
FMI 3-90.6

**HEAVY BRIGADE
COMBAT TEAM**

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HEADQUARTERS, DEPARTMENT OF THE ARMY

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Heavy Brigade Combat Team

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Preface

Field Manual-Interim (FMI) 3-90.6 provides tactics, techniques, and procedures (TTP) for the tactical employment of the heavy brigade combat team (HBCT). This publication

- Provides the doctrinal guidance for commanders, staffs, and subordinate commanders and leaders of the currently transitioning organizations who are responsible for conducting (planning, preparing, executing, and assessing) operations in the HBCT.
- Serves as an authoritative reference for personnel developing doctrine (fundamental principles and TTP) materiel and force structure, institution and unit training, and standing operating procedures (SOPs) for HBCT operations.

This FMI addresses operations for HBCTs organized under the Army modular concept that governs the development of equipment, training, and structure for former divisional brigades. The procedures described herein are intended as a guide and are not to be considered inflexible. Each situation in combat must be resolved by an intelligent interpretation and application of the doctrine set forth herein. The guiding manual for this FMI has been FM 3-90.3, The Mounted Brigade Combat Team.

FMI 3-90.6 is written for the HBCT commander, the HBCT battle staff, subordinate commanders, and all supporting units. The manual reflects and supports the Army operations doctrine as stated in FM 3-0, *Operations*. This is not intended as a stand-alone reference for HBCT operations; rather, it is intended to be used in conjunction with existing doctrine.

This FMI is published to provide expedited delivery of doctrine urgently needed to execute transformation to modular organizations. It has not been placed through the standard development process but is authorized for implementation. FM 3-90.6 is under development and will supersede this FMI before its expiration date. Send comments on this FMI to the address below. The proponent will consider them for inclusion in FM 3-90.6.

The doctrine in this FMI is based on suggestions, insights, and observations developed from four separate 3^d Infantry Division HBCT rotations at the Combat Training Centers (CTCs), conducted by Task Force Modularity Field Experimentation Project Team (FEPT), Joint and Army Experimentation Division (JAED), Futures Center (FC), TRADOC, during FY 2004. Each CTC rotation yielded valuable information concerning the HBCT operations. Additionally, Task Force Logistics contributed significant insights to the doctrine in this FMI.

This FMI was written in conjunction with five other FMI relating to HBCT operations, including HBCT combined arms battalion operations; HBCT fires and effects operations; HBCT logistics; the HBCT brigade troops battalion operations; and the HBCT reconnaissance squadron operations. For the most part, these FMI include only TTP that have changed due to the new organization. These FMI include not only TTP that have changed due to the new organization but also a wide variety of TTP that, after implementing the new HBCT organization, remain relevant and provide the required contextual frameworks.

The proponent for this publication is the US Army Training and Doctrine Command (TRADOC). Submit comments and recommended changes and the rationale for those changes on DA Form 2028 (Recommended Changes to Publications and Blank Forms)

and forward to Commander, US Army Armor Center, ATTN: ATZK-TDD-B, Fort Knox, KY 40121-5000 or e-mail the DA Form 2028 to Doctrine Training/Doctrine Development web site, Doctrine Division, Chief Combined Arms Doctrine Branch at: <http://knox-www.army.mil/center/dtdd/> and Commandant, US Army Infantry School, ATTN ATSH-ATD, Ft Benning, GA 31905-5593 or email to doctrine@benning.army.mil.

Unless otherwise stated in this publication, the masculine nouns and pronouns do not refer exclusively to men.

Introduction

SECTION I - PURPOSE

An interim field manual (FMI) is a Department of the Army publication that provides expedited delivery of urgently needed doctrine. This FMI is one of six being prepared to meet the doctrinal requirements of the heavy brigade combat team (HBCT). This FMI applies to the transformational force across the full spectrum of military operations: peacetime military engagement (PME), small scale contingencies (SSC), and major combat operations (MCO).

The doctrine contained in this FMI is approved for immediate use in training and operations. Operational concepts described in this manual are based on decisions by the Army Chief of Staff to reorganize the Army to a brigade-based force, and to quickly implement “good enough” designs that will be refined over time. The material provided in this FMI is considered “good enough” to satisfy the requirements of the Army’s transforming organizations.

The intended audience for this publication is leaders and staff sections within transforming units. These leaders include those in combined arms chains of command, field and company grade officers, middle-grade and senior noncommissioned officers, and battalion and squadron command groups and staffs. This manual provides guidance for unit of employment (UEX) leaders and staffs for training and employment of the HBCT to conduct close combat in offensive and defensive operations. This publication may also be used by other Army organizations to assist in their planning for support to HBCTs.

This FMI applies to the active component (AC), reserve component (RC), and Army civilians. It builds on the collective knowledge and experience gained through recent operations, numerous exercises, and the deliberate process of informed reasoning. It is rooted in time-tested principles and fundamentals, while accommodating new technologies and diverse threats to national security.

This FMI will expire after 2 years from its approved publication date. Throughout its life, proponents should collect feedback to refine the emerging doctrine that will be incorporated into new or revised field manuals.

SECTION II - TRANSFORMING TO MEET OPERATIONAL REQUIREMENTS

WE ARE A NATION AT WAR

In the opening decade of the 21st Century, regional instability, proliferation of weapons of mass destruction (WMD), transnational threats from groups using terrorism to achieve political objectives, the spiraling information revolution and ongoing globalization have created a prolonged period of conflict for the United States with great uncertainty about the nature and location of that conflict. The multi-polar world created by the breakup of the Soviet Union has presented the U.S. Army with both opportunities and challenges.

Current and future enemies may look different from the former Soviet Union, but American interests remain the same. Today while peace exists between the great powers, a state of permanent white water can be found in much of the world.

In this environment, war is the norm, and peace is the exception. Our adversaries seek adaptive advantage through asymmetry. America has near peer competitors in niche areas, and conventional force-on-force conflicts are still possible. There is an enormous pool of potential combatants armed with irreconcilable ideas, and our homeland has become part of the battlespace.

Historically, conventional terrorism and threats directed at US citizens and property were conducted outside of US borders. The events of 9/11 demonstrated that the threat to the US homeland from transnational organizations and groups with regional agendas is very real.

The Army must be able to defuse crises and/or defeat aggression early to prevent escalation and limit damage. To meet the requirements of the current operational environment, we need flexible, rapidly deployable forces and sufficient depth and strength to sustain multiple, simultaneous operations.

The Army must adapt to these challenges NOW. We are generating more versatile combat power because:

- We have extended worldwide commitments.
- We will remain at war for the foreseeable future.
- We must be more responsive to regional combatant commanders (RCC) needs.
- We must execute offensive, defensive, stability, and support operations as part of an integrated joint force.

DELIVERING THE RIGHT ARMY FORCES

To better meet current and future operational requirements, the United States Army is undertaking a total organizational redesign of its combat and associated support units, while in the midst of the global war on terrorism (GWOT). In terms of scope, the efforts to transform the Army rival the changes wrought in the Army by Secretary of War, Elihu Root a century ago, in 1903. This effort involves changing how the Army conducts operations, and how it is organized to accomplish assigned missions. The organization and doctrine of the Army that appears as the result of transformation will not resemble that with which our nation fought the major conflicts of the last century. (See Figure Intro-1.)



Figure Intro-1. Today's Army

We are seeking a campaign-quality Army with a joint and expeditionary mindset. This new expeditionary mindset recognizes we are an Army in contact, engaged in ongoing operations and ready to respond to the next crisis as it evolves. Transformation is an attitude and spirit—infused across the entire force—that embraces a forward-leaning, modular, joint interdependent, and capabilities based Army led by aggressive, intelligent, and empowered Soldiers. This team of

teams will transform to an Army that will ultimately win the war on terror and provide long-term security for the Nation.

Army transformation is a comprehensive effort intended to reinvent the Army at strategic, operational, and tactical levels. Formations will be redesigned to provide modular, capabilities-based organizations, increasing their relevance and responsiveness to regional combatant commanders (RCC).

Changing the organizational structure of units must be logically consistent with future force concepts but tempered by the technological and the current force capabilities that are reasonably available within the near term. This force will be strategically responsive, networked, and fight with a precision capabilities-based maneuver force that is dominant across the range of military operations envisioned for the future global security environment.

Delivering the right Army forces at the right place and time is vital to the joint force commander's ability to defeat any enemy. As the Army repositions and reconfigures its forces, the ability to rapidly deploy, employ, and sustain forces throughout the global battlespace will be expanded. Keeping the Army relevant and ready is about anticipation, and not about preparing for yesterday's challenges. The world is changing and the Army is responding to these changes and positioning itself for the challenges of the future strategic environment with forces that will be more effective in combat missions, more capable of stability operations and far better at interacting with other service tactical elements of the joint force.


SECTION III - A TOTAL ORGANIZATIONAL REDESIGN

MODULARITY

Modularity is the foundation for building a Campaign Quality Army with joint and expeditionary capabilities. Often times, commanders require a function to be performed that does not warrant the deployment of an entire unit. However, deploying portions of units can render the remaining elements of the parent organization incapable of performing their mission due to a lack of key personnel and equipment

Modularity provides a force design methodology that aids in solving these dilemmas. It enhances the Army's ability to rapidly respond to a wide range of global contingencies with a force possessing needed functions and capabilities, while deploying a minimum of troops and equipment. It is a methodology that puts the right amount of the needed capabilities at the right place at the right time. At the same time, it also leaves behind the remainder of an organization which can be deployed later or can provide mission capable support elsewhere if needed.

Modularity is about packaging units into flexible configurations, creating more cohesive and capable units, and adjusting the types and mix of AC and RC units (See Figure Intro-2). Modular units are rapidly deployable, responsive, agile, tailorable and discrete packages of land force combat power.



Restructuring Today's Army


- **Modularity:** creating brigade sized building blocks of combat power
- **Stabilization:** creating more cohesive and capable units and providing predictability to Soldiers by extending the length of assignments
- **Rebalancing:** adjusting the types and mix of AC and RC units

To produce more combat power for Combatant Commanders

Figure Intro-2. Restructuring Today's Army

The object of modularity is to provide superior tactical units that are more responsive and provide greater mission potency for the joint force commander.

Modularity provides the methodology for the Army to achieve a force structure that will optimize rapid assembly of mission-oriented contingency forces that are effective and efficient; while providing a means of rapidly identifying, mobilizing, and deploying doctrinally sound, sustainable, and fully missioncapable elements/organizations capable of operating in a joint and combined environment (See Figure Intro-3.)



Modularity and The Army's Need to Change

Modularity: Provides capabilities-based units at the Brigade level to Regional Combatant Commanders with responsive, fully mission-Capable combat and support organizations that operate in a Joint, Combined or Multi-National environment.

Why Change:

- Provides greater capacity for rapid and tailorable force capability packages
- Improves strategic responsiveness for full spectrum operations

Offers:

- Embedded Joint capabilities and connectivity
- Organic staff precluding augmentation
- Interdependent Joint communications, ISR, and fires
- Deployable, separable Command Posts
- Organizations capable of C2 and/or support of Joint and multi-national forces

Figure Intro-3. Modularity and the Army's Need to Change

Modularity will apply to force elements, to include command and control (C2) headquarters, performing missions across the range of military operations (peacetime, conflict, and war), and to force elements participating in joint, combined, multi-national, and interagency operations.

MODULAR HEADQUARTERS

Since 1999, the US military has undergone a sweeping evolution driven by operational experience and new capabilities. In the past, the conduct of operations was divided into loosely linked major land, sea, and air operations, often conducted with different objectives. Today, joint operations form an integrated joint fabric and increasingly, operations are integrated at the tactical level. The nature of modern land operations has changed in terms of geography and time. In general, operations have become more distributed in space and more simultaneous in time. At tactical and operational levels, subordinate units operate in noncontiguous areas of operations and conduct nonlinear operations as a matter of routine. This change is the result of smaller and more agile forces, significant improvements in C2, and continuing integration of joint capabilities at lower echelons. Army forces continue to increase their lethality. The integration of advanced information technologies multiplies the effectiveness of the individual weapons systems by many times. All these factors support Army forces executing offensive land operations early in the campaign, by introducing forces capable of maneuvering to operational depths as part of an integrated joint force.

The operational environment requires Army forces that are much more responsive and tailored to the needs of the combatant commanders. Army forces must be capable of executing a full range of military operations from theater war through smaller contingencies to humanitarian assistance. To meet joint requirements, the Army is reorganizing its echelons above brigade.

Between now and 2010, two higher headquarters will replace the existing structure of divisions, corps, and echelons above corps. These new headquarters are currently designated Units of Employment (UE), specifically a UEx (primary warfighting), and a UEy (theater operational land force and joint support) echelon (See Figure Intro-4). While the tendency is to think of these

echelons as linear improvements to the division and corps, they are not. Both higher echelons will be complementary, modular entities designed to employ tailored forces within integrated joint campaigns.

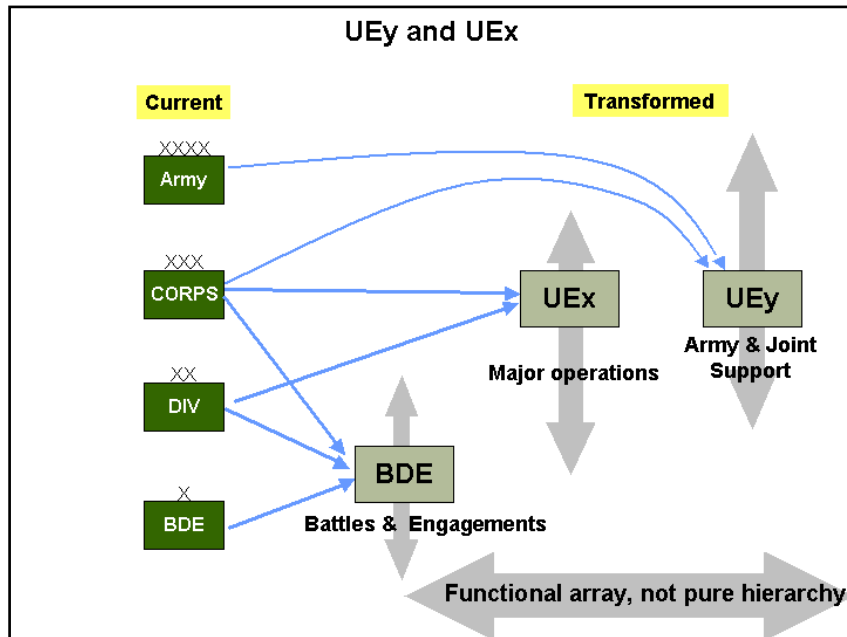


Figure Intro-4. UEy and UEx

Units of employment execute offensive, defensive, stability, and support operations on land as part of an integrated joint force. The UEx will become the principle war fighting headquarters of the Army, exercising operational control over brigades employed in tactical engagements. The UEy will focus primarily on the Army component responsibilities, supporting the entire theater and the operational forces- joint, interagency, and multinational (JIM) - as required by the combatant commander.

The Brigade Based Force

The Army will transform to a brigade-based modular Army to achieve more balance in the force, with the ability to operate decisively in an uncertain environment against an unpredictable threat that will make every attempt to avoid our strengths (See Figure Intro-5). This redesign effort, as well as associated restructuring and stabilization initiatives, are important as they are intended to sustain both the active and reserve component Army through a potentially long term, manpower and resource intensive war on terrorism.

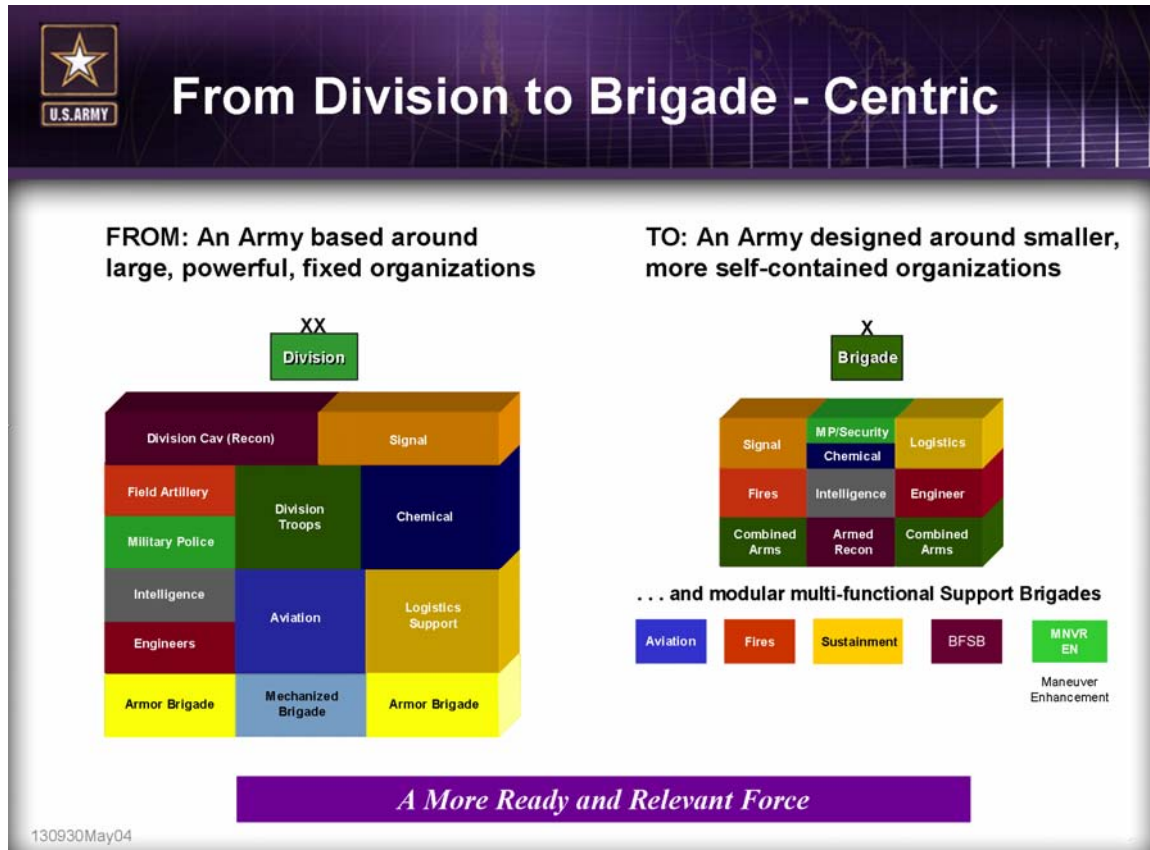


Figure Intro-5. From Divisions to Brigades

The new brigade designs achieve three goals set by the Army's Chief of Staff. This new design will:

- Increase the number of combat brigades available to the Army while maintaining combat effectiveness that is equal to or better than that of current divisional brigade combat teams.
- Create smaller standardized modules to meet the varied demands of RCCs and reduce joint planning and execution complexities.
- Redesign brigades to perform as an integral part of the joint team. This makes them more capable in their basic ground close combat role, able to benefit from other service support and to contribute more to other service partners.

The fundamental transforming idea behind the Army's reorganization is to organize Soldiers into powerful and modular brigade combat beams (BCTs) with dramatically improved C2 systems. This pairing of better combat potential with superior C2 will give the brigades the ability to gather more information faster and more reliably and to fight as a networked team of teams internally and with teammates in the other services. This will give the new maneuver brigades significantly greater combat power than that of contemporary ones.

The principal tactical unit of the modular Army will be the BCTs, which will be made up of battalion-sized and company sized subunits. Brigade based, modular units are rapidly deployable, lethal, responsive, agile, tailorable, and discrete packages of land force combat power.

