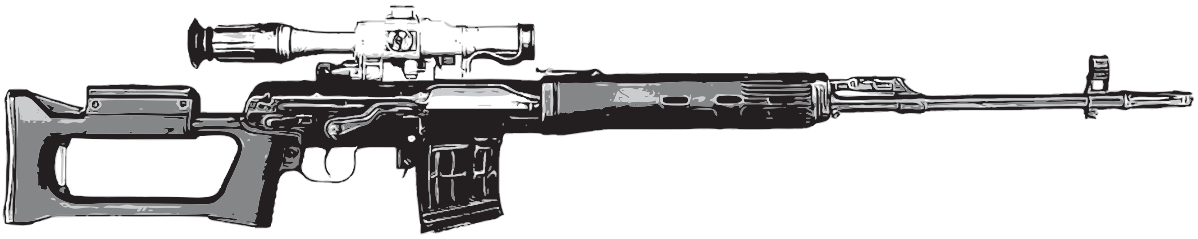

Figure C-5. Figure C-5. SVD Sniper Rifle.

Caliber: Russian 7.62 x 54 mm rimmed

Operation: gas operated, short stroke, rotating bolt; semiautomatic

Capacity: 10-round detachable box magazine

Weight: 4.31 kg empty with telescope

Length: 1,225 mm

Barrel length: 620 mm

Maximum range: iron sights 1,200 m; scope 1,300 m

Maximum effective range: 1,300 m

Maximum rate of fire: 30 rds/min

Aimed rate of fire: 3–5 rds/min

Muzzle velocity: 2,526 fps

Scope type: PSO-1 with illuminated reticle

Accuracy: less than 2 minutes of arc at 600 m

Stock: fixed

Evgeniy Fedorovich Dragunov developed the SVD in 1965. It entered service in 1967 and was the standard Soviet sniper weapon. One squad in each motorized rifle platoon has an SVD; selected riflemen receive regular, centralized sniper training on it. Largely due to its open buttstock, the SVD is lighter than older sniper rifles. The 4x PSO-1 optical sight has a 6-degree field of view. It contains an integral, infrared detection aid and an illuminated rangefinder reticle. The SVD is effective in daylight against point targets or at night against active infrared emitters, such as night driving aids and weapon sights.

RPK Light Machine Gun

Figure C-6. Figure C-6. RPK Light Machine Gun.

Caliber: 7.62 x 39 mm

Action: gas operated, rotating bolt with 2 lugs

Weight: 5 kg

Overall length: 1,040 mm

Barrel length: 591 mm

Magazine capacity: box magazine 30 or 40 rounds, drum 75 rounds

Maximum range: 1,000 m

Maximum effective range: 800 m

Cyclic rate of fire: 600 rds/min

Muzzle velocity: 2,444 fps

Practical rate of fire: 100–140 rds/min

Stock: fixed

The RPK is a variant of the AKM assault rifle. It has a longer, heavier barrel (591 mm versus 415 mm); a stamped metal bipod; and a heavier type of fixed, wooden buttstock. The modified receiver of the RPK can accommodate its larger diameter barrel. The RPK normally feeds ammunition from either a 40-round curved box magazine or a 75-round spring-loaded drum magazine; however, it can also use the 30-round curved box magazine of the AKM, if necessary. It has a chrome-plated barrel, chamber, and gas piston. It also has a cyclic rate reducer built into the trigger mechanism. Because the RPK fires from a closed bolt, it tends to "cook off" its cartridges after prolonged firing. Since the barrel cannot be changed, the sustained rate of fire must not exceed about 80 rounds per minute.

RPD Light Machine Gun

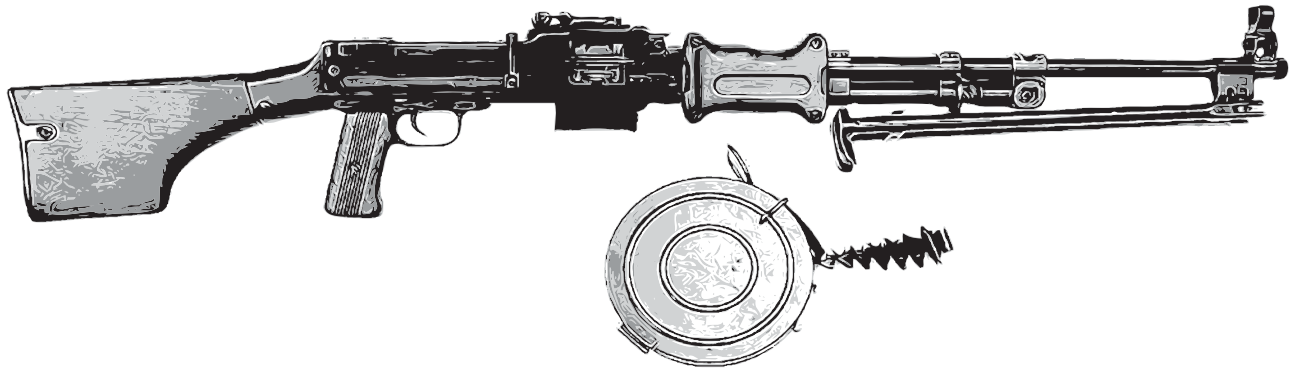

Figure C-7. RPD Light Machine Gun.

Caliber: 7.62 x 39 mm

Action: gas operated with locking wings

Weight: 6.6 kg

Overall length: 1,037 mm

Barrel length: 520 mm

Magazine capacity: drum 100 rounds

Maximum range: 1,200 m

Maximum effective range: 800 m

Cyclic rate of fire: 650 rds/min

Sustained rate of fire: 150 rds/min Muzzle velocity: 2,297 fps

Stock: fixed

PKM Machine Gun

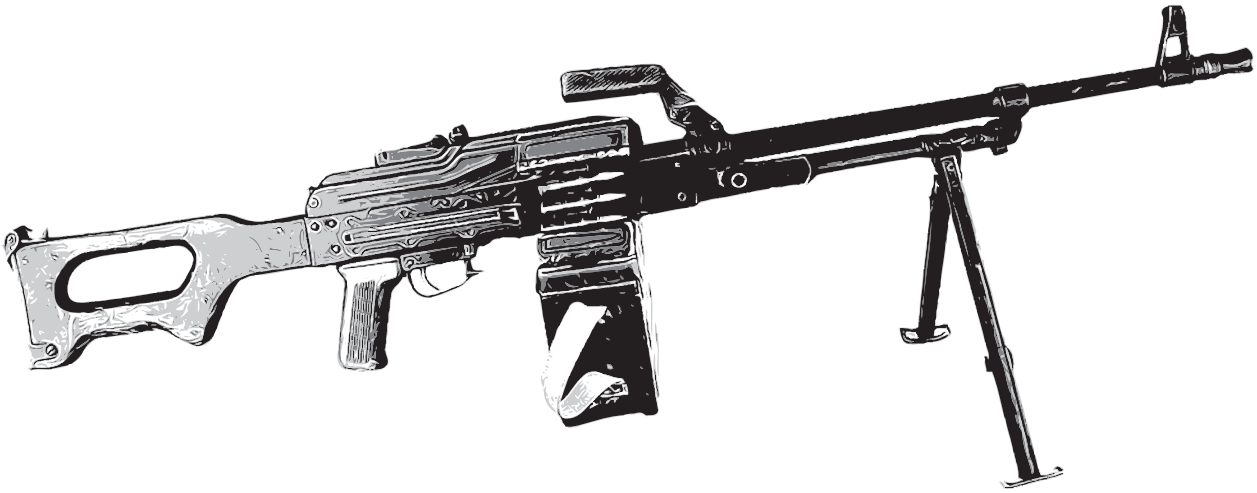

Figure C-8. PKM Machine Gun.

Caliber: 7.62 x 54 mm rimmed

Action: gas operated, rotating bolt with 2 lugs

Weight: 8.99 kg on bipod (PK); 16.48 kg on tripod (PKM)

Overall length: 1,173 mm

Barrel length: 658 mm

Feeding: belt 100-, 200-, or 250-round drums

Maximum range: 1,500 m

Maximum effective range: 1,200 m

Cyclic rate of fire: 700–850 rds/min

Sustained rate of fire: 150 rds/min

Stock: fixed

The 7.62-mm general purpose machine gun Pulemyot Kalashnikov is a gasoperated, belt-fed, sustained-fire weapon. The Soviets based its design on the Kalashnikov assault rifle. Notable differences from the assault rifle are the gas cylinder below the barrel and the hollow-frame stock resembling that of the SVD sniper rifle. The PKM fires 7.62 x 54R rimmed cartridges, using a metal nondisintegrating belt. The PKM is an improved, lighter version (8.4 kg) of the PK, using stamped metal components instead of machined metal. An assault magazine attached to the rails under the receiver can carry 100 cartridges. Either 200or 250-round belt boxes can also feed the PKM. The PKM, when tripod-mounted, is designated PKMS.

Grenades and Launchers

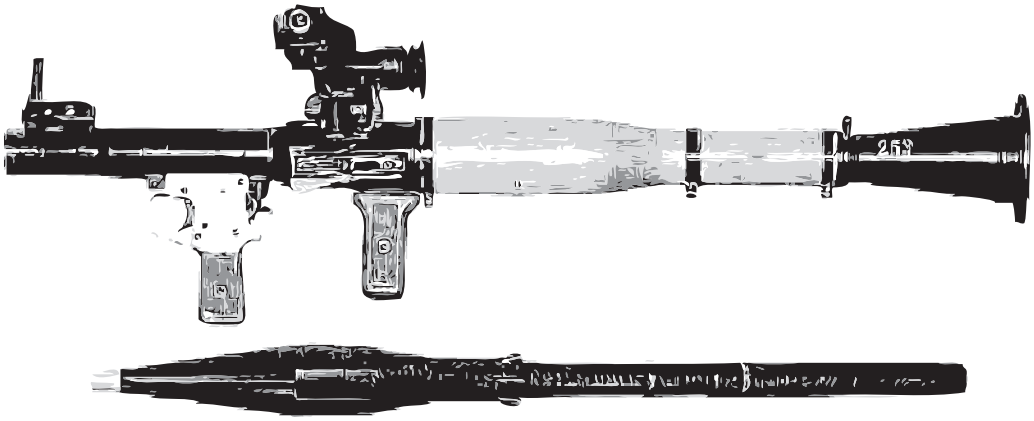

Figure C-9. RPG-7V with PG-7 Grenade and Booster Element.

Figure C-10. Figure C-10. PG-7VL Heat Grenade.

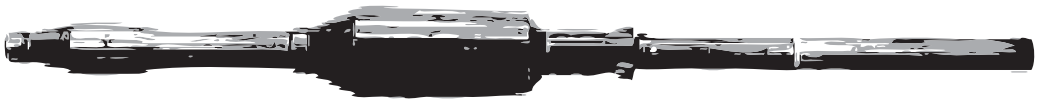

Figure C-11. Figure C-11. PG-7VR (Antiactive Armor).

Figure C-12. Figure C-12. TBG-7V Thermobaric.

Figure C-13. Figure C-13. OG-7V Fragmentation Grenade.

The following characteristics refer to figures C-9 through C-13:

Caliber: 40-mm launcher; 40-, 70-, and 105-mm warheads, depending on the grenade model

Type: recoilless launch plus rocket booster

Weight: 6.3 kg unloaded, with PGO-7 telescope sight Overall length: 650 mm

Maximum range: 950 m (high explosive antitank [HEAT] round self-destructs at approximately 200 m)

Maximum effective range: 200–500 m, depending on grenade type Arming distance: 3–15 m

Armor penetration: 250 to 800 mm rolled homogenous armor (HEAT round) Effective casualty radius: 15 m (antipersonnel round)

Adopted in 1961, the RPG-7 is a reloadable, shoulder-fired, muzzle-loaded, recoilless antitank and antipersonnel rocket propelled grenade launcher. It launches fin-stabilized, oversized rocket-assisted HEAT grenades (85 mm in the PG-7 version, 70 mm in the PG-7M) from a smooth bore 40-mm tube. The launcher with optical sights weighs 6.9 kilograms. Among the production grenades are the PG-7V, PG-7VL, PG-7VR, OG-7, and TBG-7V. The PG-7V

rocket has a penetration capability of 330 mm of steel armor. The PG-7VL antitank grenade can penetrate up to 600 mm of rolled homogeneous steel. The PG- 7VR is a tandem warhead designed to penetrate explosive reactive armor and the armor underneath. The OG-7 and OG-7M are high-explosive antipersonnel grenades. The OG-7M is a 2-kg, 40-mm fragmentation warhead that is effective at a range of 350 m with a kill radius of 15 m. The TBG-7V thermobaric round uses a 4.5-kg 105-mm warhead effective at a range of 200 m (maximum 700 m). The kill radius of this rocket is 10 m.

Mortar

Figure C-14. Figure C-14. 82-mm Mortar.

Caliber: 82 mm

Weight: 92.3 pounds

Muzzle velocity: depends on type of round Maximum range: 3,000 m

Minimum range: 82 m

Sustained rate of fire: 25 rds/min

The 82-mm mortar fires two types of high explosive rounds, both of which produce an average of 305 lethal fragments. The first has six stabilizing fins with attached “boat type” powder increments. The second has ten stabilizing fins and uses three “ring type” powder increments. The 82-mm smoke round also produces lethal fragments (about 210) and a smoke cloud 20–25 yards wide and 15–25 yards high.