Today's varying types of divisional and non-divisional BCTs will be reduced to three variants. Two standard BCT designs will replace the task-organized combinations formed inside today's divisions. One variant is a heavy brigade combat team (HBCT), and the other is an infantry BCT. Selected infantry BCTs will be organized along the standard design, but retain the ability to conduct forced entry operations by vertical envelopment (air assault and airborne). Stryker brigade combat teams (SBCT) are the third type of maneuver brigade combat team available to the UEx commander.

These BCTs will be standing combined arms formations, and will include organic battalion-sized maneuver, fires, reconnaissance, and logistics subunits. In contrast to current divisional brigades, the modular force BCTs will be fixed base table of organization and equipment (TOE) units.

With the fielding of BCTs, the Army will shift from a division-based stance to a brigade-based posture. The Army shifts from generating and employing divisions in decisive land operations to providing the joint commander the right mix of BCTs and appropriate C2 as part of an integrated joint operation. Rather than providing some derivative of a division, as the Army does now, the Army will provide a mix of capabilities, controlling headquarters, and an appropriate commander to meet the requirements of the joint force commander, which will be driven by the threat and mission requirements.

Despite their organizational similarity to present maneuver brigades, the transformed modular BCTs are organized to maintain combined arms teamwork more effectively under intense stress. Advanced C2 tools, increased reconnaissance capabilities with improved sensors, and better precision weapons add significantly to the effectiveness of the new brigade combat teams.

These BCTs will magnify the effects of all the elements of combat power—maneuver, firepower, protection, leadership, and information—in new ways. As their fighting systems improve over the next decade, combat units will generate significant increases in combat power and significant advances in the focus, discrimination, and precision of combat effects.

Lethality in combat is determined less by the total number of shooters in an organization than by the number it can bring to bear and the accuracy with which they fire. While the shooters in the brigades' direct and indirect fire systems are familiar (120mm and 25mm cannons; small arms, machine guns, grenade launchers, and anti-tank/anti-material/anti-air missiles; 60mm, 81mm, and 120mm mortars; and 105mm or 155mm howitzers), their effectiveness has been substantially improved through better situational understanding and fire control tools.

To support the new heavy, infantry, and Stryker BCTs; five types of supporting brigades will be organized to provide supporting aviation, artillery fires, sustainment, intelligence, surveillance, and reconnaissance (ISR) and protection. These supporting brigades are organized to perform specific combined arms support functions.

The supporting brigades are flexibly organized to meet mission demands. Each brigade includes a mix of organic and assigned battalions. Each brigade can also be tailored for the specific set of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC) conditions of a major operation or contingency, and can be task organized in size from a brigade-sized element down to platoon-sized or section-sized elements. These supporting brigades provide the means to weight the decisive operation or to tailor BCTs for specific missions.

The Army National Guard will have the same common brigade combat team design as the active Army but will retain a separate Scout group in addition to its heavy, infantry, and Stryker BCTs. The Army Reserve will provide an array of supporting units.

SECTION IV - THE NEW ARMY FORCES

UE_y

The UE_y is the Army theater-level headquarters that directly supports the RCC. The UE_y consolidates most of the supporting functions currently executed by Army corps and Army service component commands (theater Army) into a single operational command echelon. The UE_y will be the primary vehicle for support to the entire region as well as Army, Joint, and multinational forces deployed to a joint operational area (JOA). There will be one UE_y for each RCC, and any sub-unified command designated by the Secretary of Defense.

The UE_y commander performs the service unique functions and tasks of the Army service component commander (ASCC) for that RCC. In major combat operations, the UE_y may become the joint force land component commander (JFLCC) and exercise operational control over tactical forces. It can also provide the headquarters for a joint task force in smaller scale contingencies. The UE_y requires some joint augmentation to function as the JFLCC or joint task force (JTF). The specific organization of each UE_y will be based on the unique requirements of the joint force commander/RCC and the conditions of the theater. Figure Intro-6 shows a general regionally focused UE_y command and control headquarters.

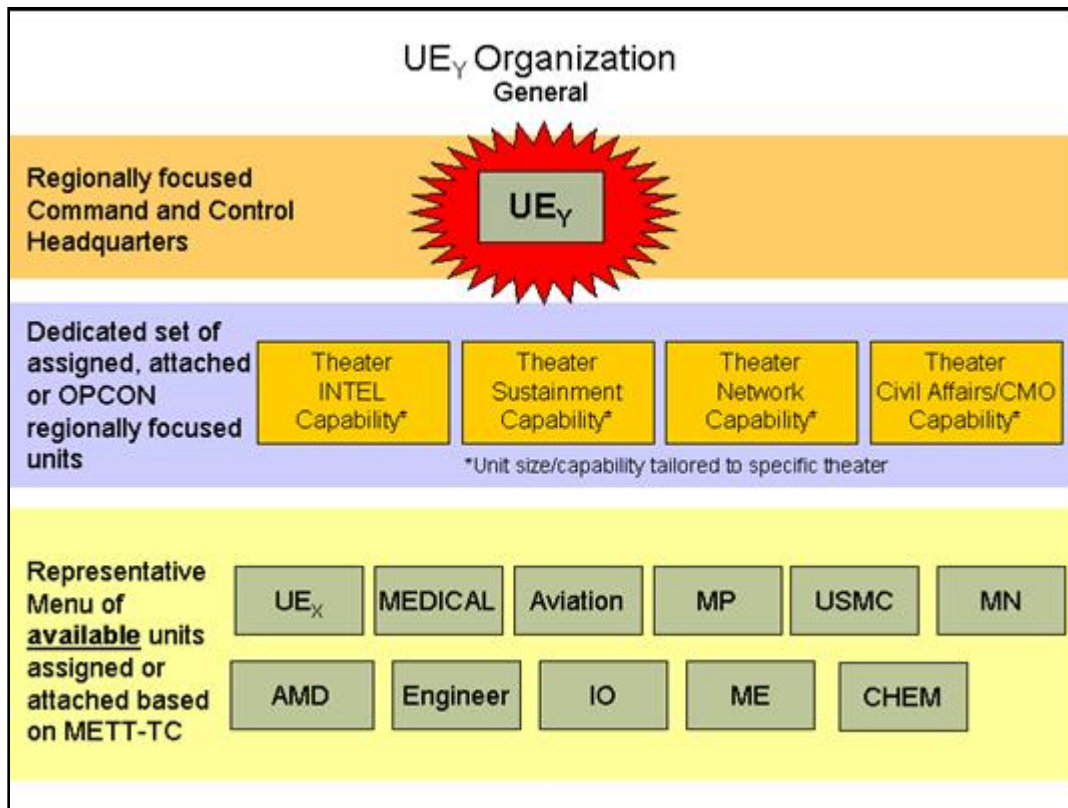


Figure Intro-6. UE_y Organization, General

Four regionally focused commands or brigades will provide a theater base to each UE_y and allow it to support the operations of the UE_x and other joint and multinational forces in the combatant command. These supporting commands and brigades supporting each theater include a theater sustainment command (TSC), a theater network command (TNC), a theater intelligence brigade

(TIB) and a civil affairs brigade. The situation in each theater will dictate the size of the commands, and theater-level brigades that support Army forces in theater.

The UEy receives other commands and brigades as required for execution of campaigns. Typically, these include a medical command, air and missile defense command, theater aviation brigade, engineer brigade(s), military police brigade(s), and one or more tailored UEx. From these forces and based on the assigned mission, the UEy may allocate additional maneuver; fires; aviation; surveillance; maneuver enhancement; sustainment and other functional brigades to the UEx during the conduct of operations.

UEx

The primary tactical war fighting headquarters will be the UEx. The UEx will combine the functions of today's division with the tactical responsibilities of the corps. The primary task of the UEx will be to direct the operations of the subordinate brigades and battalions. In marked contrast to the division, the UEx will not be a fixed formation. The UEx will not have any organic forces beyond the elements that make up the headquarters and its special troop battalion that includes life support and maintenance, a security company, a signal company, and a mobile command group section. Figure Intro-7 depicts a UEx organization.

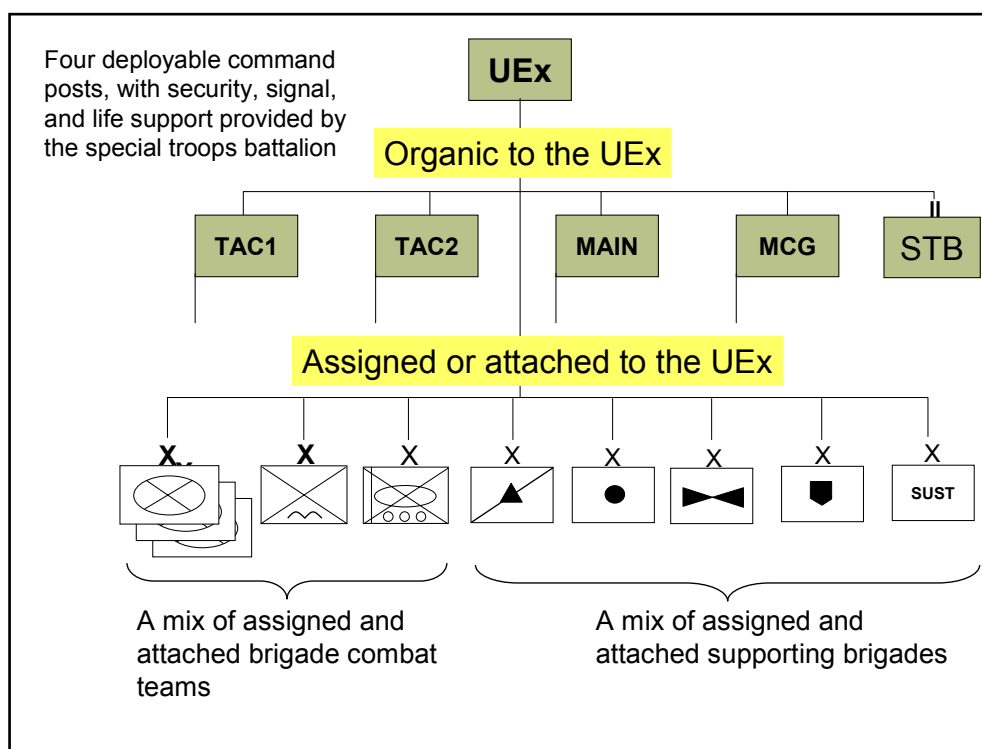


Figure Intro-7. UEx Organization

The UEx will be a completely modular C2 entity designed to exercise C2 over assigned brigades. Fully modular, the UEx headquarters is self-contained and built for today's expeditionary warfare. This contrasts sharply with the current division, which is the largest fixed organization in the Army.

The modular design envisions that the UEx can control a mix of the six basic types of brigade formations—the BCT, the aviation brigade, the battlefield surveillance brigade (BFSB), the maneuver enhancement brigade (ME), the fires brigade, and the sustainment brigade. Since the

UEX has no fixed structure beyond the UEX headquarters, not all of these brigades may be present in an operation. In some operations, the UEX may control more than one of a particular type of brigade. The UEX may also control functional groups, battalions, or even companies, but normally these will be task organized to one of the brigades.

The UEX conducts decisive, shaping, and sustaining operations that translate operational directives into tactical action. The UEX is organized, manned, trained, and equipped to accomplish the following:

- Controls up to six BCTs in major combat operations, but may control more in prolonged stability operations. However, the span of command may decrease to one or two BCTs during forcible entry operations.
- Controls a tailored mix of other warfighting capabilities organized under the five multi-functional supporting brigades. The UEX may also attach or operational control (OPCON) functional brigades to the control of the UEX commander.
- Organizes and distributes C2 assets based on METT-TC. The UEX commander may alternate command posts (CP) between planning and execution, assign them to geographically dispersed operations, or allocate them to divergent types of operations occurring simultaneously (for example offensive and stability operations). The commander may also organize C2 according to major functions such as, Army forces (ARFOR), land component, tactical controlling headquarters, etc., or purpose (decisive, sustaining, and shaping).
- Functions as an ARFOR or JTF/JFLCC headquarters for smaller scale contingencies without additional Army augmentation. The UEX may serve as both the ARFOR and JFLCC simultaneously, although augmentation may be required for extended operations.
- Directs mobile strike and precision strike operations through mission orders to the aviation and fires brigades, respectively.
- Normally operates independently along a line of operation or in an AO during offensive operations.

Each UEX is unique not only for a particular campaign, but for different phases of the campaign. The higher headquarters continually tailors the UEX according to the factors of METT-TC.

While current divisions are concerned solely with tactics, the UEX can function at the operational level of war with little or no augmentation. It can perform as the Army force headquarters (ARFOR) for a small joint task force (JTF) and can function as the combined or joint force land component command (C/JFLCC) with USMC or multinational augmentation. With other service augmentation and special training the UEX may even serve as a joint task force (JTF) headquarters.

In garrison, the UEX coordinating staff is organized into a general staff that includes G1, personnel; G2, intelligence; G3, operations; G4, logistics; G5, plans; G6, command, control, communications and computer operations (C4OPS); and G7, information operations. The UEX headquarters also includes special staff and personal staff for the commander. In contrast to current division/corps headquarters organization, all of the special staff is organic to the UEX headquarters. The headquarters has organic liaison teams. The UEX does not depend on any subordinate brigade to provide elements of the special staff, and it has a security company that can provide security platoons to its mobile elements.

HEAVY BRIGADE COMBAT TEAM DESCRIPTION

The following paragraphs provide a general description of the HBCT's capabilities, organization and C2 relationship to the UEX. The HBCT is more deployable, more versatile and contributes more to the joint team than the previous heavy organizations they replace. Figure Intro-8 shows how the HBCT is organized with its organic battalions.

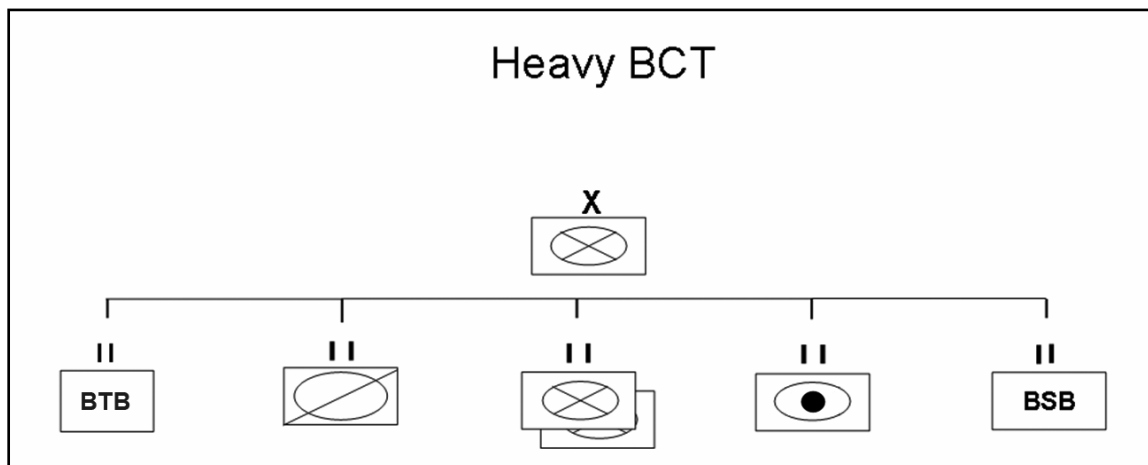


Figure Intro-8. Heavy BCT

The HBCT reduces the complexity of deployment planning and replaces the many variations of the divisional armored and mechanized brigades. It contains the combined arms components normally required to rapidly achieve tactical overmatch in a single formation. Robust enough to fight with or without external support for limited periods, the HBCT can fight “off the ramp” across the full spectrum of operations when tactically loaded.

Compared to prior divisional heavy brigade organizations, the HBCT provides more mission potency for the cargo weight and space. Exploiting higher leader to led ratios, a more stable (and thus experienced) staff, and enhanced C2 systems the HBCT command teams employ the brigade’s potential more effectively. Enhanced and expanded fire and air support elements distributed throughout the organization and greater network connectivity allows maximum use of lethal and suppressive air support.

The HBCT is versatile. While the HBCT is optimized for high tempo offensive operations against conventional and unconventional forces in mixed or open terrain, it is also adept in mixed terrain defense, urban combat, and mobile security operations (screen, guard, and cover). In addition to offensive and defensive operations, the HBCT can conduct stability operations, support operations and support and stability operations.

The new modular HBCTs contribute more to the joint team. They are more effective in their unique role of forcing a decision on enemy leaders in a broader variety of missions and environments, and at a lower cost in supporting resources to the joint force as a whole.

The HBCT’s versatility and ability to make rapid transitions derives from its organic combined arms composition. The HBCT’s balanced combined arms battalions (CAB) need minimal reconfiguration from mission to mission. Engineers and fire support elements are organic to the CABs. The HBCT makes better use of non-organic lethal and suppressive fire support. HBCT organizations are sufficiently robust to maintain full-time, all-around security, for all organic and attached elements. Additionally, there is sufficient organic support to fight and win assigned engagements before external support is required.

To further enhance versatility, the next higher headquarters can modify the mission capabilities of the HBCT, or weight them when they are designated as the main effort by attaching combat support mission modules to the maneuver, reconnaissance, fires or brigade troops battalion (BTB). Because of similarities in the structure of the functions of the infantry, Stryker and heavy BCTs, and because the battalions are combined arms modules, the higher commander can also tailor brigades for specific missions by exchanging battalions. However, the UEx normally avoids detaching organic forces from the BCT, instead varying the size of the AO assigned to the

brigade or the distribution of tactical tasks between brigades. Circumstances may compel the UEx to task organize the subordinate battalions between BCTs, but this is the exception, and not the rule.

THE SUPPORTING BRIGADES

There are five new brigades that support the BCTs and execute shaping and sustaining operations throughout the UEx AO. These brigades include aviation, fires, surveillance, maneuver enhancement, and sustainment.

These five brigades perform the following supporting functions across the UEx AO.

- Each brigade can be tailored for the specific set of METT-TC conditions of a major operation or contingency.
- Each can join or detach themselves from any higher headquarters easily and effectively.
- Each is self-contained and does not provide staff augmentation to the supported headquarters.
- Each has substantial network connectivity and liaison officer (LNO) capability to support another headquarters whether it is army, joint or multinational.
- Each can access and use joint enablers to accomplish its functions.
- Each has the means to reinforce the BCTs for specific missions.

The UEx commander may also determine that a ground maneuver unit or other Joint capabilities should be placed under the operational control of supporting brigade units of action (UA). This decision would be based on the type of operation (offense, defense, stability, or support) as well as METT-TC considerations.

Fires Brigade

The organization of the fires brigade differs from currently fielded corps and division field artillery brigades in its staff design, capacity to employ electronic warfare (EW) units and unmanned aerial vehicles (UAV). The brigade commander performs the duties of the force field artillery commander for the unit to which the fires brigade is assigned (UEy or UEx), providing advice on all aspects of fires and effects employment.

Each fires brigade has an organic missile battalion. Depending on METT-TC, fires brigades are task organized with additional long-range precision missiles, advanced cannon artillery, and counter fire radars. Figure Intro -9 provides the fires brigade mission, shows how it is organized with organic forces, and how it could be task organized with other assigned forces. The fires brigade may receive OPCON of EW assets selected for their ability to engage enemy C2 systems. The fires brigade provides fires on a planned or emergency basis at the direction of the UEx.