Pistols

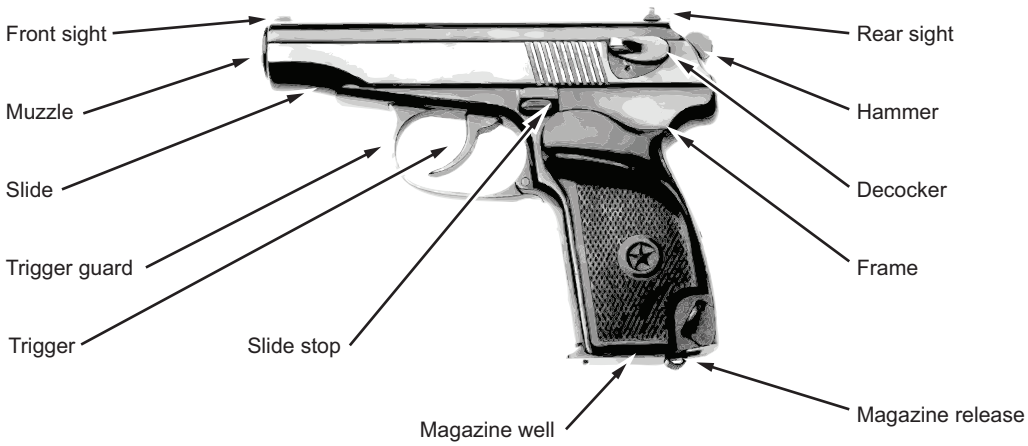

Figure C-15. Figure C-15. Makarov Pistol.

Caliber: 9 x 18 mm

Type: double action, semiautomatic, blowback Overall length: 161 mm

Weight unloaded: 730 grams Barrel length: 93.5 mm Magazine capacity: 8 rounds

The Makarov was the result of a competition held to design a replacement for the aging Tokarev TT-33 semiautomatic pistol. The TT had been loosely derived from the popular M1911 and was, by 1945, felt to be too large, heavy, and unreliable for a general service pistol. Rather than building a gun around an existing cartridge, Nikolai Makarov designed a new round, the 9 x 18 mm PM based on the popular Browning .380 Automatic Colt Pistol cartridge. In the interests of simplicity and economy, the Makarov pistol was to be of straight blowback operation and the 9 x 18 mm round was found to be the most powerful that could be fired safely from such a design. Although the given dimension was 9 mm, the bullet was actually 9.3 mm in diameter—shorter, wider, and, therefore, incompatible with pistols chambered for the popular 9-mm Luger/Parabellum round. This meant that Soviet ammunition was unusable in NATO firearms, so, in a conflict, NATO forces would not be able to gather ammunition from fallen Soviet soldiers or Soviet stockpiles.

Figure C-16. Figure C-16. Glock Pistol.

Caliber: 9 x 19 mm parabellum

Type: double action, semiautomatic, locked breech

Overall length: 186 mm

Weight unloaded: 625 grams

Barrel length: 114 mm

Magazine capacity: 17 rounds

The Glock 17 was the first pistol designed and manufactured by the Austrian company Glock. It is a locked breech, short recoil 9-mm Luger semiautomatic pistol with a standard magazine capacity of 17 rounds of ammunition. It uses a modified Browning barrel locking system. The G17 showed up in the early 1980s for the Austrian Army weapons trials. It entered service under the designation P80. The pistol does not have any external safety lever, hammer, decocker, or any other operation controls that must be deactivated prior to making the weapon ready to shoot. By merely pulling the trigger to the rear, the three independent safeties (trigger safety, firing pin safety, and drop safety) are automatically deactivated and reactivated when the trigger is released.

APPENDIX D
TACTICAL TASKS

Enemy-Oriented Tactical Tasks

Ambush

A surprise attack by fire from concealed positions on a moving or temporarily halted enemy.

Attack by Fire

Fires (direct and indirect) to destroy the enemy from a distance, normally used when the mission does not require or support occupation of the objective.

> Note: This task is usually given to the supporting effort during offensive operations and as a counter-attack option for the reserve during defensive operations. The assigning commander must specify the intent, such as destroy, fix, neutralize, or suppress.

Block

To deny the enemy access to a given area or to prevent enemy advance in a given direction or on an avenue of approach. It may be for a specified time.

> Note: Units assigned this task may have to retain terrain.

Breach

To break through or secure a passage through a natural or enemy obstacle.

Bypass

To maneuver around an obstacle, position, or enemy force to maintain the momentum of advance. Previously unreported obstacles and bypassed enemy forces are reported to HHQ.

Canalize

To restrict operations to a narrow zone by the use of existing or reinforcing obstacles or by fires or bombing.

Contain

To stop, hold, or surround enemy forces or to keep the enemy in a given area and prevent its withdrawing any part of the forces for use elsewhere.

Defeat

To disrupt or nullify the enemy commander's plan and overcome his/her will to fight, thus making him/her unwilling or unable to pursue his/her-adopted COA and yield to the friendly commander's will.

Destroy

To physically render an enemy force combat ineffective unless reconstituted.

Disrupt

To integrate fires and obstacles to break apart an enemy's formation and tempo, interrupt its timetable, or cause premature commitment or the piecemealing of its forces.

Exploit

To take full advantage of success in battle and follow up initial gains, offensive actions that usually follow a successful attack and are designed to disorganize the enemy in depth.

Feint

An offensive action involving contact with the enemy to deceive it about the location or time of the actual main offensive action.

Fix

To prevent the enemy from moving any part of its forces, either from a specific location or for a specific period of time, by holding or surrounding them to prevent their withdrawal for use elsewhere.

Interdict

An action to divert, disrupt, delay, or destroy the enemy's surface military potential before it can be used effectively against friendly forces.

Neutralize

To render the enemy or its resources ineffective or unusable.

Penetrate

To break through the enemy's defense and disrupt its defensive system.

Reconnoiter

To obtain, by visual observation or other methods, information about the activities and resources of an enemy or potential enemy.

Rupture

To create a gap in enemy defensive positions quickly.

Support by Fire

A tactical mission in which a force engages the enemy by direct fire to support a maneuvering force using overwatch or by establishing a base of fire. The supporting force does not capture enemy forces or terrain.

Friendly Force-Oriented Tactical Tasks

Breach

To break through or secure a passage through a natural or friendly obstacle.

Cover

Offensive or defensive actions to protect the force.

Disengage

To break contact with the enemy and move to a point where the enemy cannot observe or engage the unit by direct fire.

Displace

To leave one position and take another. Forces may be displaced laterally to concentrate combat power in threatened areas.

Exfiltrate

The removal of personnel or units from areas under enemy control.

Follow

The order of movement of combat, CS, and CSS forces in a given combat operation.

Guard

To protect the main force by fighting to gain time while also observing and reporting information.

Protect

To prevent observation, engagement, or interference with a force or location.

Screen

To observe, identify, and report information and only fight in self-protection.

Terrain-Oriented Tactical Tasks

Clear

To remove enemy forces and eliminate organized resistance in an assigned zone, area, or location by destroying, capturing, or forcing the withdrawal of enemy forces that could interfere with the unit's ability to accomplish its mission.