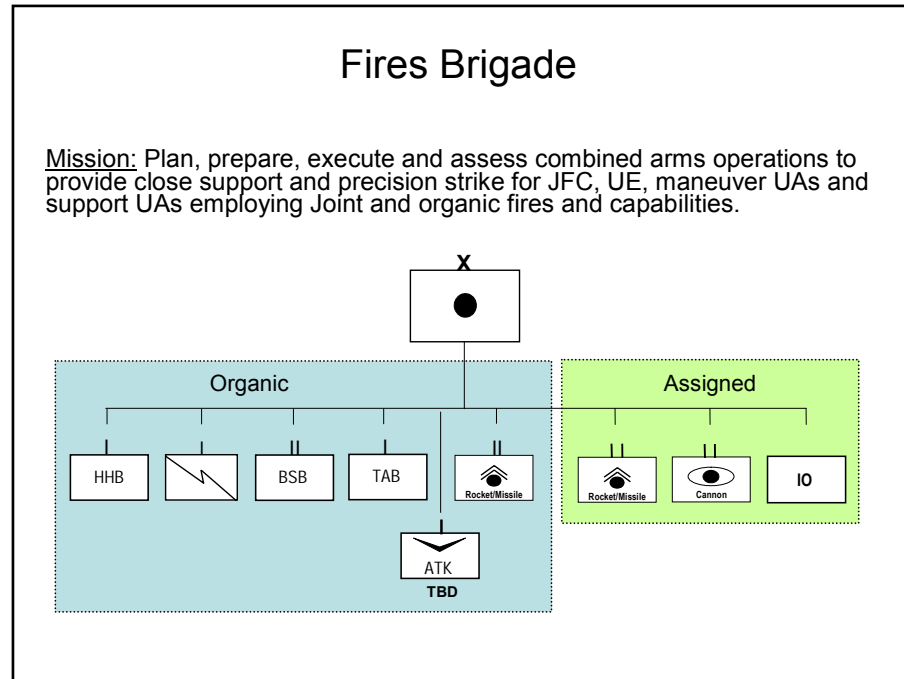


Figure Intro-9. Fires Brigade

The primary task of the fires brigade is to plan, coordinate, and execute precision strike operations within the UEx AO. The conduct of strike operations is predicated on the ability of the strike headquarters to control and synchronize all elements of the strike operation with all available lethal and non-lethal fires to deliver concentrated effects on the target. The C2 capabilities of the fires brigade allow it to plan, prepare, execute, and assess precision strike with operational control of additional ISR and EW capabilities from the other brigades. The UEx sends mission orders to the fires brigade specifying intended effects, additional capabilities under the operational control of the fires brigade, and joint capabilities available for the mission.

The secondary task for the fires brigade is to provide reinforcing fires within the brigade AO. When directed by the UEx, the fires brigade provides additional cannon or missile artillery to support the brigade combat team, or delivers precision fires into the BCT AO as requested by the supported BCT commander.

The fires brigade also provides reactive and proactive counter-strike operations in support of the UEx and BCTs.

Aviation Brigade

The aviation brigade supports the operations of the entire UEx with task organized aviation capabilities. The bulk of Army aviation combat power resides in the multi-functional aviation brigade organized to support the UEx and the combined arms maneuver brigade combat teams. The organization of the aviation brigade combines a variety of battalions—attack, assault, lift, and support—under one command.

The UEx aviation brigade is expansible and tailorable to the mission, and can support multiple brigade combat teams (See Figure Intro-10). Based on METT-TC, the aviation brigade commander task organizes available aviation resources into mission packages that are either controlled by a supported brigade combat team or the aviation brigade.

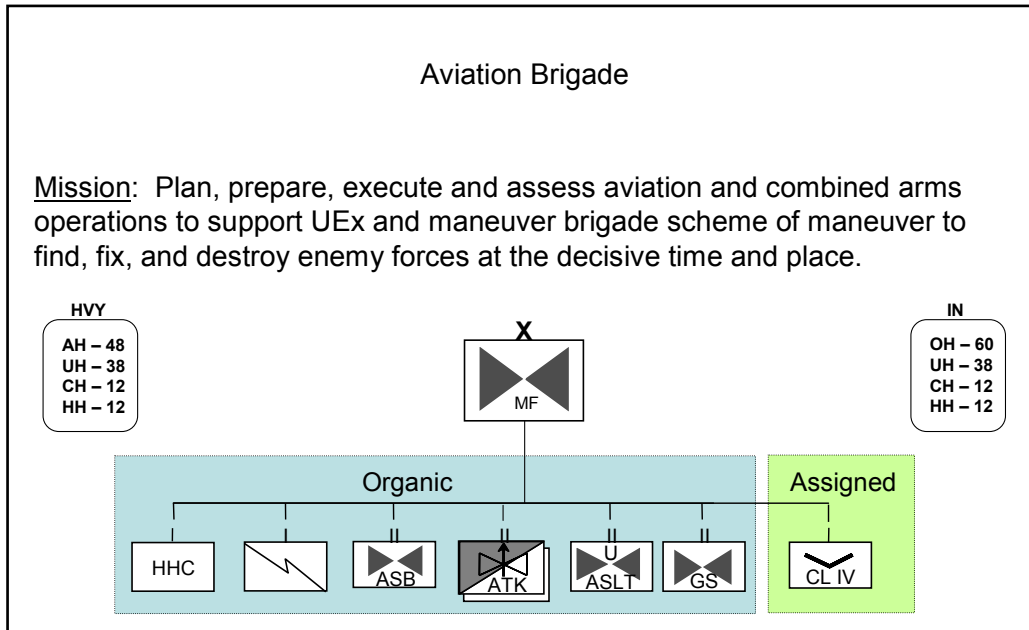


Figure Intro-10. UEx Aviation Brigade

The aviation brigade receives priorities and mission orders from the UEx, to conduct and support reconnaissance, security, mobile strike, vertical maneuver, attack aviation support to close combat, aerial sustainment, and C2 operations.

The aviation brigade plans and conducts mobile strike operations. Mobile strike operations are extended combat operations that capitalize on the ability of attack aviation to maneuver to the full depth of the UEx AO, deliver massed direct fire, and employ precision munitions in support. The UEx executes mobile strikes outside of the BCT areas against targets that are capable of maneuvering to avoid precision strikes.

The aviation brigade executes screening missions for the UEx. The aviation brigade may receive the OPCON of ground maneuver and joint assets and capabilities to carry out these missions. It supports other security operations; including BCTs assigned a screen, guard or cover mission with aviation forces. For guard and cover missions, the aviation brigade provides reconnaissance, attack, and lift assets under the OPCON of BCTs. The aviation brigade also supports area and route security operations conducted by the maneuver enhancement brigade.

Battlefield Surveillance Brigade (BFSB)

The organization of the BFSB consists of an organic military intelligence battalion, brigade troops battalion, and a long-range surveillance detachment (See Figure Intro-11). Other surveillance and reconnaissance units are attached to the BFSB, tailored to specific operations. The tactical function of the BFSB is to develop situational understanding (SU) over unassigned portions of the UEx area of operations and support UEx-level decision processes. The BFSB directs its capabilities to the areas external to the brigade areas. Since the BFSB will inevitably lack sufficient assets to maintain visibility over the entire AO, the brigade commander will develop a BFSB plan for organic and attached assets based on the ISR plan developed by the G3 and G2 of the UEx.

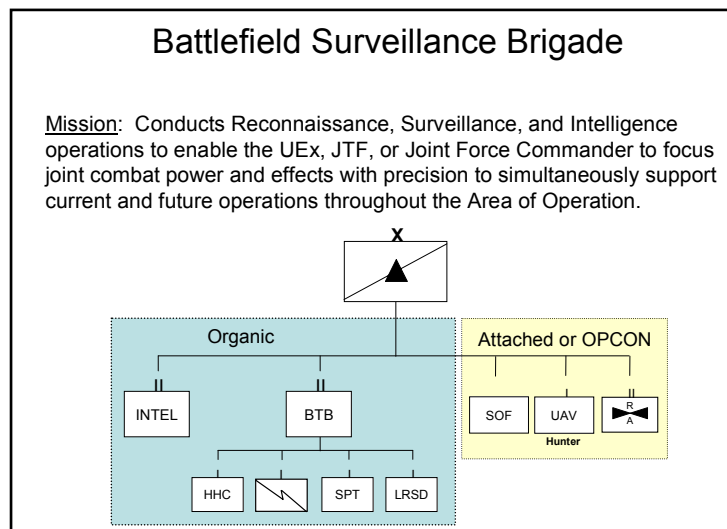


Figure Intro-11. BFSB Brigade

The BFSB is organized to assist the G2 in satisfying the commander's critical information requirements (CCIR), which include priority intelligence requirements (PIR). It becomes the eyes and ears of the UEx within its AO. The UEx commander describes the operation and identifies the PIR. The commander's intent and PIR become mission orders for the BFSB commander. The BFSB commander controls all UEx level surveillance and reconnaissance assets not task organized or organic to another brigade.

The BFSB commander needs wide latitude in order to develop the situation across the UEx AO. The size and scope of the operation will often require the UEx to complement and reinforce the BFSB with additional assets. The UEx also focuses the BFSB through the allocation of brigade AOs. The BFSB has the capability to reinforce the BCTs collection capabilities. When circumstances and orders from the UEx dictate, the BFSB will reinforce brigade intelligence capabilities with additional assets.

Maneuver Enhancement Brigade

The maneuver enhancement brigade (See Figure Intro-12) is designed as a multi-functional headquarters only—it has no organic units beyond a brigade base of headquarters and support units. However, the brigade headquarters includes air and missile defense (AMD), military police (MP), engineer, and chemical, biological, radiological and nuclear (CBRN) functional operations/planning cells. One of its uses is to create a modular, tailorable, scalable protection force for the UEx commander.

Each maneuver enhancement brigade is uniquely tailored for its mission. Typically, the maneuver enhancement brigade includes a mix of construction engineer, CBRN defense, civil affairs, AMD, and MP together with a tactical combat force (TCF).

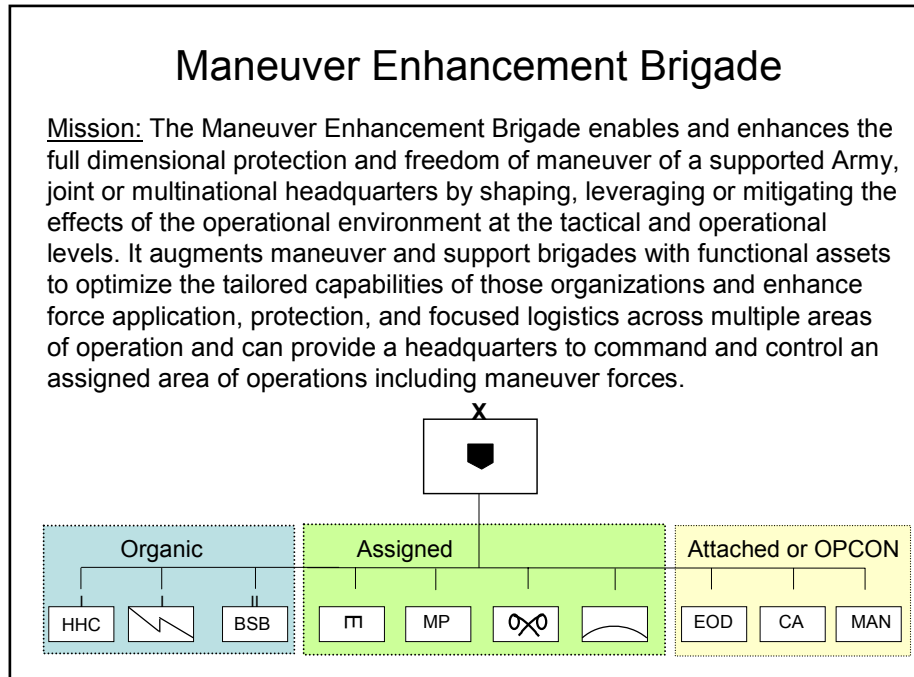


Figure Intro-12. Maneuver Enhancement Brigade

The maneuver enhancement brigade is responsible for protection outside of maneuver brigade combat team AOs. Tailored with MP; ADA; combat engineer; and combined arms battalions, it preserves tactical or operational freedom of action within the UEx area of operations by performing limited offensive; defensive; and stability missions on assigned routes or in a designated rear area. It also plans, prepares, executes, and assesses protection missions for other joint, service, and functional, and multinational headquarters when required.

The maneuver enhancement brigade does not supplant unit self defense responsibilities. Units are still responsible for self-protection against Level I and some Level II threats. The maneuver enhancement brigade complements self defense by focusing on protection across the UEx as a war fighting function, not a piecemeal activity.

The maneuver enhancement brigade may provide tactical combat response forces within an AO, improve and secure lines of communications (LOC), and it may be tasked to organize base security and defense for several base clusters. It is organized and trained to execute selected security missions including route security and key asset or point security. It normally requires augmentation to perform area security operations. It is not organized, trained, or equipped to do screen, guard and cover operations.

Sustainment Brigade

The organization of the sustainment brigade is tailored with multi-functional support battalions, each of which includes a mix of logistical capabilities (See Figure Intro-13). Specialized support units of varying size are task organized based on METT-TC.

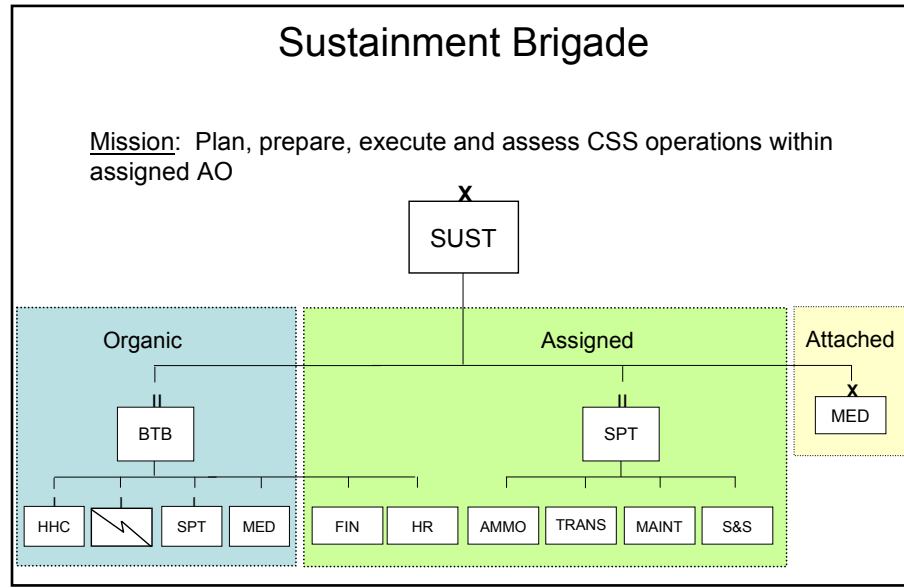


Figure Intro-13. Sustainment Brigade

One or more tactical sustainment brigades move with and support the UEx. If more than one sustainment brigade supports the UEx, the UEx staff coordinates their operations.

The sustainment brigade of the UEx provides distribution-based replenishment to the BCTs task organized under the UEx, and area support to any other unit located within the UEx AO. The sustainment brigade establishes temporary bases within the UEx AO to conduct mission-staging operations (MSO) and to provide replenishment to the BCTs of the UEx.

THE FOCUS OF THIS MANUAL IS THE HBCT

This manual describes how the reconnaissance squadron (RS) optimizes organizational effectiveness while balancing lethality, mobility, and survivability against requirements for rapid strategic deployability. This manual provides emerging tactics and techniques to fully utilize the range of capabilities found within the RS ranging from high intensity operations to support operations and stability operations. The details of the RS organization and capabilities will be provided in the ensuing chapters.

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Chapter 1

The Role of Land Combat Operations

The Army organizes, trains, and equips Heavy Brigade Combat Teams (HBCTs) to fight and win engagements and battles in support of operational and strategic objectives. BCTs (including heavy, infantry, and Stryker) are the Army's standard tactical element and principal formation for conducting sustained combined arms and close combat land operations. America's HBCTs serve as a deterrent to armed conflict and are capable of deploying worldwide and conducting full spectrum operations (FSO). This interim FM, FMI 3-90.6, *The Heavy Brigade Combat Team*, highlights changes and adaptations to FM 3-90.3, *The Mounted Brigade Combat Team*, and addresses the tactical employment and operation of the modular HBCT. Brigade commanders and staff must fully understand the capstone manual FM 3-0, *Operations*, as well as FM 3-90, *Tactics*. FM 3-0 establishes the Army's capstone doctrine for full spectrum operations with warfighting as the Army's primary focus. FM 3-0 is built on global strategic responsiveness for prompt, sustained Army force operations on land. It provides overarching doctrinal direction for conducting full spectrum operations detailed in this and other Army manuals. FM 3-90 introduces the basic concepts and control measures associated with the art of tactics. It cannot be read in isolation and must be used with FM 3-0; the concepts in FM 3-07, *Stability Operations and Support Operations*; and the plan, prepare, execute, and assess cycle described in FM 6-0, *Mission Command: Command and Control of Army Forces*. In turn, the concepts of FM 6-0 must be related to the military decision-making process (MDMP) described in FM 5-0, *Army Planning and Orders Production*. These publications provide the framework for understanding this interim manual.

SECTION I – BRIGADE MISSION-ESSENTIAL TASKS

1-1. HBCTs develop a mission-essential tasks list (METL) based on their war plans and external directives as described in FM 7-15 (FM 25-10). Mission-essential tasks are the operational expression of the brigade's core competencies. They describe what well-trained, superbly led, and well-equipped Soldiers do to support the Army's mission-essential tasks of shaping the security environment, responding promptly to crisis, dominating land operations, and providing support to civil authorities (as described in FM 3-0).

SHAPE THE SECURITY ENVIRONMENT

1-2. The National Security Strategy (NSS) and National Military Strategy (NMS) establish an imperative for regional and worldwide engagement. The United States will remain

politically and militarily engaged in the world and will maintain military superiority over potential adversaries. Engagement elevates to mission status the role of the US Armed Forces in shaping an international environment that promotes and protects US national security interests, optimally before the threat of conflict arises. Forward basing, forward presence, and force projection enhance the ability of Army forces to engage other nations—their people, governments, and militaries.

1-3. HBCTs shape the security environment by providing an overwhelming presence to potential adversaries. This overwhelming presence allows these brigades the ability to conduct full spectrum operations regardless of the conditions. Due to their structure and the ability to tailor the organization to the operational requirements, they are uniquely suited to counter forces hostile to the United States and its allies. HBCTs undertake peacetime military engagement (PME) missions to reassure foreign governments, build trust and confidence, promote regional stability, reduce potential conflicts and threats, and deter aggression and coercion.

RESPOND PROMPTLY TO CRISIS

1-4. The Army's capability to rapidly project HBCTs to any environment provides military leaders the ability to increase force presence, to increase the magnitude of the enemy's dilemma, and to act decisively within the time specified by the regional combatant commander (RCC) or joint force commander (JFC). HBCTs provide superior tactical units that are more responsive and provide greater mission potency at no increase in the logistical burden. The HBCT trains to rapidly deploy personnel and equipment using rail, sealift, and airlift from home stations to a theater of operations or rapidly deploy personnel by airlift and draw equipment from pre-positioned stocks, enabling the HBCT to quickly maneuver throughout the depth of the area of operations (AO).