Control

To maintain physical influence by occupation or range of weapon systems over the activities or access in a defined area.

Occupy

To move onto an objective, key terrain, or other manmade or natural terrain area without opposition and control the entire area.

Reconnoiter

To secure data about the meteorological, hydrographic, or geographic characteristics of a particular area.

Retain

To occupy and hold a terrain feature to ensure it is free of enemy occupation or use.

Secure

To gain possession of a position or terrain feature, with or without force, and to prevent its destruction or loss by enemy action. The attacking force may or may not have to physically occupy the area.

Seize

To clear a designated area and gain control of it.

Environmentally-Oriented Tactical Tasks

Assess the Population

To evaluate the situation and attitudes of the civil population inhabiting the AO; this will likely be an ongoing task that friendly forces use to determine how and to what extent its own or enemy actions or environmental events are likely to affect the actions of the population.

Build/Restore Infrastructure

To construct, rebuild, or repair local infrastructure (roads, bridges, power/sewage plants, etc.), usually after a natural disaster or after major operations are complete, in order to win local support/cooperation and/or to support friendly force operations.

Coordinate with Civil Authorities

To harmonize military activities with those of other (nonmilitary) government agencies, NGOs, and national or local HN government entities in order to achieve unity of effort and facilitate meeting objectives.

Enable Civil Authorities

To support or assist local or national HN government or other civil entities to effectively govern in their respective jurisdictions or to carry out other legitimate functions.

Engage the Civil Authorities

To interact with, coordinate with, and influence HN civil authorities or members of the local population (with or without official titles) who can direct or influence popular attitudes or actions.

Influence the Population

To persuade the civil population of the AO to support or cooperate with operations by friendly forces or at least to accept the friendly force presence in the AO.

Liaison with Civil Authorities

To maintain communication (including personal contact) with key members of US Government agencies, HN government entities, and NGOs to ensure mutual understanding and unity of purpose or action.

Transfer to Civil Control

The handover of civil government responsibilities from friendly force military authorities to civil authorities. Civil authorities may include representatives of US Government agencies, intergovernmental organizations, and/or HN government entities.

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GLOSSARY

SECTION I. ACRONYMS

AA . . . . . assembly area
AAR . . . . . after action review
AAV . . . . . amphibious assault vehicle
AF . . . . . amphibious force
AI . . . . . area of influence
AK . . . . . Avtomat Kalashnikova
AKM . . . . . Avtomat Kalashnikova Modernizirovanniy
AKS . . . . . Avtomat Kalashnikova Skladnoy
AO . . . . . area of operations
AOI . . . . . area of interest
APL . . . . . body armor protective level
ASCOPE . . . . . areas, structures, capabilities, organizations, people, events
ATGM . . . . . antitank guided missile

BAS . . . . . battalion aid station
BDA . . . . . battle damage assessment
BHL . . . . . battle handover line
BP . . . . . battle position
BSG . . . . . battlespace geometry

C2 . . . . . command and control
CAAT . . . . . combined antiarmor team
CAR . . . . . combined arms rehearsal
CAS . . . . . close air support
CASEVAC . . . . . casualty evacuation
CBRN . . . . . chemical, biological, radiological, and nuclear
CCIR . . . . . commander's critical information requirement
CCO . . . . . combat cargo officer
CI . . . . . counterintelligence
CLIC . . . . . company level intelligence cell
CMO . . . . . civil-military operations
CO . . . . . commanding officer
COA . . . . . course of action
COC . . . . . combat operations center
COIN . . . . . counterinsurgency
COMCAM . . . . . combat camera
CONOPS . . . . . concept of operations
COP . . . . . combat outpost
COT . . . . . commanding officer of troops
CP . . . . . command post
CRRC . . . . . combat rubber raiding craft
CS . . . . . combat support
CSS . . . . . combat service support
CSW . . . . . crew-served weapon
CTP . . . . . common tactical picture

D3A . . . . . decide, detect, deliver, and assess
DS . . . . . direct support
DSF . . . . . district stability framework

EA . . . . . engagement area
ECOA . . . . . enemy course of action
EFST . . . . . essential fire support task
EOD . . . . . explosive ordnance disposal
EPW . . . . . enemy prisoner of war
EW . . . . . electronic warfare

FAC . . . . . forward air controller
FFIR . . . . friendly force information requirement
FHA . . . . . foreign humanitarian assistance
FO . . . . . forward observer
FOB . . . . . forward operating base
FP . . . . . force protection
fps . . . . . feet per second
FRAGO . . . . . fragmentary order
FSC . . . . . fire support coordinator
FSCC . . . . . fire support coordination center
FSCM . . . . . fire support coordination measure
FST . . . . . fire support team

HA . . . . . humanitarian assistance
HEAT . . . . . high explosive antitank
HHQ . . . . . higher headquarters
HMG . . . . . heavy machine gun
HN . . . . . host nation
HNSF . . . . . host nation security forces
HSS . . . . . health service support
HUMINT . . . . . human intelligence
HVI . . . . . high-value individual
HVT . . . . . high-value target

I&W . . . . . indications and warnings
IE . . . . . information environment
IED . . . . . improvised explosive device

IM . . . . . information management
IO . . . . . information operations
IPB . . . . . intelligence preparation of the battlespace
IR . . . . . intelligence requirement
IRC . . . . . information-related capabilities
ISR . . . . . intelligence, surveillance, and reconnaissance

JP. . . . . joint publication
JTAC. . . . . joint terminal attack controller

kg . . . . . kilogram(s)
KOCOA . . . . . key terrain, observation and fields of fire, cover and concealment, obstacles, and avenues of approach

LCAC . . . . . landing craft, air cushion
LCE. . . . . logistics combat element
LCU . . . . . landing craft, utility
LF . . . . . landing force
LOC . . . . . line of communications
LOGSTAT . . . . . logistics status report
LP . . . . . listening post
LZ . . . . . landing zone

m . . . . . meter(s)
MACO . . . . . marshalling area control officer
MAGTF . . . . . Marine air-ground task force
MAP . . . . . mobile assault platoon
MBA . . . . . main battle area
MCDP . . . . . Marine Corps doctrinal publication
MCO . . . . . Marine Corps order
MCPP . . . . . Marine Corps Planning Process
MCRP . . . . . Marine Corps reference publication
MCWP . . . . . Marine Corps warfighting publication
MET . . . . . mission-essential task
METL . . . . . mission-essential task list
METT-T . . . . . mission, enemy, terrain and weather, troops and support available-time available
MEU . . . . . Marine expeditionary unit
MILDEC . . . . . military deception
MISO . . . . . military information support operations
mm . . . . . millimeter(s)
MOE . . . . . measure of effectiveness
MOP . . . . . measure of performance
MOPP . . . . . mission-oriented protective posture
MOS . . . . . military occupational specialty
MTF . . . . . medical treatment facility