DOMINATE LAND OPERATIONS

1-5. The threat or use of Army heavy forces to close with and destroy enemy forces through maneuver and precision direct and indirect fires is the ultimate means of imposing our will on the enemy and achieving a decisive outcome. HBCTs provide the commander the ability to seize enemy territory, destroy the enemy's armed forces, and eliminate his means of civil population control. HBCTs conduct sustained and large-scale actions in full spectrum operations throughout the depth of the AO. Sustained land operations provide for long-term establishment of conditions required by the nation to support our national objectives. Faced by an enemy with the ability to conduct sustained resistance, the HBCT continuously creates conditions throughout the AO that lead to the enemy's ultimate defeat. Enhanced linkages to joint fires and intelligence make the HBCT more lethal and more rapidly integrated into the theater joint force. Robust organic combat support (CS) and combat service support (CSS) of the HBCT augmented (when required) from the UEx supporting brigades make sustained land operations possible.

PROVIDE SUPPORT TO CIVIL AUTHORITIES

1-6. HBCTs must function in the full spectrum of operations. They must adapt and tailor their warfighting capabilities to complement and support civil authorities and agencies at home and abroad. In times of need, HBCTs provide support and expertise to reinforce or fill critical requirements beyond the immediate capabilities of civil authorities and agencies. Prompt Army assistance to civil authorities is often a critical and decisive element in crisis resolution and disaster relief.

SECTION II – OPERATIONAL ENVIRONMENT

1-7. HBCTs operate in an environment consisting of six dimensions. Each affects how the brigade combines, sequences, and conducts military operations. Commanders tailor forces, employ diverse capabilities, and support different missions to succeed in this environment.

THREAT DIMENSION

1-8. Multiple threats to US national interests exist. Some threats are direct, such as a cross border attack; others are indirect, such as coercion. Some regional powers aspire to dominate their neighbors and have the required conventional force capabilities to do so. Such situations may threaten US vital interests, US allies, or regional stability. Transnational groups are capable of conducting a range of activities that threaten US interests and citizens at home and abroad. Extremism, ethnic disputes, religious rivalries, and human disasters contribute to destabilizing governments and regions through extensive refugee migrations. Collectively, these transnational threats may adversely affect US interests and may result in military involvement (as further described in FM 3-0).

1-9. In the foreseeable future, most nations will modernize and maintain a military capability for countering regional threats or seeking opportunities to further their national goals. Military change incorporates advances in information technology, ballistic and cruise missile capabilities, and weapons of mass destruction (WMD). Potential threats vary from heavy conventional units to adaptive, asymmetric forces structured for local and regional use. Adversaries will seek and obtain technologies that challenge US strengths in information technology, navigation, night vision systems, and precision targeting and strike capabilities. The proliferation of WMD and long-range delivery systems will enable adversaries to threaten US forces at greater ranges with increased lethality and precision.

1-10. Adversaries will develop their warfighting doctrine to consider perceived US strengths and vulnerabilities. They will try to prevent projection of US forces and control the nature and tempo of US actions through asymmetric operations and adaptive forces. They will attempt to counter US air operations and neutralize US technological advantages, such as precision strike capabilities. Adversaries will adapt to more nonlinear, simultaneous operations conducted throughout the AO. They will use conventional and unconventional means to destroy our national will and the capability to wage war. The BCT must be capable of decisive action against an adaptive learning opponent greatly empowered by thoroughly mastering his battlespace, environment, and technology and understanding US military capabilities. Future threats are informed by patterns of operation and tactical methods. Over the last decades, the United States has been viewed as predictable, casualty adverse, unwilling to engage in close combat, and reliant on precision technology—applied from a distance—for victory. At the strategic level, the future enemy will focus on attacking the US will using all elements available—diplomatic, informational, military, and economic (DIME)—to preclude US military engagement in the region.

1-11. Adversaries will also seek to shape the conditions to their advantage by changing the nature of the conflict or employing capabilities that they believe will be difficult for US forces to counter. They will use complex terrain, urban environments, and force dispersal-survival methods to offset US advantages. Faced with the realities of HBCT capabilities overmatch, the threat will seek to conduct tactical actions that will have operational or strategic effects. The enemy will have the home court advantage in that he understands his battlespace. He will have access to commercially produced data, information, and knowledge that he can use for intelligence; he will have studied his enemy; and he will have continuous updates from a globally distributed information system. This enemy will focus his efforts on attacking HBCT command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) through multiple means and will seek to cloud situational

understanding (SU) through information operations (IO), including computer network attack and defense, electronic warfare (EW), propaganda, deception, and destructive command and control (C2) attacks. The enemy will work to use these advantages to deny the SU crucial to HBCT success.

1-12. Our adversaries will continue to seek every opportunity (both foreign and domestic) to gain an advantage over US and multinational forces. When countered, they will adapt to the changing conditions and pursue all available options to avoid destruction or defeat. This environment and wide array of threats present significant challenges. The enemy's offensive tactical actions will be opportunistic. These tactics will be built around strikes involving rapid massing of forces and effects to quickly damage, degrade, or destroy our forces and then dispersing with equal speed. Surprise will be the centerpiece of these tactical designs. The enemy will focus on vulnerable and key C4ISR systems and associated linkages. This opponent will routinely attack elements from team to even brigade, when and where the opportunity presents itself—key will be the right combination of terrain, adverse weather, and our own tactical and operational predictability in setting the conditions for these actions.

1-13. Combat will likely be continuous. The HBCT will face enemy units operating in nonlinear fashion that will attack from the front, rear, flanks, above, and below. They will disperse to avoid precision strikes from air and missile capabilities. The enemy will operate in complex and urban terrain until he can set the conditions for decisive attack. Future threats will seek battle in complex and urban terrain as a way of offsetting HBCT technological advantages. He will employ camouflage, cover, concealment, dispersion, and deception (C3D2) to reinforce defenses; create opportunities for attack; and conceal positions and intent to frustrate HBCT information superiority efforts.

1-14. Enemy forces will mask their own high-value targets sets by terrain and deliberately mix with local populations to avoid detection and to facilitate close attack and ambushes. Potential target sets will be fleeting; movement will be executed as small mounted elements or in dismounted fashion over a sequence of short distances. Movements will be masked among noncombatants to further complicate our targeting abilities. Finally, the enemy will employ hugging tactics to present danger-close fires and the risk of civilian casualties. The enemy will attempt to draw the HBCT into close combat situations and attack with a combination of older, but still lethal, technology and state-of-the-art high-tech weapons. The enemy will use precision weapons purchased on the open market or will employ locally developed expedients or adaptations to destroy or neutralize HBCT systems. By attacking our systems and degrading our capabilities, he will attempt to create opportunities to mass and attack and then disperse quickly. In selected instances, the enemy will have the ability to employ weapons of mass destruction/effects. He will seek to create conditions that provided him overmatch in every way—technical, physical, and moral. To counter such threats, HBCTs will be called on to defeat a ruthless, technologically sophisticated, and lethal adversary while simultaneously protecting noncombatants and the infrastructure on which they depend.

IMPLICATIONS FOR THE HBCT

1-15. Weather and terrain can be extreme and widely varied; therefore, the HBCT must be dominant across all varieties of ground and climate. The spread of urban environments and mix of civilians, paramilitaries, insurgents, and others in close physical proximity and often in cooperation with formed military forces will challenge all aspects of operations at the HBCT level. Opposing forces will be dispersed, camouflaged, and difficult to locate. ISR efforts must, therefore, be multidisciplined and capable of discerning enemy composition, disposition, and intent. ISR efforts must also be able to discriminate and see through deception. These adaptive adversaries operate with unparalleled lethality and mobility in

close terrain. To defeat them, HBCT sensor-shooter links must be informed and near instantaneous. Within the integrating framework of ISR efforts, the HBCT uses focused intelligence preparation of the battlefield (IPB), indications and warnings, targeting, battle damage assessment (BDA), situational development, and force protection actions to develop and maintain situational understanding and cut through battlefield clutter. Enhanced command, control, communications, and computers (C4); access to joint intelligence; and greater reconnaissance allow the HBCT to understand the enemy and set conditions for success.

- Adaptive adversaries will seek to modify their operations to create false battlefield presentations and reduce signatures through deliberate and expedient means to frustrate IPB and deceive and show the HBCT exactly what it expects to see.
- The enemy will intentionally complicate indications and warnings—the process of detecting and assessing threats that fundamentally alter the commander’s selected course of action (COA). Adversaries will position decoys and deception minefields in locations where the HBCT expects to see them while emplacing real ones where they are not anticipated, making indications and warnings complicated and difficult.
- Force protection at the HBCT level will be made difficult by complex terrain where opponents can close undetected with HBCT forces, often employing low-signature weapons. This, combined with myriad commercially available deception measures, deliberately raises the level of ambiguity with the goal of slowing the pace of HBCT maneuver, thereby making it still more vulnerable.
- Enemies will seek to complicate HBCT targeting by hugging (closing distances to neutralize standoff precision fires) HBCT forces or through shielding of forces in cities, among civilian populations, or within landmarks and social or religious structures.
- Presence of niche high-technology systems in enemy hands will also make discerning signatures of high-payoff systems more difficult, further confounding the HBCT’s targeting efforts. Differentiating valid and invalid targets will consume time and impact ISR capabilities through deception and dispersion.
- Battle effects will be difficult to determine due to dispersion and signature reduction efforts. The enemy will also attempt to mask the impact of effects through the same deception and denial techniques used against targeting. HBCTs routinely operate across a dispersed, variable, and highly lethal environment. To survive and win, the HBCT must, therefore, see first—enabled by enhanced organic ISR capabilities and improved access to UEx, joint, and national ISR before and during entry and decisive operations. The HBCT, augmented by UEx and UEy air and missile defense (AMD), must ensure the enemy sees last by destroying enemy unmanned aerial vehicles beyond standoff and conducting an aggressive counter-reconnaissance, reconnaissance, surveillance, and target acquisition (RSTA) effort. At the same time, the fire control center (FCC) reliance on advanced sensors, sensor fusion/processing, and rapid information movement will provide primary focus for threat forces working counter across a range of missions and operational environments.
- Our adversaries’ goal is to defeat the HBCT by confounding its ability to achieve and maintain superior situational understanding. Current and future operational environments place mid-grade and junior leaders in complex situations with international, informational, and political implications where their tactical actions have operational and strategic impact. These leaders must effectively recognize and solve challenging problems in these difficult circumstances. The unparalleled visibility and reach of both sensors and shooters on the worldwide arms markets mean that HBCT subunits must be capable of providing overwatch in mutual

support of moving formations and performing immediate action at ranges beyond line of sight (BLOS). The HBCT must also be prepared to fight opponents similarly equipped and trained on their own ground. The variety of difficult terrain in the future operational environment (OE), along with adverse weather and the lethal nature of adaptive learning opponents, often equipped with state-of-the-art equipment, operating with home ground advantage, means that the HBCT must achieve lethality, survivability, and information overmatch.

POLITICAL DIMENSION

1-16. Successful military operations require commanders to have a clear sense of strategic policy goals and objectives. They must understand how the use of military force fits into the National Security Strategy and the desired military conditions required to meet policy objectives. In addition, commanders must articulate this understanding in a clear, concise way to the US and international media. Each political decision during the conduct of operations has strategic, operational, and tactical implications. Likewise, each strategic, operational, and tactical action may directly or indirectly impact the political dimension.

UNIFIED ACTION DIMENSION

1-17. The US National Military Strategy calls for Army forces to act as part of a fully interoperable and integrated joint force. Combatant commanders synchronize air, land, sea, space, and special operations forces (SOF) to accomplish their mission. HBCTs can expect to operate in a unified command structure both in a major combat operation (MCO) and more commonly in a small-scale contingency (SSC). The HBCT may work with multinational and interagency partners to accomplish the full spectrum of missions. HBCTs committed to SSCs can expect to protect American lives and interests, support political initiatives, facilitate diplomacy, promote fundamental ideals, and disrupt illegal activities. Close coordination is the foundation of successful unified action. The HBCT can expect to operate within the Army force (ARFOR), joint task force (JTF) and/or UEx structures.

Land Combat Operations Dimension

1-18. Land combat continues to be the salient feature of combat and is the BCT's primary function. Land combat usually involves destroying or defeating enemy forces or taking land objectives that reduce the enemy's willingness to fight. Four characteristics distinguish land combat:

- **Scope.** Land combat involves direct and indirect combat with an enemy throughout the depth of an operational area. Forces conduct simultaneous and sequential operations in contiguous and noncontiguous AOs. Commanders maneuver forces to seize and retain key and decisive terrain. They use maneuver, fires, and other elements of combat power to defeat or destroy enemy forces.
- **Duration.** Land combat is repetitive and continuous. This involves rendering an enemy incapable or unwilling to conduct further action. It may require destroying him.
- **Terrain.** Land combat takes place among a complex variety of natural and manmade features. The complexity of the ground environment contrasts significantly with the relative transparency of air, sea, and space. Plans for land combat must account for the visibility and clutter provided by the terrain and the effects of weather and climate.
- **Permanence.** Land combat frequently requires seizing or securing terrain. With control of terrain comes control of populations and productive capacity. Thus, land combat makes permanent the temporary effects of other operations.

Information Dimension

1-19. Information superiority provides commanders with accurate, timely information that enables them to make superior decisions and act faster than their adversaries. Information superiority is derived from ISR, information management (IM), and information operations. It provides one common framework on how to plan, task, and control assets, how and where to report information, and how to use information. The information environment also includes information derived from nongovernmental individuals and organizations such as the media, which produce and disseminate information that affects public opinion that can alter the conduct of and perceived legitimacy of military operations. The end result is the HBCT's ability to integrate joint effects to mission success.

1-20. Information operations are the actions taken to enable, enhance, and protect the friendly force's ability to collect, process, and act on information to achieve an advantage over enemy forces. A successful IO program will affect our enemy's audience's decision-making processes, information and information systems, while defending our friendly decision-making processes, information, and information systems.

1-21. Units conduct IO across the full range of military operations from operations in garrison, through deployment to combat operations, and continuing through redeployment upon mission completion. This is done by integrating offensive and defensive information operations. The types of IO are offensive information operations and defensive information operations (see Figure 1-1). These tasks provide the commanders an increased effectiveness for their forces. IO provide the essential tools for protecting their organizations and systems. The overall force objectives are linked with higher headquarters objectives.

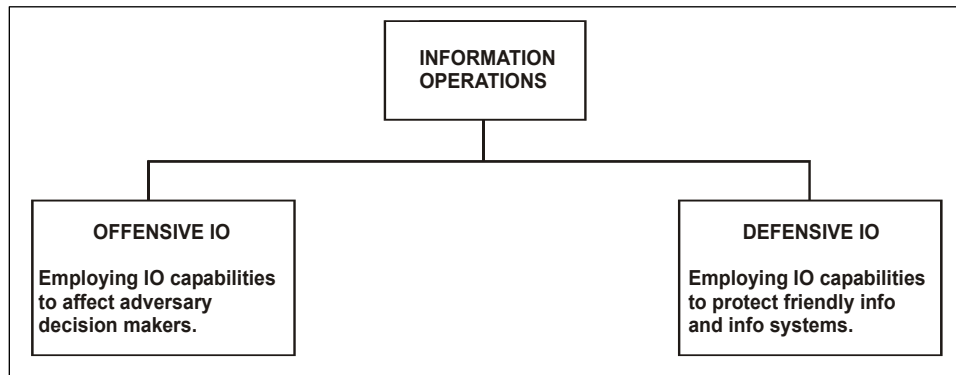


Figure 1-1. Information Operations

TECHNOLOGICAL DIMENSION

1-22. Technology enhances leader, unit, and soldier performance and affects how Army forces plan, prepare, and execute full spectrum operations in peace, conflict, and war. Technology has significantly increased our ability to conduct ISR operations. It greatly enhances the ability to conduct battle command through modern telecommunications and microprocessing. Munitions are increasingly lethal, and target acquisition systems are more precise. The proliferation of advanced technology systems requires the commander to integrate the capabilities of highly modernized organizations and less-modernized and multinational units. The HBCT is equipped with the Army Battle Command System (ABCS) suite that enables the HBCT to maximize command and control and information management of the HBCT across the full spectrum of operations. The commander can influence the action from anywhere on the battlefield within the HBCT battlespace. Linked with higher employing headquarters, the HBCT can conduct analysis and fusion of joint information and

multidisciplined intelligence in a collaborative environment. Commanders must also realize, however, that they do not have a monopoly on advanced technology. Even adversaries lacking any research and development programs can purchase sophisticated systems in the global marketplace and gain selected parity or superiority to US systems.

1-23. Adversaries will seek niche and off-the-shelf technologies and advanced weapon systems, enabling them to selectively improve their capabilities and oppose ours, often in asymmetric ways. They will seek advanced communications and signature reduction technologies to better coordinate their activities and frustrate HBCT target acquisition efforts. They will use technology-enhanced weapons (unmanned aerial vehicles (UAVs), tactical ballistic missiles (TBMs), etc.) in an antiaccess strategy. Asymmetric air and missile threats with increased precision and improved TBMs will enhance an antiaccess strategy. HBCT forces in combat will face an enemy with increased precision and ranges, advanced warheads of larger or smaller warheads, more lethal caliber, active and passive protection systems, improved signature management capabilities, directed-energy weapons, and night-vision capabilities. These capabilities are readily available on today's market.

FULL SPECTRUM OPERATIONS

1-24. HBCTs are trained and equipped to conduct full spectrum operations. Brigade commanders may combine different types of operations simultaneously and sequentially to accomplish missions in war and military operations other than war (MOOTW). The Army's HBCTs are optimized for major combat operations but retain the ability to conduct small scale contingencies and peacetime military engagements.

1-25. Full spectrum operations include offensive and defensive operations, stability operations, and support operations. Missions may require brigades to conduct or be prepared to conduct any combination of these primary operations:

- **Offensive.** Offensive operations aim at destroying or defeating an enemy. Their purpose is to impose US will on the enemy for decisive victory.
- **Defensive.** Defensive operations defeat an enemy attack, buy time, economize forces, or develop conditions favorable for offensive operations. Defensive operations alone normally cannot achieve a decision. Their purpose is to create conditions for a counteroffensive that regains the initiative.
- **Stability.** Stability operations promote and protect US national interests by influencing the diplomatic, civil, and military environments. Regional security is supported by a balanced approach that enhances regional stability and economic prosperity simultaneously. Army force presence promotes a stable environment.
- **Support.** Support operations employ Army forces to assist civil authorities, foreign or domestic, as they prepare for or respond to crises and relieve suffering. Domestically, Army forces respond only when directed by the Secretary of Defense or the President. Army forces operate under the lead Federal agency and comply with provisions of US law, including the Posse Comitatus Act and the Stafford Act.

1-26. HBCTs normally focus on one type of operation at a time and transition from one type of operation to another as the strategic and operational requirements change. It is possible that elements of the brigade could conduct one type of operation while the remainder of the brigade conducts another. For example, one task force may conduct an offensive spoiling attack on enemy forces while the rest of the brigade conducts defensive operations to protect a seaport of debarkation (SPOD) while its UEx arrives in theater. It is also possible to conduct offensive operations simultaneously with stability operations. Within the context of UEx operations, BCTs may execute different tasks to support the commander's intent.

SECTION III – OPERATIONAL FRAMEWORK

1-27. The operational framework consists of the arrangements of friendly forces and resources in time, space, and purpose with respect to each other and the enemy or situation. Commanders design an operational framework to accomplish their mission by defining and arranging three components—the AO, battlespace, and battlefield organization. Commanders use the operational framework to focus combat power.

AREA OF OPERATIONS (AO)

1-28. An HBCT's AO is the geographical area, including the airspace above, assigned by a higher commander, in which the brigade commander has responsibility and the authority to conduct military operations. AOs should allow the commander to employ organic, assigned, and supporting systems to the limit of their capabilities. The brigade commander normally designates AOs for subordinate units. Commanders use control measures to describe AOs and design them to fit the situation and take advantage of the units' capabilities. Commanders specify the minimum control measures necessary to focus combat power, delineate responsibilities, assign geographic responsibility, and promote unified action. At a minimum, control measures include boundaries on all sides of the AO.