NAI . . . . . named area of interest
NATO . . . . . North Atlantic Treaty Organization
NAVMC . . . . . Navy/Marine Corps departmental publication
NCO . . . . . noncommissioned officer
NEO . . . . . noncombatant evacuation operation
NGO . . . . . nongovernmental organization
NPI . . . . . named person of interest
NSFS. . . . . naval surface fire support
NVD . . . . . night vision device

OP . . . . . observation post
OPORD. . . . . operation order
OPSEC . . . . . operations security
OPT. . . . . operational planning team
ORM . . . . . operational risk management

PA . . . . . public affairs
PCC. . . . . precombat check
PCI . . . . . precombat inspection
PECL. . . . . performance evaluation checklist
PERMA. . . . . planning, embarkation, rehearsal,movement, action
PIR . . . . . priority intelligence requirement
PK . . . . . Pulemyot Kalashnikova
PKM . . . . . Pulemyot Kalashnikova Modernizirovanniy
PM. . . . . Pistolet Makarova
PMCS . . . . . preventive maintenance checks and services
POL. . . . . petroleum, oils, and lubricants
PSO . . . . . Pritsel Snaipersky Optichesky
PZ . . . . . pickup zone

rds/min . . . . . rounds per minute
RFA. . . . . restrictive fire area
RIP . . . . . relief in place
RO. . . . . radio operator
ROE . . . . . rules of engagement
RPD. . . . . Ruchnoy Pulemyot Degtyaryova
RPK. . . . . Ruchnoy Pulemyot Kalashnikova
RRP. . . . . repair and replenishment point

S-2. . . . . intelligence officer
S-4. . . . . logistics officer

SAT . . . . . systems approach to training
SBF . . . . . support by fire
SIGINT . . . . . .signals intelligence
SNCO . . . . . .staff noncommissioned officer
SOP . . . . . .standing operating procedure
SOSRA . . . . . suppress, obscure, secure, reduce, assault
SPINS . . . . . .special instructions
STS . . . . . ship-to-shore
SVD . . . . . .Snayperskaya Vintovka Dragunova

TCP . . . . . traffic control point
team mech . . . . . infantry heavy company team
team tank . . . . . tank heavy team
TEO . . . . . .team embarkation officer
TOW . . . . . tube-launched, optically-tracked, wire-guided
TRAP . . . . . .tactical recovery of aircraft and personnel
TRP . . . . . target reference point

UA . . . . . unmanned aircraft
UTM . . . . . unit training management

WARNORD . . . . . .warning order
WO . . . . . watch officer

XO . . . . . .executive officer

US . . . . . United States

SECTION II. DEFINITIONS

amphibious force—An amphibious task force and a landing force together with other forces that are trained, organized, and equipped for amphibious operations. Also called **AF**. (JP 1-02)

antiterrorism—Defensive measures used to reduce the vulnerability of individuals and property to terrorist acts, to include limited response and containment by local military and civilian forces. Also called **AT**. (JP 1-02)

area of influence—A geographical area wherein a commander is directly capable of influencing operations by maneuver or fire support systems normally under the commander's command or control. (JP 1-02)

area of interest—That area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory. This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission. Also called **AOI**. (JP 1-02)

area of operations—An operational area defined by the joint force commander for land and maritime forces that should be large enough to accomplish their missions and protect their forces. Also called **AO**. (JP 1-02)

assault position—That position between the line of departure and the objective in an attack from which forces assault the objective. Ideally, it is the last covered and concealed position before reaching the objective (primarily used by dismounted infantry). (MCRP 5-12C)

assembly area—1. An area in which a command is assembled preparatory to further action. 2. In a supply installation, the gross area used for collecting and combining components into complete units, kits, or assemblies. (Proposed for inclusion in the next edition of MCRP 5-12C.)

attack position—The last position occupied by the assault echelon before crossing the line of departure. (JP 1-02)

battle damage assessment—(See JP 1-02 for core definition. Marine Corps amplification follows.) The timely and accurate estimate of the damage resulting from the application of military force. Battle damage assessment estimates physical damage to a particular target, functional damage to that target, and the capability of the entire target system to continue its operations. Also called **BDA**. (MCRP 5-12C)

battle position—1. In ground operations, a defensive location oriented on an enemy avenue of approach from which a unit may defend. 2. In air operations, an airspace coordination area containing firing points for attack helicopters. Also called **BP**. (MCRP 5-12C)

battlespace geometry—A dynamic, multifaceted and multidimensional environment in which military operations occur. It is determined by such factors as intelligence preparation of the battlespace, time, sustainment, command relationships, boundaries, fire support coordination measures, rules of engagement, and political considerations that could affect operations. Also called **BSG**. (MCRP 5-12C)

casualty evacuation—The unregulated movement of casualties that can include movement both to and between medical treatment facilities. Also called **CASEVAC.** (JP 1-02)

civil-military operations—Activities of a commander performed by designated civil affairs or other military forces that establish, maintain, influence, or exploit relations between military forces, indigenous populations, and institutions, by directly supporting the attainment of objectives relating to the reestablishment or maintenance of stability within a region or host nation. Also called **CMO**. (JP 1-02)

close air support—Air action by fixed- and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and that require detailed integration of each air mission with the fire and movement of those forces. Also called **CAS**. (JP 1-02)

combat cargo officer—An embarkation officer assigned to major amphibious ships or naval staffs, functioning primarily as an adviser to and representative of the naval commander in matters pertaining to embarkation and debarkation of troops and their supplies and equipment. Also called **CCO**. (JP 1-02)

combat operations center—The primary operational agency required to control the tactical operations of a command that employs ground and aviation combat, combat support, and logistics combat elements or portions thereof. The combat operations center continually monitors, records, and supervises operations in the name of the commander and includes the necessary personnel and communications to do the same. Also called **COC**. (MCRP 5-12C.)

combat outpost—1. A security force established at the regimental level during defensive or stationary operations. 2. A reinforced observation post that can conduct limited combat, stability, or other operations. (Proposed for inclusion in the next edition of MCRP 5-12C.)

combat service support—The essential capabilities, functions, activities, and tasks necessary to sustain all elements of all operating forces in theater at all levels of war. Also called **CSS**. (JP 1-02)

combat support—Fire support and operational assistance provided to combat elements. Also called **CS**. (JP 1-02)

command and control—(See JP 1-02 for core definition. Marine Corps amplification follows.) The means by which a commander recognizes what needs to be done and sees to it that appropriate actions are taken. Command and control is one of the six warfighting functions. Also called **C2**. (JP 1-02)

commander's critical information requirement(s)—(See JP 1-02 for core definition. Marine Corps amplification follows.) Information regarding the enemy and friendly activities and the environment identified by the commander as critical to maintaining situational awareness, planning future activities, and facilitating timely decisionmaking. The two subcategories are priority intelligence requirements and friendly force information requirements. Also called **CCIRs**. (MCRP 5-12C)

commanding officer of troops—On a ship that has embarked units, a designated officer (usually the senior embarking unit commander) who is responsible for the administration, discipline, and training of all embarked units. Also called **COT**. (JP 1-02)

command post—In operations or exercises, a location from which command is exercised. Also called **CP**. (Proposed for inclusion in the next edition of MCRP 5-12C.)

common tactical picture—An accurate and complete display of relevant tactical data that integrates tactical information from the multitactical data link network, ground network, intelligence network, and sensor networks. Also called **CTP**. (JP 1-02)

counterinsurgency—Comprehensive civilian and military efforts designed to simultaneously defeat and contain insurgency and address its root causes. Also called **COIN**. (JP 1-02)

counterintelligence—Information gathered and activities conducted to identify, deceive, exploit, disrupt, or protect against espionage, other intelligence activities, sabotage, or assassinations conducted for or on behalf of foreign powers, organizations or persons or their agents, or international terrorist organizations or activities. Also called **CI**. (JP 1-02)

course of action—1. Any sequence of activities that an individual or unit may follow. 2. A scheme developed to accomplish a mission. 3. A product of the course-of-action development step of the joint operation planning process. Also called **COA**. (JP 1-02)

decisive action—Any action the commander deems fundamental to achieving mission success. (MCRP 5-12C)

defense support of civil authorities—Support provided by US Federal military forces, Department of Defense civilians, Department of Defense contract personnel, Department of Defense component assets, and National Guard forces (when the Secretary of Defense, in coordination with the governors of the affected states, elects and requests to use those forces in Title 32, United States Code, status) in response to requests for assistance from civil authorities for domestic emergencies, law enforcement support, and other domestic activities, or from qualifying entities for special events. Also called **DSCA**. Also known as **civil support**. (JP 1-02)

direct support—A mission requiring a force to support another specific force and authorizing it to answer directly to the supported force's request for assistance. Also called **DS**. (JP 1-02)

electronic warfare—Military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. Also called **EW**. (JP 1-02)

final coordination line—A line used to coordinate the ceasing and shifting of supporting fires and the final deployment of the assault echelon in preparation for launching an assault against an enemy position. Also called **FCL**. (MCRP 5-12C)

fire support coordinator—(See DOD Dictionary for core definition. Marine Corps amplification follows.) The officer in charge of the fire support coordination center who is the direct representative of the landing force commander for the planning and coordination of all available fire support. Also called **FSC**. (MCRP 1-10.2)

fire support coordination center—A single location in which are centralized communications facilities and personnel incident to the coordination of all forms of fire support. Also called **FSCC**. (JP 1-02)

fire support coordination measure—A measure employed by commanders to facilitate the rapid engagement of targets and simultaneously provide safeguards for friendly forces. Also called **FSCM**. (JP 1-02)

fire support team—A field artillery team provided for each maneuver company/troop and selected units to plan and coordinate all supporting fires available to the unit, including mortars, field artillery, naval surface fire support, and close air support integration. Also called **FIST**. (JP 1-02) Note: Marine Corps uses the acronym **FST**.

force protection—(See JP 1-02 for core definition. Marine Corps amplification follows.) Actions or efforts used to safeguard own centers of gravity while protecting, concealing, reducing, or eliminating friendly critical vulnerabilities. Force protection is one of the six war-fighting functions. (MCRP 5-12C)

foreign humanitarian assistance—Department of Defense activities conducted outside the United States and its territories to relieve or reduce human suffering, disease, hunger, or privation. Also called **FHA**. (JP 1-02)

forward air controller—An officer (aviator/pilot) member of the tactical air control party who, from a forward ground or airborne position, controls aircraft in close air support of ground troops. Also called **FAC**. (JP 1-02)

forward observer—An observer operating with front line troops and trained to adjust ground or naval gunfire and pass back battlefield information. In the absence of a forward air controller, the observer may control close air support strikes. Also called **FO**. (JP 1-02)

fragmentary order—An abbreviated form of an operation order issued as needed after an operation order to change or modify that order or to execute a branch or sequel to that order. Also called **FRAGORD**. (JP 1-02) Note: Marine Corps uses **FRAGO**.

friendly force information requirement—(See JP 1-02 for core definition. Marine Corps amplification follows.) Information the commander needs about friendly forces in order to develop plans and make effective decisions. Depending upon the circumstances, information on unit location, composition, readiness, personnel status, and logistic status could become a friendly force information requirement. Also called **FFIR**. (MCRP 5-12C)

health service support—All services performed, provided, or arranged to promote, improve, conserve, or restore the mental or physical well-being of personnel, which include, but are not limited to, the management of health services resources, such as manpower, monies, and facilities; preventive and curative health measures; evacuation of the wounded, injured, or sick; selection of the medically fit and disposition of the medically unfit; blood management; medical supply, equipment, and maintenance thereof; combat and operational stress control; and medical, dental, veterinary, laboratory, optometric, nutrition therapy, and medical intelligence services. Also called **HSS**. (JP 1-02)

high-value target—A target the enemy commander requires for the successful completion of the mission. Also called **HVT**. (JP 1-02)

host nation—A nation which receives the forces and/or supplies of allied nations and/or NATO organizations to be located on, to operate in, or to transit through its territory. Also called **HN**. (JP 1-02)

human intelligence—A category of intelligence derived from information collected and provided by human sources. Also called **HUMINT**. (JP 1-02)

improvised explosive device—A weapon that is fabricated or emplaced in an unconventional manner incorporating destructive, lethal, noxious, pyrotechnic, or incendiary chemicals and designed to kill, destroy, incapacitate, harass, deny mobility, or distract. Also called **IED**. (JP 1-02)

information environment—The aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information. (JP 1-02)

information management— The function of managing an organization's information resources for the handling of data and information acquired by one or many different systems, individuals, and organizations in a way that optimizes access by all who have a share in that data or a right to that information. Also called **IM**. (JP 1-02)

information operations—The integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own. Also called **IO**. (JP 1-02)

intelligence preparation of the battlespace—(See JP 1-02 for core definition. Marine Corps amplification follows.) The systematic, continuous process of analyzing the threat and environment in a specific geographic area. Also called **IPB**. (MCRP 5-12C)

intelligence requirements—(See JP 1-02 for core definition. Marine Corps amplification follows.) Questions about the enemy and the

environment, the answers to which a commander requires to make sound decisions. Also called **IR**. (MCRP 5-12C)

landing force—A Marine Corps or Army task organization formed to conduct amphibious operations. The landing force, together with the amphibious task force and other forces, constitute the amphibious force. Also called **LF**. (JP 1-02)

landing zone—Any specified zone used for the landing of aircraft. Also called **LZ**. (JP 1-02)

line of communications—A route, either land, water, and/or air, that connects an operating military force with a base of operations and along which supplies and military forces move. Also called **LOC**. (JP 1-02)