1-29. Commanders typically subdivide some or all of the assigned AO by assigning subordinate unit areas. These subordinate AOs may be contiguous or noncontiguous (see Figure 1-2). When friendly forces are contiguous, a boundary separates them. When friendly forces are noncontiguous, the concept of operation links the elements of the force, but the AOs do not share a boundary. The intervening area between noncontiguous AOs remains the responsibility of the higher headquarters.

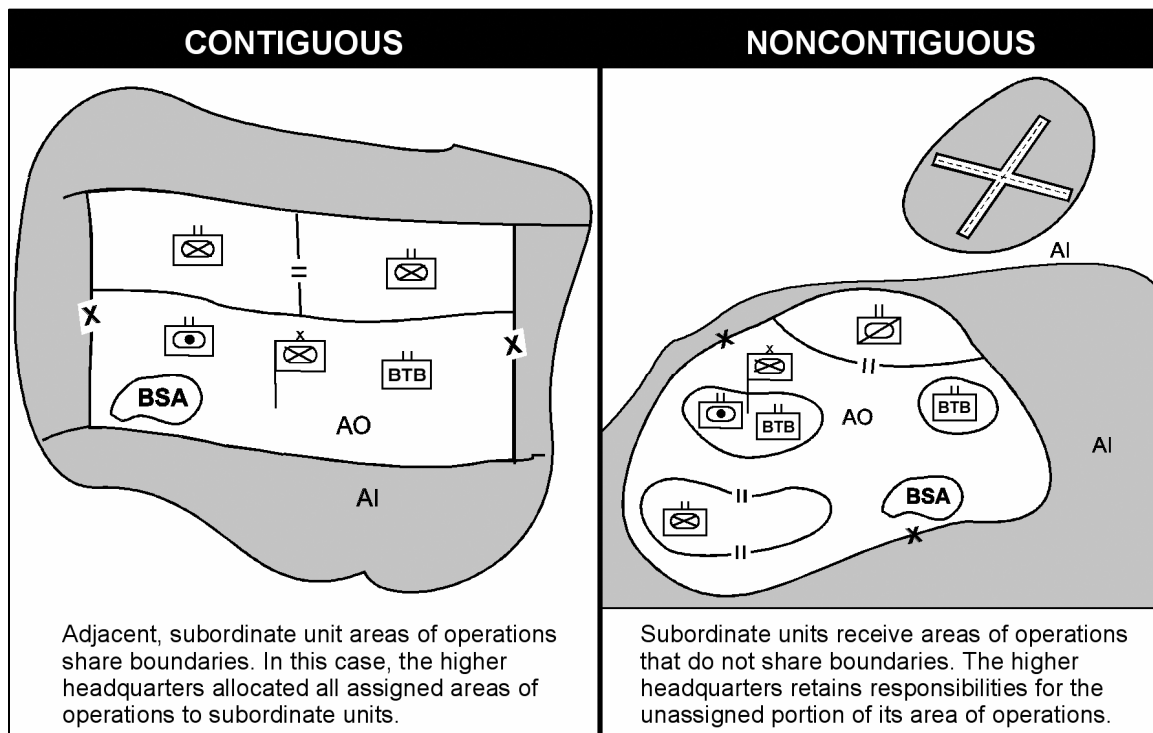


Figure 1-2. Contiguous versus Noncontiguous

AREA OF INTEREST (AI)

1-30. The HBCT's area of interest (AI) is a geographical representation of the area from which information and intelligence are required to execute successful tactical operations and to plan for future operations. It includes any threat forces or characteristics of the battlefield environment that could significantly influence accomplishment of the command's mission. A higher commander does not assign the AI. The brigade commander and his staff develop it to help visualize the battlefield and determine information requirements.

BATTLESPACE

1-31. Battlespace is the environment, factors, and conditions that must be understood to successfully apply combat power, protect the force, and complete the mission. This includes land, air, sea, space, enemy and friendly forces, facilities, weather, terrain, the electromagnetic spectrum, and information environment within the AO and AI.

1-32. Battlespace is conceptual—a higher commander does not assign it. Commanders determine their battlespace based on their concept of operations. Commanders use their experience, professional knowledge, and understanding of the situation to visualize and change their battlespace as current operations transition to future operations. Battlespace visualization begins with a picture of the ground and successively layers enemy, friendly and environment over terrain visualization. Battlespace is not synonymous with AO. Commanders visualize their battlespace to analyze all the factors that may impact on current and future operations, even if they can only directly affect those factors inside their AO. By defining his battlespace and, in particular, his AI, the commander can focus his intelligence and intelligence operations.

BATTLEFIELD ORGANIZATION

1-33. Commanders visualize their battlespace and determine how to arrange their forces. Battlefield organization is the arrangement of subordinate forces according to purpose, time, and space to accomplish a mission. The purpose-based framework centers on decisive, shaping, and sustaining operations. Purpose unifies all elements of the battlefield organization by providing the common focus for all actions. However, forces act in time and space to accomplish a purpose.

1-34. Brigade commanders organize forces according to purpose by determining whether each unit's operation will be decisive, shaping, or sustaining. These decisions form the basis of the concept of operations. Commanders also synchronize operations in time and space. When circumstances require a spatial reference between friendly and enemy forces, commanders may describe them in terms of deep, close, and rear areas. These spatial categories are especially useful in combat operations that are generally contiguous, linear, and feature a clearly defined enemy force.

Decisive Operations

1-35. Decisive operations directly achieve the mission and intent of the higher headquarters. Decisive operations conclusively determine the outcome of battles and engagements. There is only one decisive operation for any phase of an operation for any given echelon. The decisive operation may include multiple actions conducted simultaneously throughout the depth of the AO. Commanders weigh the decisive operation while economizing on the effort allocated to shaping operations.

1-36. In the offense and defense, decisive operations normally focus on maneuver, ISR, and effects. Conversely, logistics may be decisive during the mobilization and deployment phases

of an operation or in support operations, particularly if the mission is humanitarian in nature.

1-37. A reserve is a portion of a body of troops that is kept to the rear or withheld from action at the beginning of an engagement to be available for a decisive movement (FM 1-02, *Operational Terms and Graphics*). Reserves shape through their placement within the AO while planning for and preparing to conduct operations until committed. When committed, they either become or reinforce the decisive operation. Commanders can use reserves to influence circumstances or exploit opportunities. When commanders anticipate uncertainty, they hold a greater portion of the force in reserve, posturing the force to seize and maintain the initiative as a situation develops. The HBCT will often be presented with a dilemma when establishing a reserve force. During mission analysis, the HBCT commander must assess his troops available and the enemy strength and capabilities. On occasion, the two-manuever battalion organization will cause the commander to either seek augmentation from the UEx (aviation, for example), request a change in area of responsibility (AOR), recommend changes in the scope of assigned tasks, or utilize a reserve from a subordinate organization. The commander and staff should consider all available forces and capabilities, including effects and ISR, which can mitigate the risk of unexpected developments. To sustain momentum and maintain the initiative, the UEx commander may consider employing an additional BCT as a supporting effort, with the UEx as the commanding headquarters for the operation. Reserves deploy and reposition as necessary to ensure their protection, availability, and prompt reaction (see Chapters 5 and 6).

Shaping Operations

1-38. The enhanced organic HBCT staff and access to joint and other external assets allow the HBCT commander to better integrate all resources to shape the battlefield and create the conditions for mission success. Shaping operations create and preserve the conditions for the success of the decisive operation. Shaping operations include lethal and nonlethal activities conducted throughout the AO. They support the decisive operation by affecting the enemy's capabilities and forces or influencing the opposing commander's decisions. Shaping operations use the full range of military power to neutralize or reduce enemy capabilities. They may occur simultaneously with, before, or after initiation of the decisive operation. They may involve any combination of forces and occur throughout the depth of the AO. Some shaping operations, especially those that occur simultaneously with the decisive operation, are economy-of-force actions. If the force available does not permit simultaneous decisive and shaping operations, the commander sequences shaping operations around the decisive operation. A shaping operation may become the decisive operation if circumstances or opportunity demand. In that case, commanders weigh the new decisive operations at the expense of other shaping operations. The concept of the operation clearly defines how shaping operations support the decisive operation.

1-39. Security operations are an important aspect of shaping operations. Security enables the decisive operation of the next higher headquarters. Security protects the force and provides time for friendly forces to react to enemy or hostile activities. It also blinds the enemy's attempts to see friendly forces and protects friendly force enemy observation and fires.

Sustaining Operations

1-40. The purpose of sustaining operations is the generation and maintenance of combat power. Sustaining operations are operations at any echelon that enable shaping and decisive operations by providing CSS, rear area and base security, movement control, terrain management, and infrastructure development. Sustaining operations include the following elements:

- Sustainment generates and sustains combat power. While balancing the necessity of security, sustainment is the provision of essential capabilities, functions, activities, and tasks necessary to sustain all elements of the operating forces in theater. Sustainment encompasses those activities at all levels of war that generate and maintain forces on the battlefield.
- Rear area and base security include measures taken by a military unit, an activity, or an installation to defend and protect itself against all acts that may impair its effectiveness. It has four components: intelligence, base and base cluster defense, response force operations, and combined arms tactical combat force (TCF) operations (see FM 3-93 (FM 100-7)).
- Movement control includes the planning, routing, scheduling, controlling, and security of the movement of personnel and materiel into, within, and out of the AO. Maintaining movement control, keeping lines of communication (LOCs) open, and obtaining host nation support are critical requirements in preserving freedom of movement throughout the AO.
- Terrain management includes the process of allocating terrain, designating assembly areas, and specifying locations for units and activities. The process includes grouping units together to form bases and designated base clusters as necessary.
- Infrastructure development applies to all fixed and permanent installations, fabrications, or facilities that support and control military forces. Infrastructure development focuses on facility security modifications and includes area damage control (ADC) and repairs.

1-41. Sustaining operations are inseparable from decisive and shaping operations, although they are not by themselves decisive or shaping. Failure to sustain normally results in mission failure. Sustaining operations occur throughout the AO, not just within the rear area. Sustaining operations determine how fast forces reconstitute and how far forces can exploit success. At the tactical level, sustaining operations underwrite the tempo of the overall operation; they assure the ability to take advantage of any opportunity immediately.

MAIN EFFORT

1-42. Within the battlefield organization of decisive, shaping, and sustaining operations, commanders designate and shift the main effort. The main effort is the activity, unit, or area that the commanders determine constitutes the most important task at that time. Commanders weigh the main effort with resources and priorities. Within shaping and decisive operations, the brigade commander may designate a main effort for each operation; however, he will designate only one main effort per operation and shift the main effort as circumstances and intent demand.

1-43. The main effort and the decisive operation are not always identical. Identification of the main effort in shaping operations is a resource decision. A shaping operation may be the main effort before execution of the decisive operation. However, the decisive operation becomes the main effort on execution. Shifting the main effort does not normally require changing or adjusting the plan. Commanders anticipate shifts of main effort throughout the operation. In contrast, changing the decisive operation from the plan requires execution of a branch, sequel, or new plan.

Close, Deep, and Rear Areas

1-44. Despite the increasing nonlinear nature of operations, there may be situations where commanders describe decisive, shaping, and sustaining operations in spatial terms. Typically, linear operations involve conventional combat and concentrated maneuver forces. Ground combat forces share boundaries and orient against a similarly organized enemy

force. Terrain or friendly forces secure flanks and protect sustainment operations. In some multinational operations, the capabilities and doctrine of partners may dictate spatial organization of the AO. In such situations, commanders direct and focus simultaneous decisive, shaping, and sustaining operations in deep, close, and rear areas respectively (see Figure 1-3).

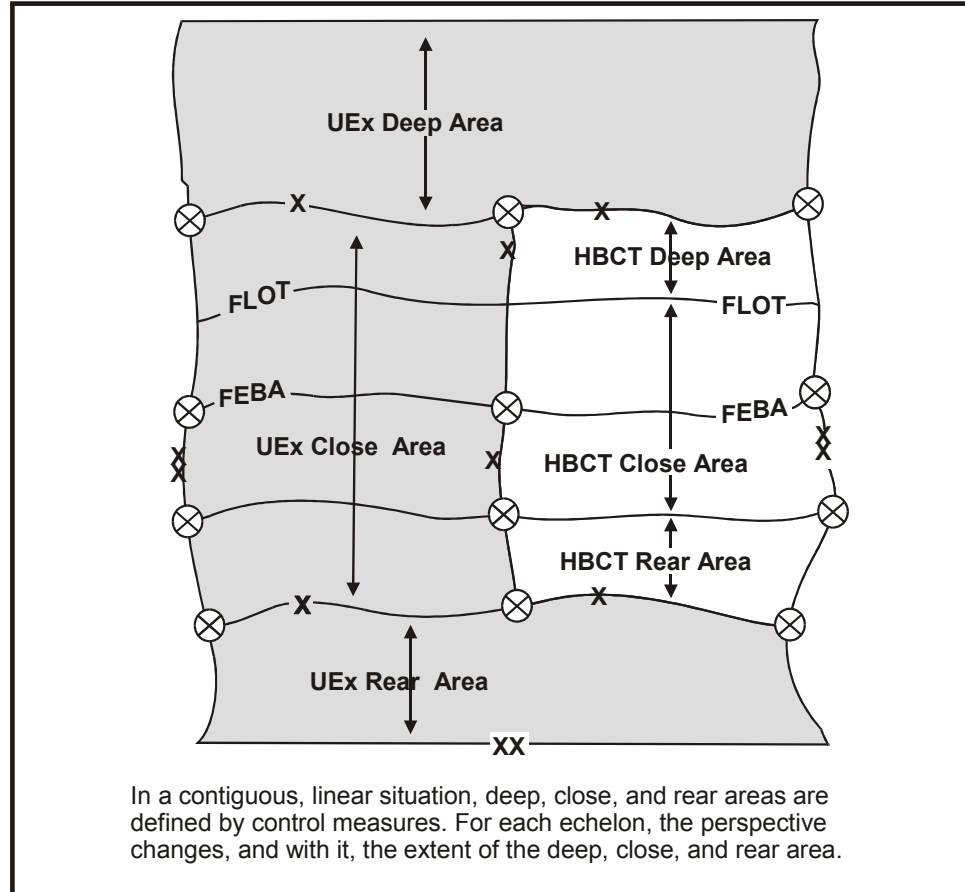


Figure 1-3. Deep, Close, Rear Areas

1-45. When designated, the **close area** is where forces are in immediate contact with the enemy and the fighting between the committed forces and readily available tactical reserves of both combatants is occurring or where commanders envision close combat taking place. Typically, the brigade's close area is the area extending from its maneuver battalion rear boundary to the brigade forward boundary. Commanders plan to conduct decisive operations through maneuver and fires in the close area and position most of the maneuver forces in it.

1-46. Close combat includes the activities of forces directly supporting fighting elements. Examples of these activities are reinforcing field artillery (FA) fires and combat health support. Within the close area, one subordinate unit may conduct the decisive operation while another conducts shaping operations.

1-47. When designated, the **deep area** is an area forward of the close area that commanders use to shape enemy forces before they are encountered or engaged in the close area. Typically, the brigade's deep area is that area from its battalion's forward boundary to the forward boundary of the UEx or ARFOR headquarters. Thus, the deep area relates to the close area not only in terms of geography but also in terms of purpose and time. The extent

of the deep area depends on how far out the force can acquire information and strike targets. Commanders may place forces in the deep area to conduct shaping operations. Some of these operations may involve close combat. However, most maneuver forces stay in the close area. The brigade's ability to conduct deep operations is limited by the ranges of the systems in its task organization and its ability to sustain forces inserted deeper than the forward line of troops (FLOT). A brigade normally requires additional artillery, joint, or Army aviation assets to conduct deep operations.

1-48. When designated, the rear area for the brigade extends from its rear boundary to the rear of the area assigned to its subordinate battalions. This area is provided primarily for performing support functions. Operations in rear areas assure freedom of action and continuity of operations, sustainment, and C2. Regardless of the specific sustaining operations performed by an organization occupying the rear area, its focus on other than combat operations leaves it more vulnerable than combat forces conducting sustaining operations and facilities. In some cases, geography or other circumstances may cause the commander to designate a noncontiguous rear area. In this case, the rear area force protection challenge increases due to the physical separation from combat units that would otherwise occupy a contiguous close area.

Chapter 2

Organization and Capabilities

Army Transformation is a comprehensive effort to reinvent the Army at the strategic, operational, and tactical levels. This effort involves changing how and why the Army conducts operations and how it is organized to accomplish assigned missions. The major focus of Transformation is to provide the right Army capabilities to the joint force commander (JFC) at the right place and right time. Responsiveness requires three operational attributes:

- Army forces will be modular, allowing for a selective mix of Army units that exactly meets the needs of the combatant commander at any given point in the campaign. The force will be continuously tailored, adjusting the Army force mix according to the conditions in the joint operations area.
- Army forces will deploy more capable forces directly into operations at the outset of the campaign, allowing the JFC to exercise the full, complementary range of joint capabilities. Lighter, more sustainable, and more self-contained forces will enable Army forces to enter and operate from austere entry locations in less time than current forces. The inclusion of operationally significant land power early in the campaign expands the operational and strategic options for the combatant commander and presents the enemy with a nearly insoluble dilemma.
- The unit of employment (UE) echelon structure provides the combatant commander with a scalable battle command capability, allowing distribution of joint and land command and control (C2) across the area of responsibility (AOR) with greater effectiveness and efficiency.

SECTION I – UEY AND UEX OVERVIEW

2-1. Transformation has changed the way the Army organizes, particularly at the brigade and higher echelon, and how it fights. The process of Transformation will be continuous, initially involving the major combat and support equipment that Soldiers use to fight, then to the organization of the field forces of the Army, then expanding to the strategic support Army. Figure 2-1 shows how current Army echelons align with the echelons of the transformed Army.

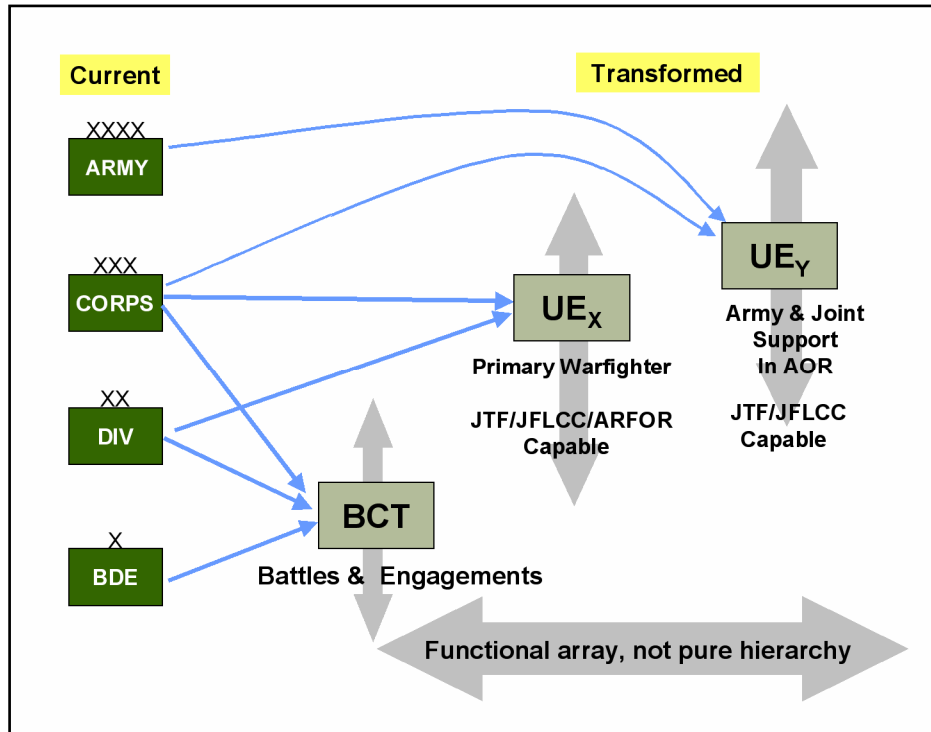


Figure 2-1. Levels of Command

2-2. Although Figure 2-1 depicts the Army with two echelons above brigade, the difference is greater than the seniority of the headquarters. There will be a division of functions between the higher headquarters. The UE_y and UE_x are designed to be modular C2 elements that can be tailored according to the demands of the situation. The UE_y focuses primarily on the Army component responsibilities, supporting the theater and the operational forces (JIM) as required by the combatant commander. The UE_x becomes the principal warfighting headquarters of the Army, exercising operational control over brigades employed in tactical engagements.