line of departure—1. In land warfare, a line designated to coordinate the departure of attack elements. Also called **LD**. 2. In amphibious warfare, a suitably marked offshore coordinating line to assist assault craft to land on designated beaches at scheduled times the seaward end of a boat lane. Also called **LOD**. (JP 1-02)

logistics combat element—The core element of a Marine air-ground task force (MAGTF) that is task-organized to provide the combat service support necessary to accomplish the MAGTF's mission. The logistics combat element varies in size from a small detachment to one or more Marine logistics groups. It provides supply, maintenance, transportation, general engineering, health services, and a variety of other services to the MAGTF. In a joint or multinational environment, it may also contain other Service or multinational forces assigned or attached to the MAGTF. The logistics combat element itself is not a formal command. Also called **LCE**. (MCRP 5-12C)

main battle area—That portion of the battlespace in which the commander conducts close operations to defeat the enemy. Normally, the main battle area extends rearward from the forward edge of the battle area to the rear boundary of the command's subordinate units. (MCRP 5-12C)

Marine air-ground task force—The Marine Corps' principal organization for all missions across a range of military operations, composed of forces task-organized under a single commander capable of responding rapidly to a contingency anywhere in the world. The types of forces in the Marine air-ground task force (MAGTF) are functionally grouped into four core elements: a command element, an aviation combat element, a ground combat element, and a logistics combat element. The four core elements are categories of forces, not formal commands. The basic structure of the MAGTF never varies, though the number, size, and type of Marine Corps units comprising each of its four elements will always be mission dependent. The flexibility of the organizational structure allows for one or more subordinate MAGTFs to be assigned. In a joint or multinational environment, other Service or multinational forces may be assigned or attached. Also called **MAGTF**. (MCRP 5-12C)

Marine Corps Planning Process—A six-step methodology that helps organize the thought processes of the commander and staff throughout the planning and execution of military operations. It focuses on the mission and the threat and is based on the Marine Corps philosophy of maneuver warfare. It capitalizes on the principle of unity of command and supports the establishment and maintenance of tempo. The six steps consist of problem framing, course of action development, course of action war game, course of action comparison and decision, orders development, and transition. Also called **MCPP**. (MCRP 5-12C)

Marine expeditionary unit—A Marine air-ground task force (MAGTF) that is constructed around an infantry battalion reinforced, a composite squadron reinforced, and a task-organized logistics combat element. It normally fulfills Marine Corps forward sea-based deployment requirements. The Marine expeditionary unit provides an

immediate reaction capability for crisis response and is capable of limited combat operations. In a joint or multinational environment, it may contain other Service or multinational forces assigned or attached to the MAGTF. Also called **MEU**. (MCRP 5-12C)

measure of effectiveness—A criterion used to assess changes in system behavior, capability, or operational environment that is tied to measuring the attainment of an end state, achievement of an objective, or creation of an effect. Also called **MOE**. (JP 1-02)

measure of performance—A criterion used to assess friendly actions that is tied to measuring task accomplishment. Also called **MOP**. (JP 1-02)

medical treatment facility—A facility established for the purpose of furnishing medical and/or dental care to eligible individuals. Also called **MTF**. (JP 1-02)

military deception—Actions executed to deliberately mislead adversary military, paramilitary, or violent extremist organization decision makers, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly mission. Also called **MILDEC**. (JP 1-02)

military information support operations—Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals in a manner favorable to the originator's objectives. Also called **MISO**. (JP 1-02)

mission-oriented protective posture—A flexible system of protection against chemical, biological, radiological, and nuclear contamination in which personnel are required to wear only that protective clothing and equipment appropriate to the threat level, work rate imposed by the mission, temperature, and humidity. Also called **MOPP**. (JP 1-02)

named area of interest—(See JP 1-02 for core definition. Marine Corps amplification follows.) A point or area along a particular avenue of approach through which enemy activity is expected to occur. Activity or lack of activity within a named area of interest will help to confirm or deny a particular enemy course of action. Also called **NAI**. (MCRP 5-12C)

naval surface fire support—Fire provided by Navy surface gun and missile systems in support of a unit or units. Also called **NSFS**. (JP 1-02)

night vision device—Any electro-optical device that is used to detect visible and infrared energy and provide a visible image. Night vision goggles, forward-looking infrared, thermal sights, and low-light level television are night vision devices. Also called **NVD**. (JP 1-02)

noncombatant evacuation operations—Operations directed by the Department of State or other appropriate authority, in conjunction with the Department of Defense, whereby noncombatants are evacuated from foreign countries when their lives are endangered by war, civil unrest, or natural disaster to safe havens as designated by the Department of State. Also called **NEO**s. (JP 1-02)

nongovernmental organization—A private, self-governing, not-for-profit organization dedicated to alleviating human suffering; and/or promoting education, health care, economic development, environmental protection, human rights, and conflict resolution; and/or encouraging the establishment of democratic institutions and civil society. Also called **NGO**. (JP 1-02)

operation order—A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation. Also called **OPORD**. (JP 1-02)

operations security—A process of identifying critical information and subsequently analyzing

friendly actions attendant to military operations and other activities. Also called **OPSEC**. (JP 1-02)

pickup zone—The zone in which helicopters land to pick up troops and supplies for movement to the landing zone. (MCRP 5-12C)

priority intelligence requirement—(See JP 1-02 for core definition. Marine Corps amplification follows.) An intelligence requirement associated with a decision that will critically affect the overall success of the command's mission. Also called **PIR**. (MCRP 5-12C)

public affairs—Those public information, command information, and community engagement activities directed toward both the external and internal publics with interest in the Department of Defense. Also called **PA**. (JP 1-02)

relief in place—An operation in which, by direction of higher authority, all or part of a unit is replaced in an area by the incoming unit and the responsibilities of the replaced elements for the mission and the assigned zone of operations are transferred to the incoming unit. (JP 1-02)

repair and replenishment point—A combat service support installation, normally in forward areas near the supported unit, established to support a mechanized or other rapidly moving force. It may be either a prearranged point or a hastily selected point to rearm, refuel, or provide repair services to the supported force. Also called **RRP**. (MCRP 5-12C)

restrictive fire area—An area in which specific restrictions are imposed and into which fires that exceed those restrictions will not be delivered without coordination with the establishing headquarters. Also called **RFA**. (JP 1-02)

rules of engagement—Directives issued by competent military authority that delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered. Also called **ROE**. (JP 1-02)

ship-to-shore movement—That portion of the action phase of an amphibious operation which includes the deployment of the landing force from the assault shipping to designated landing areas. (JP 1-02)

signals intelligence—1. A category of intelligence comprising either individually or in combination all communications intelligence, electronic intelligence, and foreign instrumentation signals intelligence, however transmitted. 2. Intelligence derived from communications, electronic, and foreign instrumentation signals. Also called **SIGINT**. (JP 1-02)