2-3. The UE_y is organized and equipped primarily as the Army service component commander (ASCC) for a regional (geographic) combatant command. One UE_y is assigned to each regional combatant commander (RCC). The normal command relationship between the RCC and the UE_y is combatant command (COCOM) (command authority). In peacetime and wartime, that UE_y is the ASCC. As the ASCC, the UE_y is responsible for administrative control (ADCON) of all Army forces in the AOR. The ASCC also integrates Army forces into the execution of theater engagement plans and provides Army support to joint forces, interagency elements, and multinational forces as directed by the RCC.

2-4. When required by specific theater exigencies, the UE_y may be organized and equipped to perform operational-level functions for land forces within a joint campaign in addition to its theater Army service component commander responsibilities. For major combat operations involving major land operations or theater war, the UE_y may provide the joint force land component commander (JFLCC) and headquarters. Note that for major combat operations, the RCC invariably elects to exercise operational control (OPCON) over joint forces without an intervening joint task force (JTF) headquarters. At the same time, the UE_y continues to perform the ASCC functions. For theater war, the combatant commander may command operations directly or organize theaters of operation within the command. Normally, one UE_y headquarters serves as the JFLCC and Army force (ARFOR) for each

new theater of operations, as specified by the directive creating the theater of operations. For theater war, or within a regional combatant command with subunified commands, the Secretary of Defense determines the rank and command relationship between the original UEy commander and additional UEy commands added to the theater.

2-5. When complexity or span of command necessitates the addition of an intermediate echelon, the UEy receives additional UEx headquarters. The Army tailors the intermediate UEx headquarters with the appropriate commander, staff, communications, and units to allow it to function as an intermediate headquarters over other UExs. This allows the UEy to continue to function as the ASCC and JFLCC simultaneously, without overburdening the headquarters with tactical responsibilities.

2-6. The UEy is designed primarily as an ASCC headquarters that generates and supports Army forces within a theater as well as supports joint forces as required by the RCC. As the ASCC, the UEy:

- Tailors land forces for joint operations
- Supports theater security cooperation plans with Army forces and appropriate C2.
- Provides theater-level augmentation to Army forces in a joint operational area (JOA), including ARFOR capabilities, liaison teams, and public affairs teams.
- Develops the mission-essential task list for conventional Army forces.
- Provides training support, materials, and regional expertise to aligned Army forces
- Supports all Army forces (including Army special operations forces (ARSOF)) deployed in a theater.
- Provides ADCON, Army support, and appropriate C2 tailored to focus the ARFOR responsibilities in the JOA on operational control of forces.
- Provides Army support to the joint force as a whole, the other services, other US Government agencies, and multinational forces as directed.
- Orchestrates the deployment sequence and introduction of Army forces into theater.
- Establishes and secures theater bases and conducts reception, staging, onward movement, and integration (RSOI) through the theater sustainment command (TSC).

2-7. In addition to one or more UEx under its operational control, the UEy normally has a set of regionally focused capabilities. The situation in the theater dictates the size of these formations; e.g., commands, brigades, or groups. Figure 2-2 uses the largest sized formations that will be habitually associated with a particular UEy. Command relationships will also vary across theaters between the UEy and supporting capabilities. In some theaters, the commands will be assigned in others, operational continuity (OPCON) or aligned for planning only.

2-8. These regionally focused supporting commands and brigades include a TSC, a theater signal command (SIGCOM), a theater intelligence brigade (TIB), and a civil affairs command (CACOM). The actual size and designation of each will be adjusted to the demands of that ASCC and its theater responsibilities. The theater Army special operations command (TARSOC) falls under the administrative control of the UEy but is not shown in Figure 2-2. Each of these subordinate commands can support Army forces in a JOA through a combination of modular C2 provided to the UEx and support accomplished by the forces under their operational control. Figure 2-2 illustrates the major organizations of the UEy.

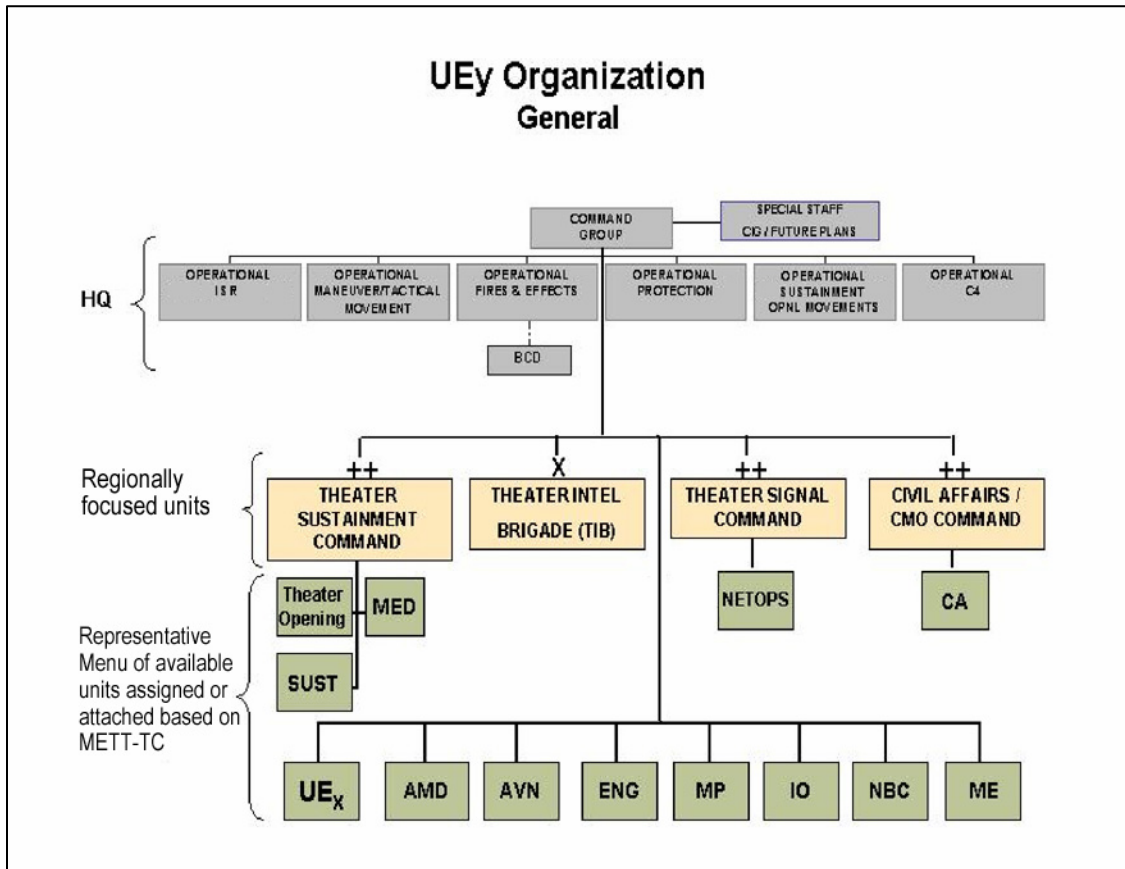


Figure 2-2. UEy and Subordinate Commands

2-9. The UEx is the primary warfighting headquarters and will combine the functions of the current division with the tactical responsibilities of the corps. The primary task of the UEx is to direct the operations of the subordinate brigades and battalions. The UEx is not a fixed formation. It will be a completely modular organization, designed to exercise C2 over assigned brigades. The UEx will not have organic forces beyond the elements that make up its headquarters. It will have the ability to flex to form an intermediate, third echelon. For example, the UEx may be inserted above another UEx or current force division headquarters as a land component headquarters. This capability allows the Army to provide the RCC the necessary land C2 to direct major operations involving Army, Marine, and multinational formations. When the UEx becomes a third or intermediate echelon, the UEx may receive a higher ranking commander. With joint augmentation, the UEx can become a JTF for a small-scale contingency (SSC).

2-10. The modular design of Army tactical forces envisions that the UEx will control six basic types of brigade formations. The maneuver brigade combat team (BCT) is a standing combined arms formation (Figure 2-3) that is intended to conduct full spectrum operations.

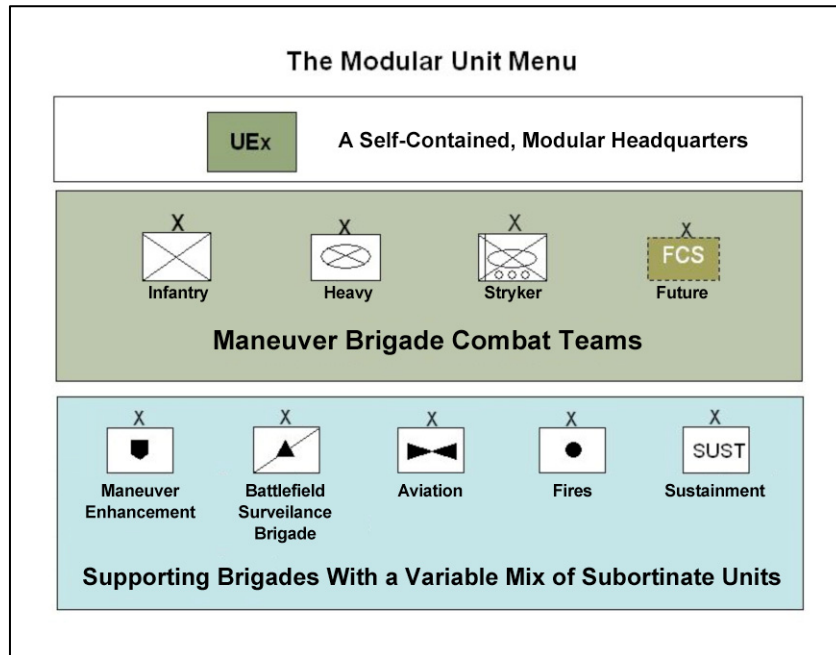


Figure 2-3. UEx and Subordinate Brigades

2-11. The other brigades perform supporting functions across the UEx AO. These supporting brigades (Figure 2-4) include an aviation brigade; battlefield surveillance brigade (BFSB); a maneuver enhancement (ME) brigade; a fires brigade; and a sustainment brigade. These brigades include multifunctional headquarters with some elements assigned but with the command and control to accept a mix of functional subordinate units.

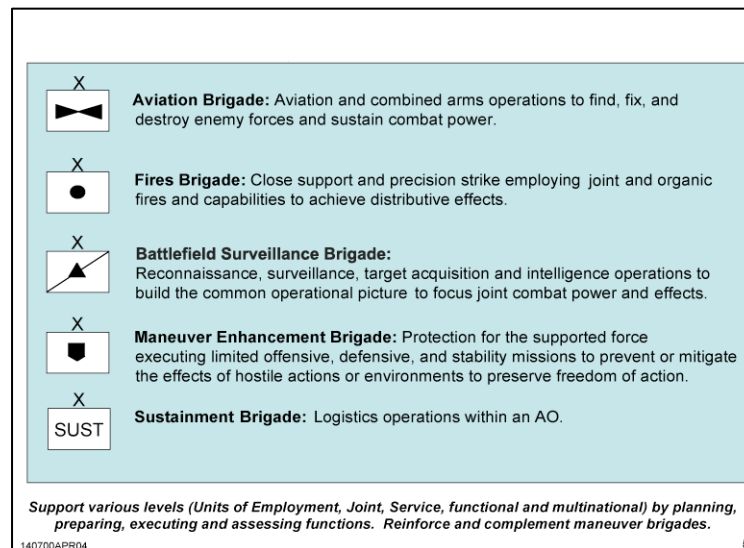


Figure 2-4. Supporting Brigades and Missions

2-12. The UEx has no fixed structure beyond the UEx headquarters, so not all of these brigades may be present in an operation. In some operations, the UEx may control more than one of a particular type of brigade. The UEx may also control functional groups,

battalions, or even companies, but normally, these will be task organized to one of the brigades. Figure 2-3 illustrates the maneuver BCTs and support brigades that are normally subordinate to a UEx. The UEx mission analysis is critical to determining the force composition of the UEx for a given combat mission. The commander must determine the right force mix for both current and subsequent operations across the full spectrum of operations. He must assess force requirements for both pending and potential subsequent operations and determine the composition of the supporting brigades required to support the maneuver BCTs and the UEx operations. The UEx commander will tailor his forces against the mission requirements

SECTION II – MANEUVER BRIGADE COMBAT TEAMS

2-13. Maneuver BCTs are the Army’s basic instrument of tactical execution. Advanced digital command and control, improved sensors with better linkage to joint assets, and better precision weapons add significantly to the effectiveness of the BCT. Maneuver within the UEx capitalizes on integrated joint capabilities to expand mutual support across expanded areas of operation (AOs) and allow maneuver BCTs to conduct relatively independent nonlinear operations within contiguous or noncontiguous AOs.

2-14. Maneuver BCTs are the primary forces normally under the control of the UEx; that is, the UEx will generate tactical and operational effects principally through the maneuver BCTs under its control. The UEx will control a mix of Heavy Brigade Combat Teams (HBCTs), Stryker Brigade Combat Teams (SBCTs), and Infantry Brigade Combat Teams (IBCTs) for different missions. Figure 2-5 provides an overview of the organizations of the three types of maneuver BCTs.

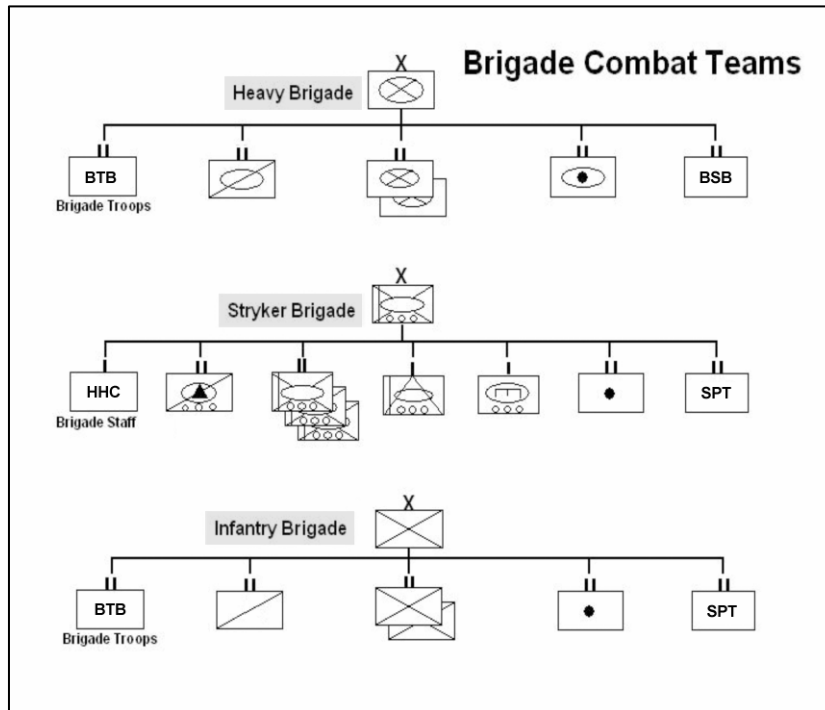


Figure 2-5. Maneuver Brigade Combat Teams

2-15. The HBCT, IBCT, and SBCT all have versatile and complementary capabilities. Figure 2-6 reflects evolving and common operating environments (COEs) and the most likely operational environments. The figure summarizes common missions of the BCTs by type.

Each mission environment is distinctive enough to call for a suitable mix of brigades, but none is so specialized that it requires only a single type of brigade. Rather, the three brigade types complement each other in all mission sets. The dark lines indicate the range of mission environments where each has a comparative advantage, and the dotted lines indicate environments where each has a comparative utility when combined with other types of BCTs.

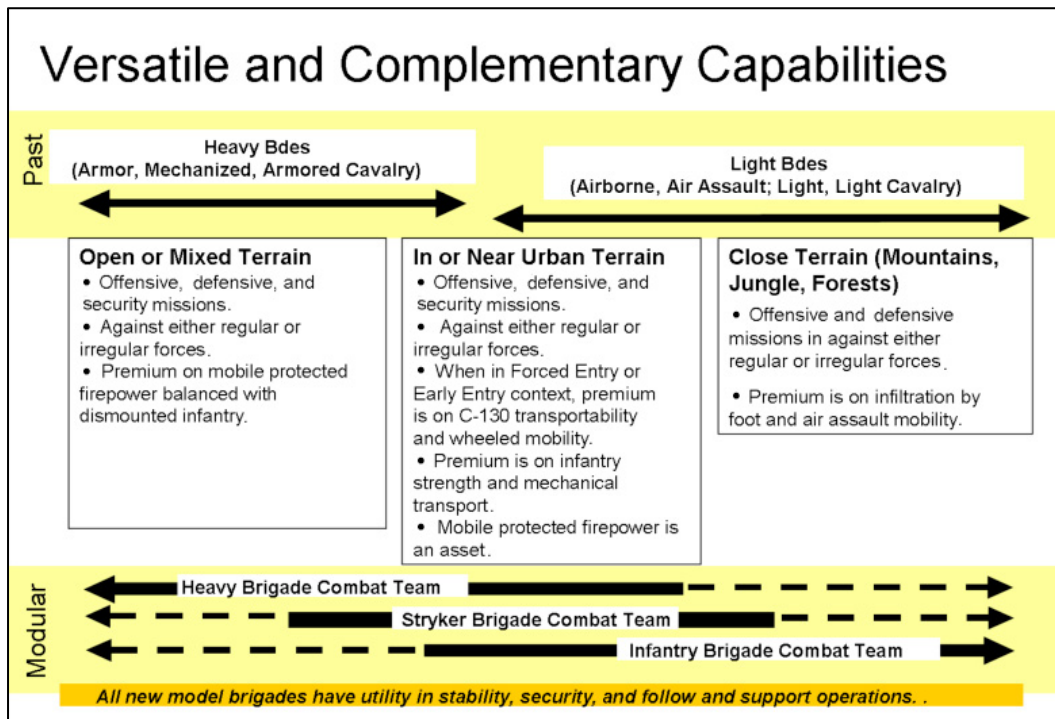


Figure 2-6. Versatile and Complementary Capabilities

2-16. The UEx assigns the maneuver BCT an area of operation, together with a mission statement, the intent, and the concept of operations allows the brigade to accomplish assigned tasks with minimum control from the UEx—mission orders. The UEx task organizes the brigade by adding and subtracting forces to the operational control of the brigade. The UEx avoids detaching organic forces from the maneuver BCT instead varying the size of the AO assigned to the brigade or distributing tactical tasks between brigades. Circumstances may compel the UEx to task organize the subordinate battalions between maneuver BCTs, but this is the exception and not the rule. As soon as possible, the UEx restores the detached maneuver battalion to its parent brigade. This allows the UEx and UEy to be more flexible when reorganizing for transitions. It also improves the support planning within the UEx and UEy, particularly while digital C2 systems evolve.

2-17. To maintain continuous pressure on enemy forces, the UEx may employ several techniques to ensure the BCTs are either kept at or rapidly returned to required levels of combat readiness. Dependent upon METT-TC, traditional sustainment techniques may be used, or techniques that take advantage of the modular capabilities of the HBCT may be employed. One such technique is to conduct a mission staging operation (MSO). To support an MSO, the UEx designs operations to support cycling of the maneuver BCTs to temporary bases where the brigade rests, refits, and receives large quantities of supplies. This is a sustaining operation designated by the UEx commander as an MSO. During an MSO, the maneuver BCT moves to the area established by the sustainment brigade for mission staging. While in mission staging, the brigade is not available for other tactical tasks other

than local security missions. Normally, mission staging involves the sustainment brigade, maneuver enhancement brigade, and the maneuver BCT. In offensive operations, one brigade may replace another brigade in the attack, typically when one brigade has a follow and assume mission. The UEx commander then orders an MSO for the maneuver BCT that is out of the fight. After mission staging, that brigade may assume the attack while the second brigade refits, continuing a tactical cycle of mission staging without relinquishing the initiative. In offensive operations against a tough opponent, the UEx may employ three or more brigades in rotation. Figure 2-7 illustrates an example of an MSO.

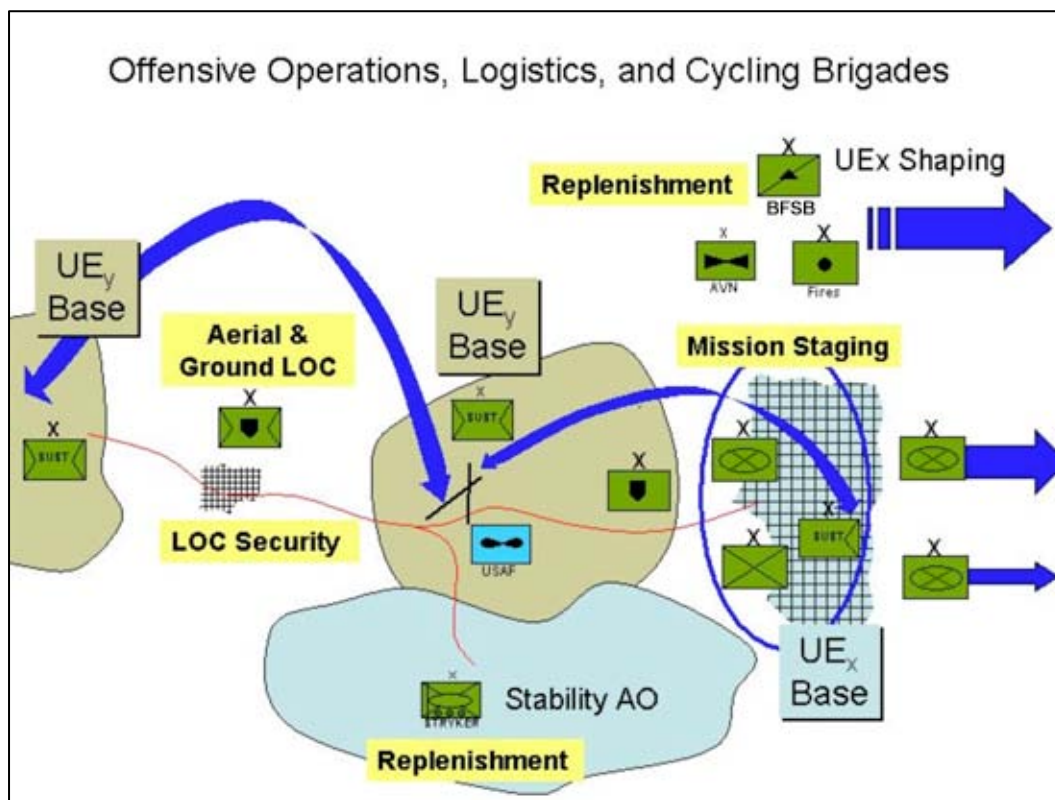


Figure 2-7. Example of a UEx Cycling Maneuver Brigades

2-18. The UEx assigns security operations—screen, guard, and cover—to maneuver BCTs. The BFSB is designed and organized to conduct ISR operations. It is not designed to conduct security operations, including screen, guard, or cover operations. When the tactical situation requires offensive maneuver operations to provide security, the UEx will normally assign the mission to a maneuver BCT. The aviation brigade may also be assigned a screening mission.

2-19. Within the brigade AO, the maneuver BCT controls vertical maneuver of company- and/or battalion-sized forces supported by aviation assets provided by the aviation brigade. The UEx controls tactical vertical maneuver outside the brigade AO. When ground or air maneuver occurs in close proximity between brigades, the UEx imposes appropriate control measures to synchronize the efforts of the subordinate units. For air assaults conducted by the UEx, the UEx designates the infantry brigade conducting the maneuver as the supported brigade and the aviation brigade as the supporting commander. Depending on the factors of METT-TC, the fires brigade may also be designated as a supporting commander. In the event that the tactical situation requires vertical maneuver of a brigade or a larger sized force, normally the UEx commander will designate another UEx to command the large-scale

vertical operation. This is particularly true of airborne operations, which require extensive joint support and multiple C2 arrangements.

SECTION III – HEAVY BRIGADE COMBAT TEAM CAPABILITIES

2-20. As a combined arms organization, the HBCT is optimized for high-tempo operations against conventional and unconventional forces in mixed and open terrain. It is also capable in defense, the urban fight, mobile security missions, and stability operations. Organized with enhanced C4ISR; significant reconnaissance depth and capability; organic cannon and mortar lethality; balanced maneuver battalions; and a robust sustainment capability, the HBCT is a highly capable force across the full spectrum of operations. It can sustain itself to fight and win assigned missions before external logistical support is required. With its increased fire and air support capabilities distributed throughout the organization, the HBCT can optimize external lethal and suppressive fire support from both service and joint assets. Its organic balanced combined arms maneuver battalions facilitate rapid mission transitions with minimum reorganization. Coupled with the capacity to gain information faster and more reliably and to fight as a networked team of teams, the HBCT can secure or retain the initiative and exercise it to defeat all enemies during full spectrum operations.

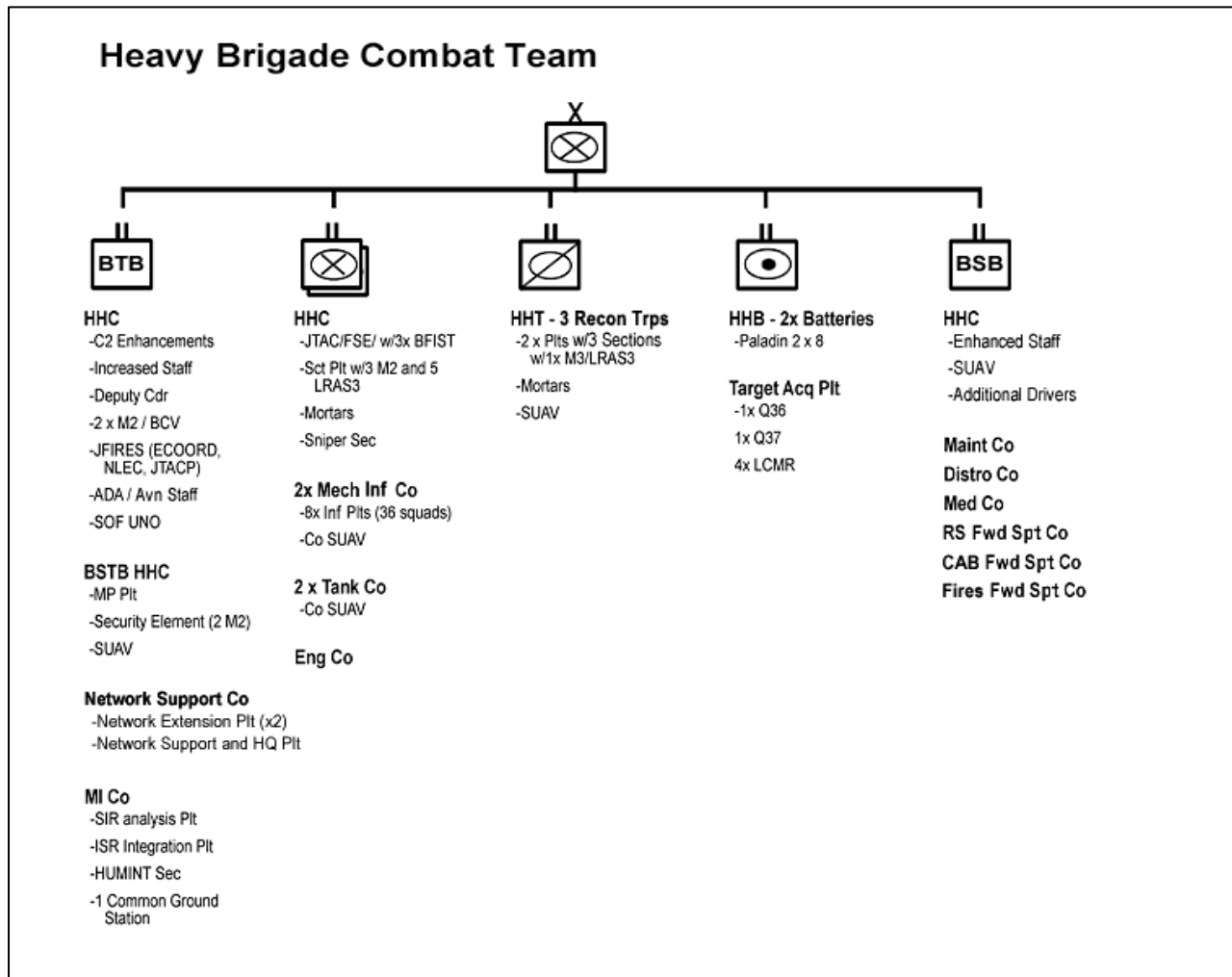


Figure 2-8. Heavy Brigade Combat Team

ENHANCED C4ISR

2-21. The HBCT will be generally better informed than its earlier counterparts. Systems and platforms are now networked with the Army Battle Command System (ABCS). This equipment automatically shares friendly unit locations, first to company level and, ultimately, to platoons and to individual Soldiers and platforms. Satellite-based data and voice networks will replace more vulnerable and less agile communications architecture based on terrestrial radios and relay repeater stations.

2-22. This equipment will permit leaders within the brigade to share information, anticipate developments, and act faster and with greater certainty than ever before. They will also collaborate freely and securely on estimates, plans, and friendly locations with higher, other service, and adjacent headquarters, thus improving coordination and speed of action.

2-23. The brigades will be connected into the Global Information Grid. By adding information available from satellites and theater reconnaissance and surveillance means, the brigades will at least triple their capabilities for reconnaissance and surveillance. Altogether, network connectivity, advanced sensors, and better analysis will enable Soldiers and their leaders to see, understand, and share information much more rapidly than in the past.

2-24. As a result, they will be better protected and more potent. Aviators, infantrymen, and tankers have long known the dangers of being isolated in the chaos of battle and the value of teamwork and mutual support. Collaboration produces a multiplication and not just a summation of strengths.

2-25. The same principle applies to combat units at any echelon. Having a shared common operational picture (COP), and enhanced and more reliable communications, will greatly enhance cooperative engagement tactics from the lowest level. For example, leaders will know that “even though I cannot see you, I know exactly where you are, that you are still effective, and that you can cover me.” Knowing this with certainty, adjacent unit leaders can act much more decisively in pursuit of the commander’s intent.

TANK AND INFANTRY INTEGRATION

2-26. The trend in mobile mounted warfare is for closer integration between tanks and infantry. The qualities that were decisive as recently as Operation Desert Storm and Operation Iraqi Freedom (OIF), the ability to meet and best mobile armor formations of any size in open terrain, will no longer be preeminent because enemy tactics have changed. In the open desert, tank-heavy formations dominated engagements, and mechanized infantry was less critical. OIF demonstrates anew the value of close coordination between tanks and infantry. OIF has also reemphasized the necessity of air superiority as a precondition for mounted operations. The side with the air advantage writes the rules for mobile mounted warfare. Airpower, more flexibly applied, more precise in its effects, and available in all weather and light conditions, allows smaller units to operate more independently and for BCT commanders to assume greater risks. Without this advantage, a commander must move his forces with far greater care, taking cover in towns, villages, and broken ground. Future enemy conventional forces will adopt tactics that stage most engagements at relatively close quarters or in highly dispersed conditions. This means that while the lethality, protection, and shock action of the tank will still be useful to the side with the airpower advantage, pure tank battalions and even pure tank companies will be at risk without closely integrated infantry. The same issues apply to integration of tanks and infantry in urban terrain. Within the restricted battlespace of the urban fight, tanks without infantry are highly vulnerable to close attacks. Likewise, the mobility, firepower and protection of armor provide a significant enabler to infantry moving through or attacking in an urban area.

RECONNAISSANCE

2-27. Reconnaissance and surveillance requirements have also changed. In the future, the reconnaissance effort will shape and pace the success of attacking HBCTs. Because future adversaries will combine conventional and unconventional fighters and methods, HBCTs will experience deadly but target-poor tactical environments. To find, fix, and defeat enemy forces that mix with the civilian population; hide in close and urban terrain; and attempt to avoid decisive engagement, the new modular brigades need better reconnaissance and surveillance capabilities. Enemy preferences for operating against routes and areas behind combat forces will also place a premium on scouting routes and avenues within and surrounding an HBCT's AO.

2-28. As a consequence, new BCT designs have more than doubled the reconnaissance capabilities available to brigade commanders and given them new surveillance and target acquisition capabilities. The new design permits the HBCT to mix aggressive patrolling, reconnaissance in force, and a multilayered and integrated approach to their reconnaissance efforts. Their ability to develop the situation both in and out of contact and to act first with decisiveness is enhanced by this robust reconnaissance capability. Echelons above the brigade will continue to conduct reconnaissance ahead of brigade reconnaissance, and they must reinforce the capabilities of main effort brigades.

2-29. An important measure of effectiveness of any system of lethal and suppressive support is the degree to which commanders can concentrate combined effects at the critical place and time and the agility with which they can shift those concentrations to new situations. Having organic reconnaissance squadrons provides those means to the commanders of the new BCTs.

FIGHTING IN DEPTH

2-30. The need to fight the enemy in depth to suppress enemy fires, attack uncommitted enemy forces, and facilitate maneuver is a new challenge for BCT command teams. Divisional brigades were organized for close-in fighting. Divisions were responsible for all engagements beyond line of sight (BLOS) of brigade troops, including counterbattery fires.

2-31. UEx commanders will help shape engagements for their BCTs with long-range fires, but increasingly, BCTs will need to fight their enemy counterparts in depth with their own means. Attacking into a modern enemy formation requires dismantling enemy surveillance capabilities, consisting of dispersed and hidden sensors, artillery, and air defense integrated by a protected network and C2 facilities. While the UEx will execute the general shaping function, the speed of action and the distribution of sensors will make it necessary for BCTs to assume responsibility for counterfire operations against enemy cannon and mortar systems. Additionally, the tactical options they develop will often be recognized only at BCT level and will have to be acted on so quickly that deep fires by the BCT will be the only practical solution. BCT shaping of the situation in depth with both lethal and nonlethal means will be important in assuring freedom of action for their battalions and for sustaining the BCT's offensive actions to greater depth.

2-32. One of the most striking observations about capability for combat in depth is the degree to which improved reconnaissance and intelligence capabilities enhance the modular brigades' combat potential. In fact, BCTs that can refine their understanding of the enemy in depth can make better ground maneuver decisions and make them sooner, thus avoiding the enemy's strengths and exploiting his positional weaknesses.

2-33. Unlike previous brigades, the HBCT possesses a separate target acquisition organization equipped with the tactical unmanned air vehicle (TUAV). The TUAV, operated by the military intelligence (MI) company, contributes to the overall intelligence picture and is also capable of being employed for target acquisition (TA) and battle damage assessments

(BDA). Coupled with the reconnaissance squadron and external sensors, this arrangement allows the reconnaissance elements to concentrate on collecting combat information while fire support staff support them—and the BCT at large—with TA, fires, and BDA. Acting together, the reconnaissance, TA, intelligence staff, maneuver battalions, and indirect fires units constitute a far-improved reconnaissance strike capability with tighter, more responsive attack linkages.

2-34. The counterfire challenges for the attacking force have always been greater because counterfire radars and the batteries in their network must continually displace forward while maintaining protective coverage. The defender can put his artillery units in hidden and protected positions, use them with great discretion, and refrain from using them in mass until he can achieve maximum effect.

2-35. Higher levels of command will remain responsible for acquiring and attacking enemy long-range artillery systems that will target maneuver brigades. BCTs themselves, however, must assume responsibility for counterfire operations against the enemy’s short-range cannon and mortar systems in their proximity.

2-36. As Figure 2-9 shows, counterfire batteries and radars still need to be integrated into the fighting formations of the BCTs. Much of the UEx’s artillery would be to the rear of the brigade’s. The artillery within the BCT’s formation should, therefore, support BCT artillery.

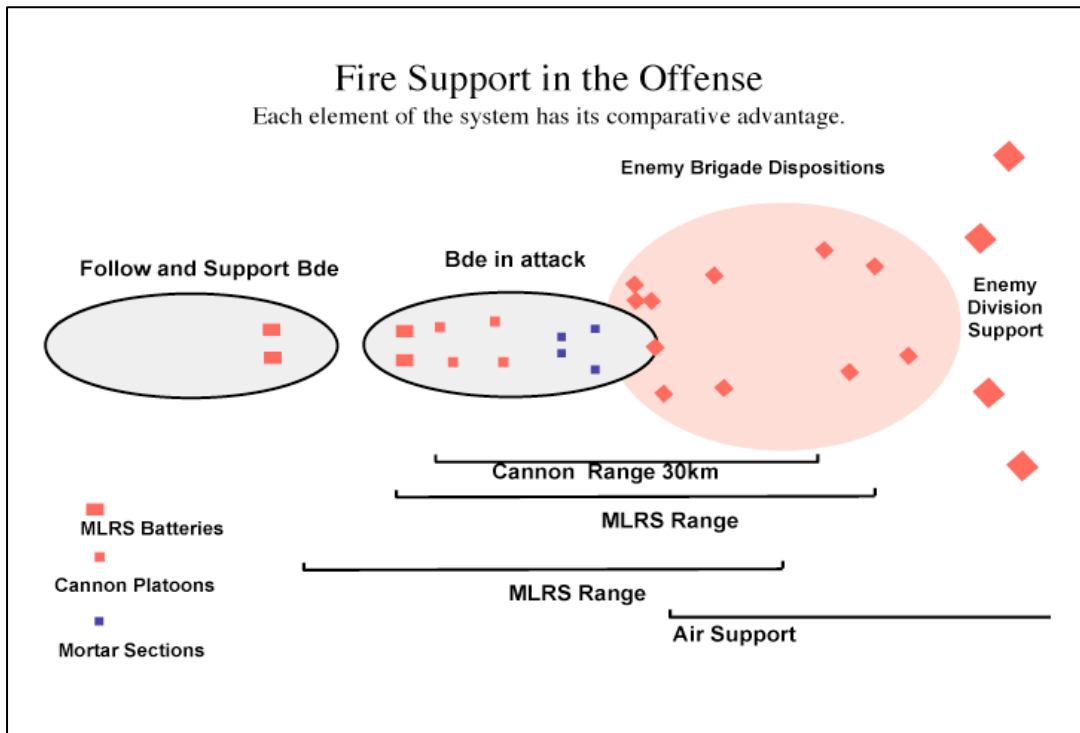


Figure 2-9. Fire Support in the Offense

2-37. In the main, these brigades begin the transition from line-of-sight (LOS) tactics to tactics that combine LOS with beyond line of sight (BLOS) fighting to a greater extent.