situational awareness—Knowledge and understanding of the current situation that promotes timely, relevant, and accurate assessment of friendly, enemy, and other operations within the battlespace in order to facilitate decisionmaking. An informational perspective and skill that foster an ability to determine quickly the context and relevance of events that are unfolding. Also called **SA**. (MCRP 5-12C)

stability operations—An overarching term encompassing various military missions, tasks, and activities conducted outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief. (JP 1-02)

standing operating procedure—A set of instructions covering those features of operations that lend themselves to a definite or standardized procedure without loss of effectiveness. The procedure is applicable unless ordered otherwise. Also called **SOP**. (Proposed for inclusion in the next edition of MCRP 5-12C)

tactical recovery of aircraft and personnel—A Marine Corps mission performed by an assigned and briefed aircrew for the specific purpose of the recovery of personnel, equipment, and/or aircraft when the tactical situation precludes search and rescue assets from responding and when survivors

and their location have been confirmed. Also called **TRAP**. (JP 1-02)

tactical tasks—Actions a commander may take to accomplish the mission. They are assigned based on unit capabilities and may be specified, implied, or essential. (Proposed for inclusion in the next edition of MCRP 5-12C.)

traffic control point—A designated spot on the ground, road, or trail network used to control and influence the flow of pedestrian, vehicular, or boat traffic to execute tactical tasks and generate effects. A traffic control point is hasty or deliberate in nature. Its purpose is friendly, terrain, enemy, or environmentally oriented. Also called **TCP**. (MCRP 5-12C)

unmanned aircraft—An aircraft that does not carry a human operator and is capable of flight with or without human remote control. Also called **UA**. (JP 1-02)

warning order—1. A preliminary notice of an order or action that is to follow. 2. A planning directive that initiates the development and evaluation of military courses of action by a supported commander and requests that the supported commander submit a commander's estimate. 3. A planning directive that describes the situation, allocates forces and resources, establishes command relationships, provides other initial planning guidance, and initiates subordinate unit mission planning. Also called **WARNORD**. (JP 1-02)

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5205.2 DOD Operations Security (OPSEC) Program

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3121.01B Standing Rules of Engagement for U.S. Forces

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12401-10 Strategic Communication and Information Operations in the DoD

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1-0 Doctrine for the Armed Forces of the United States
1-02 Department of Defense Dictionary of Military and Associated Terms
3-0 Joint Operations
3-02 Amphibious Operations
3-02.1 Amphibious Embarkation and Debarkation
3-07 Stability Operations
3-09.3 Close Air Support
3-10 Joint Security Operations in Theater
3-13 Information Operations
3-15 Barriers, Obstacles, and Mine Warfare for Joint Operations
3-16 Multinational Operations
3-28 Civil Support
3-29 Foreign Humanitarian Assistance
3-50 Personnel Recovery
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3-68 Noncombatant Evacuation Operations
5-0 Joint Operation Planning

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3500.10 Military Police and Corrections Training and Readiness Manual
3500.44 Infantry Training and Readiness Manual
3500.108 Marine Air-Ground Task Force (MAGTF) Plans Training and Readiness (T&R) Manual

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5-0 The Operations Process
6-0 Mission Command

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3-06 Urban Operations
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3-21.10 The Infantry Rifle Company
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3-90-1 Offense and Defense, Volume I
3-90-2 Reconaissance, Security, and Tactical Enabling Tasks
3-90.5 The Combined Arms Battalion
3-97.6 Mountain Operations
90-5 Jungle Operations
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1 Warfighting
1-0 Marine Corps Operations

1-3 Tactics
2 Intelligence
4 Logistics
5 Planning
6 Command and Control

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3-11.1 Marine Rifle Company/Platoon
3-11.2 Marine Rifle Squad
3-11.3 Scouting and Patrolling
3-11.4 Helicopterborne Operations
3-12 Marine Corps Tank Employment
3-13 Employment of Amphibious Assault Vehicles
3-14 Employment of the Light Armored Reconnaissance Battalion
3-15.1 Machine Guns and Machine Gun Gunnery (under development as MCWP 3-15.1, Machine Gun Employment)
3-16 Fire Support Coordination in the Ground Combat Element
3-16.6 Supporting Arms Observer, Spotter, and Controller
3-17 Engineering Operations
3-17.8 Combined Arms Mobility Operations
3-31.5 Ship-to-Shore Movement
3-33.1 Marine Air-Ground Task Force Civil-Military Operations
3-33.5 Insurgencies and Countering Insurgencies
3-33.8 Multiservice Tactics, Techniques, and Procedures for Conducting Peace Operations (Peace Ops)
3-35.1 Mountain Warfare Operations
3-35.3 Military Operations on Urban Terrain (MOUT)
3-35.6 Desert Operations
3-35.7 MAGTF Meteorological and Oceanographic Support
3-35.8 Tactical Boat Operations
3-37 MAGTF Nuclear, Biological, and Chemical Defense Operations
3-37.2 Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection
3-37.3 Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear (CBRN) Decontamination Operations
3-40.1 Marine Air-Ground Task Force Command and Control
3-40.2 Information Management
3-40.4 Marine Air-Ground Task Force Information Operations
3-40.5 Electronic Warfare
3-43.1 Raid Operations
4-1 Logistics Operations
4-11 Tactical-Level Logistics
4-11.1 Health Service Support Operations
4-11.3 Transportation Operations
4-11.4 Maintenance Operations
4-11.6 Petroleum and Water Logistics Operations

4-11.8 Services in an Expeditionary Environment
5-1 Marine Corps Planning Process

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3-0A Unit Training Management Guide
3-0B How to Conduct Training
3-02H Multi-Service Tactics, Techniques, and Procedures for Survival, Evasion, and Recovery
3-11.01 Combat Hunter (under development)
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3-33.1A Civil Affairs Tactics, Techniques, and Procedures
3-35.1A Small Unit Leader's Guide to Mountain Warfare Operations
3-35.5 Jungle Operations
3-37.2A Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Contamination Avoidance
3-40.6B Tactical Psychological Operations Tactics, Techniques, and Procedures
4-11C Combat Cargo Operations Handbook
4-11.3F Convoy Operations Handbook
4-11.3G Unit Embarkation Handbook
4-11.3H Multiservice Tactics, Techniques, and Procedures for Tactical Convoy Operations
4-11.4A Recovery and Battle Damage Assessment and Repair
5-12C Marine Corps Supplement to the Department of Defense Dictionary of Military and Associated Terms

Fleet Marine Force Manual (FMFM)
6-3 Marine Infantry Battalion

Fleet Marine Force Reference Publication (FMFRP)
12-5 Small Wars Manual

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3-17.02 MAGTF Counter-Improvised Explosive Device (C-IED) Operations
3-33.01 Small Unit Leader's Guide to Counterinsurgency
3-35.01 Tactics, Techniques, and Procedures for Reduction of Urban Area Strong Points

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