FIRES AND EFFECTS

2-38. The HBCT’s own fires organization operates an enhanced targeting organization with airborne targeting sensors. These make it possible to adjust fires against enemy formations

that are beyond the LOS of observers on the ground. Moreover, they have access to and the ability to integrate long-range Army fires and fires of the other components of the joint force into their operations. The High-Mobility Artillery Rocket System (HIMARS) or multiple-launch rocket system (MLRS) batteries can be attached when needed, and the fires battalion can be reinforced with artillery and attack helicopters from higher Army echelons as well as with naval gunfire and precision bombing from Navy, Marine or Air Force aircraft. In short, this reorganization of fires accelerates the trend toward longer range precision weapons and sensors, which permit engagements to begin at long range and continues to deliver precise, lethal, and suppressive fires to close combat.

2-39. This robust over-the-hill target acquisition capability of HBCTs makes them more lethal because of vastly improved early target acquisition, destructiveness, and assessment of effects. Maneuver brigades will continue to benefit from the long-range sensors of higher echelon commands, but having their own targeting and battle damage assessment capability facilitates closer integration of such support.

2-40. HBCTs and their subordinate units plan fires in detail and thoroughly integrate support from outside the brigade. When they must respond to the enemy's initiative, they may have to depend on their organic systems at critical intervals. Therefore, it will remain important to ensure immediately responsive fire support is available to each echelon. Nonetheless, better integration of fires in depth; networked fire control and direction; increased ranges, accuracy, and agility of the overall system will increase both the economy and the effectiveness of the HBCT's fire support systems.

CLOSE SUPPORT FIRES

2-41. Close fire support demands rapid response, precision, and, at times, sustained fire for suppression. Rather than high-volume precision fires, today's BCTs need rapid response sniper precision and suppressive fires that cause the enemy to remain sheltered until friendly forces gain their objectives. This kind of suppression requires control at the lowest possible level to support maneuver and to respond quickly to enemy movements. Smoke to facilitate maneuver is necessary in the close support attack as well.

2-42. In the Cold War target-rich environment of the defensive engagement area, the premium was on high-volume precision munitions that would slow and impede advancing mechanized formations. The most important firepower in such close engagements was massed direct and indirect fire. That required support by lethal, precise, and rapid-fire tank guns and antitank missiles. Supporting artillery saturated engagement areas with coordinated SADARMs (Sense and Destroy Armor) and DPICMs (dual-purpose, improved conventional munitions) to kill mechanized vehicles by top attack and FASCAM (family of scatterable mines) munitions to impede or kill moving armored vehicles. In addition, division commanders could reinforce threatened sectors and contain breakthroughs with battalions of rotary-wing antitank helicopters. Finally, Air Force A-10s and multirole fighters were the joint force commander's means of weighting a corps sector or reacting rapidly to a tactical crisis.

2-43. In contrast to the massed fires of Cold War days, the close combat engagements fought by companies and platoons today will rely on lower volumes of precision fire delivered simultaneously across the battlefield by every means available. Responsiveness is important because the premium is on firepower of a different kind.

2-44. First, the demands for precision are different. Because high-value targets appear fleetingly, they must be engaged quickly and accurately. The tank cannon and antitank missile play a sniper-like role, especially when the reconnaissance work is done by high-powered, long-range optics like the Long-Range Advanced Scout Surveillance System (LRAS3). Attack helicopters move rapidly to kill targets found by unmanned aerial vehicles

(UAVs) or scouts of the reconnaissance squadron. In the deeper realm, having artillery systems ready to kill high-payoff targets within seconds of finding them provides substantial payoff.

2-45. Second, companies and platoons will continue to need high volumes of smoke and suppressive fires in close combat engagements. As opposed to the precision fires needed to kill identified targets, suppressive fires must affect a larger area to cause the enemy to seek shelter. Since it is not always possible to guess exactly where the enemy will be, especially in the COE, it is important for such systems to be extremely responsive.

2-46. Suppression is a bottom-up phenomenon. Combat platoons employ overwatch tactics when they advance. When the enemy begins the engagement from hidden positions, squad machineguns and tank and infantry fighting vehicle machineguns blanket the approximate source of the fire with return fire. The next increment of suppression comes from tank guns and vehicular-mounted heavy machine cannons firing high-explosive munitions, then mortars, then howitzers. Soldiers advance safely to the enemy position behind this suppressive fire. The better the bottom-up control of suppressive effects, the better it works.

2-47. Attacking forces require precise, immediately responsive fires that can be employed close to friendly elements. Further, these fires must be able to be shifted rapidly to engage or suppress new targets, isolate portions of the battlespace, or degrade the enemy's ability to maneuver. Therefore, the optimal close combat firepower requirements for attacking tactical ground forces are provided by organic means because of the precise timing and positive control ground commanders require. Attack helicopters under the control of the ground commander can be effective in certain circumstances, especially against local counterattacks by mechanized forces. Air component close air support (CAS) often requires commanders to lift or shift their own suppressive efforts using BCT tactical control teams. CAS is most useful to companies when they are advancing on a known heavily fortified position in a deliberate attack. Then, they can be used in advance of organic suppressive fires to damage defenses and destroy the morale of defenders in advance of an assault.

SECTION IV – SECURITY AND PROTECTION

2-48. Brigade combat teams need to secure and protect their command posts (CPs), combat support (CS) organizations, and combat service support (CSS) units without overly degrading their maneuver company strength. Elements vulnerable to enemy attack include the following:

- The headquarters and its CPs and command groups.
- UAV launchers and sensors operating behind the reconnaissance troops and combined arms battalions.
- The artillery batteries, CPs, radars, and targeting elements of the fire support system.
- The various CSS elements supporting the brigade.
- The retransmission sites.
- The MI collection assets
- The mortars, CPs, and combat trains of the combined arms battalions.

2-49. Maintaining security will be especially difficult during high-tempo offensive operations. Historically, security is enhanced by rapidity of the advance, unpredictability of movement, ambiguity of force signatures, shared situational understanding (SU), disciplined local security, mutual support within a formation, rapid-response forces, and follow-and-support forces. BCTs will need to adapt to this condition wherever they fight.

2-50. The BTB organization provides an additional commander and staff to plan, coordinate, and execute security for both Level I and Level II threats.

INFORMATION SUPERIORITY (IS)

2-51. The relative advantage gained by intensive engagement in the three elements of information superiority (IS)—intelligence, surveillance, and reconnaissance (ISR); information management (IM); and information operations (IO) (both offensive and defensive)—is enhanced by the organic assignment of an IO officer, a psychological operations (PSYOP) staff planner, public affairs (PA) and civil affairs (CA) sections, robust reconnaissance elements, tactical human intelligence (HUMINT) teams, counterintelligence teams, an electronic warfare (EW) specialist, and an organic MI company. These assets contribute significantly to the effectiveness and efficiency of the BCT commander's IS (nonlethal) effort. Coupled with the digital connectivity to both internal and external information sources (both national and theater), the process, dissemination, and display of information according to commander's critical information requirements (CCIR) will allow the BCT commander to rapidly seize and retain the initiative across the full spectrum of operations.

SECTION V – HBCT ORGANIC UNITS

BRIGADE TROOPS BATTALION (BTB)

2-52. The brigade troops battalion (BTB) is organized to provide the HBCT with command and control of the brigade's separate companies and detachments. Through its assigned subordinate units, the BTB provides a wide variety of battlefield functional areas (BFAs) and special mission capabilities.

2-53. The BTB commander commands and controls the separate companies and attachments of the HBCT in full spectrum operations. The organic units of the BTB include a BTB headquarters and headquarters company, including a chemical reconnaissance platoon, and a military police platoon, the HBCT headquarters and headquarters company, an MI company, and a network support company. Nonorganic units and elements most likely to be attached to the BTB during combat operations include explosive ordnance disposal (EOD) teams, civil affairs CAT A and CAT B teams, psychological operations (PSYOP), public affairs (PA), Chemical smoke and decontamination, and small engineer construction elements.

2-54. The BTB commander also performs the following roles:

- Conducts rear area security operations planning, preparation, execution, and assessment for all HBCT headquarters command posts (main, tactical, commander and deputy commander mobile command group CPs and the BTB tactical operations center (TOC)) and in rear battlespace to defeat Level I and Level II threats when augmented with a combat forces.
- Ensures compliance of HBCT rear security base cluster defense plans and operations for all HBCT rear units not assigned to a combat battalion
- Provides administrative/logistical operations and force health protection to all assigned and attached units as defined in designated command and support relationships.
- Tracks and maintains situational understanding for all attached and assigned small unit elements in the HBCT AO that are not assigned to an HBCT subordinate battalion.

2-55. BTB units or elements in many instances are providing support to meet requirements recommended by the HBCT staff and approved and disseminated by an HBCT operation order (OPORD) or fragmentary order (FRAGO). Examples include establishing communications relay sites (identified by the S6); conducting surveillance of named areas of

interest (NAIs), etc. The BTB commander and staff provide command oversight of their subordinate units or elements in accomplishing those tasks. For example, the BTB ensures that proper troop-leading procedures are performed (rehearsals, etc.), force protection and security measures are adequate, tactical movements are properly conducted, sustainment operations are properly planned, resourced, and executed, etc.

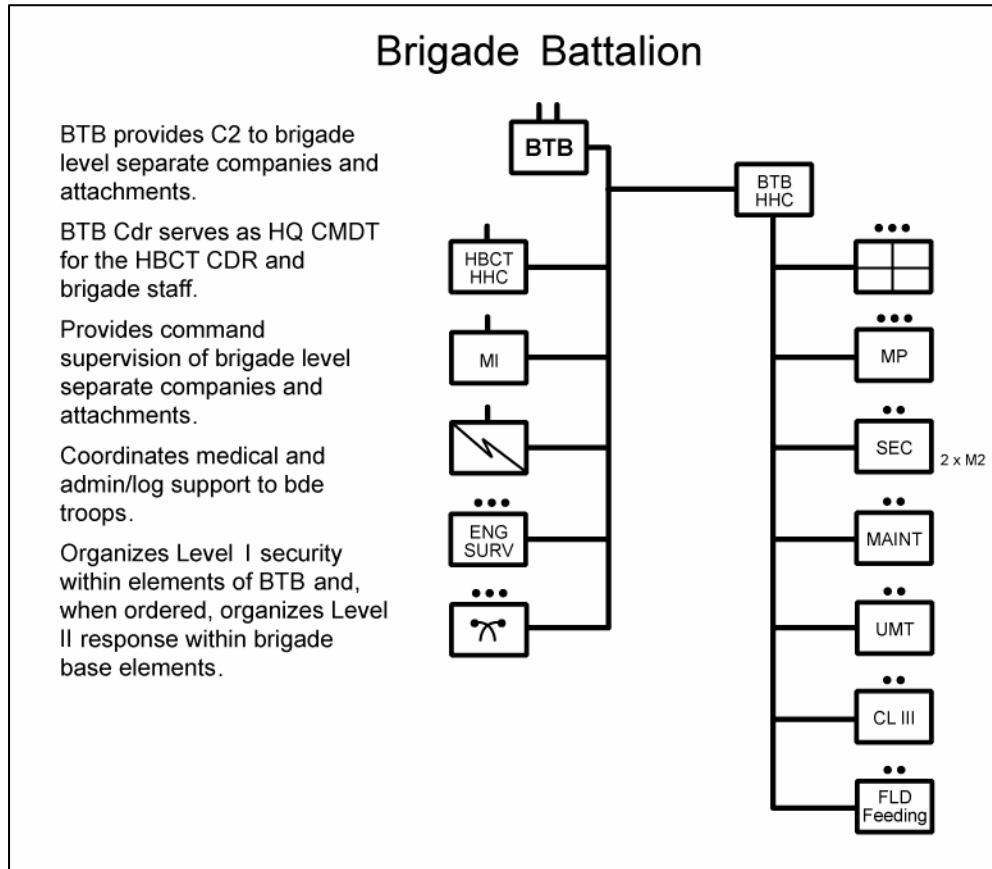


Figure 2-10. Brigade Troops Battalion

RECONNAISSANCE SQUADRON

2-56. The reconnaissance squadron conducts and coordinates reconnaissance and counter-reconnaissance to the depth of the brigade objective. It can conduct screen operations, but doing so may degrade its primary mission to find and track the enemy. This organization includes ground troops with M3 and high-mobility multipurpose-wheeled vehicle (HMMWV)/Long-Range Advanced Scout Surveillance System (LRAS3) teaming. It can sense all threats in all dimensions throughout the area of influence. It is capable of being reinforced by echelons above brigade (EAB) as the mission dictates. The reconnaissance squadron CP may be located with the HBCT's tactical CP, especially if the tactical CP is located well forward or is positioned in the reconnaissance squadron's AO. It coordinates and shares information and intelligence through the network with EAB reconnaissance efforts as well as those of other brigades and the subordinate maneuver battalion reconnaissance platoons. The reconnaissance command group may accompany the brigade commander's command group.

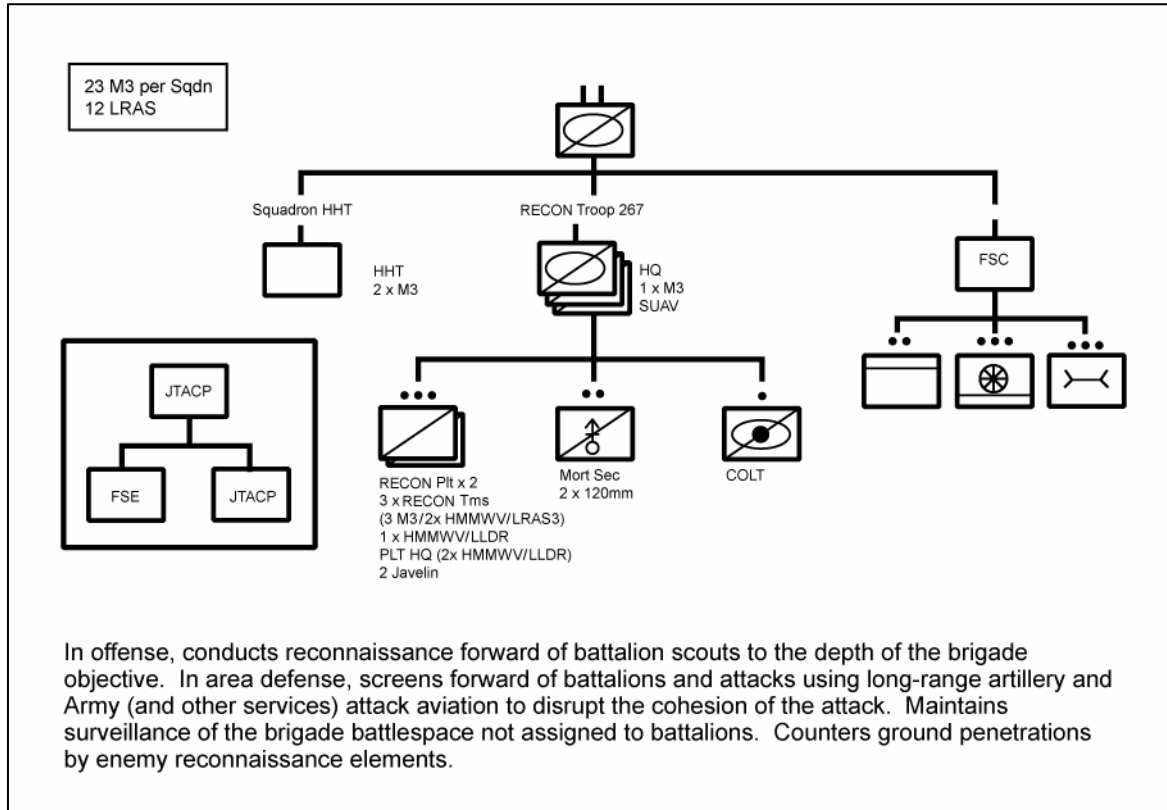


Figure 2-11. Reconnaissance Squadron

COMBINED ARMS BATTALION

2-57. Two robust and balanced maneuver battalions comprise the maneuver and close combat assault elements of the brigade. They are optimized for high speed and fluid offensive operations in mixed and open terrain on a contiguous or noncontiguous battlefield to exploit the effects of long-range precision fires and air operations against conventional mechanized formations supported by unconventional forces. The maneuver battalions can use firepower/maneuver/shock effects to close with and destroy the enemy and take away his will to fight. They provide long-range precision antitank fires and are optimized for extended range engagements in open or mixed terrain. These battalions can also break through enemy defenses, exploit the success of an attack, and pursue defeated enemy forces. They can also defeat enemy armored and mechanized attacks and launch counterattacks as part of a defense. The battalions are modular in design, combining armor, infantry, engineer, and forward support companies with organic reconnaissance, snipers, mortars, and a fire support element capable of drawing on EAB artillery and attack helicopters and Air Force CAS. The battalion module can be disengaged and attached to any brigade headquarters when the mission dictates. Its companies may be attached to the BTB if the threat level exceeds its ability to provide security to the brigade base elements. The tank and mechanized companies train as combined arms teams. Figure 2-12 shows the maneuver battalion.

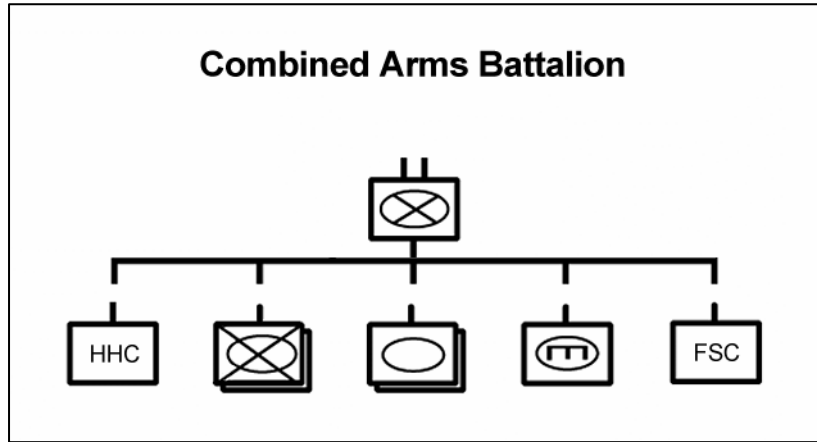


Figure 2-12. Combined Arms Battalion

FIRES BATTALION

2-58. The fires battalion (lethal and suppressive effects) is responsible for all lethal and suppressive support to battalions in priority of weighting, and shaping missions assigned by the brigade commander to the depth of the brigade objective or deployment of the brigade's enemy counterpart and counterfire with cannon and attached missile range. A basic nucleus of lethal and suppressive capabilities (2x8 gun Paladin batteries) and organic targeting radars may be reinforced as required by cannon and/or MLRS batteries; Army attack helicopter teams; and Navy, Marine, or Air Force CAS or air interdiction (AI) sorties. Figure 2-13 shows the fires battalion.

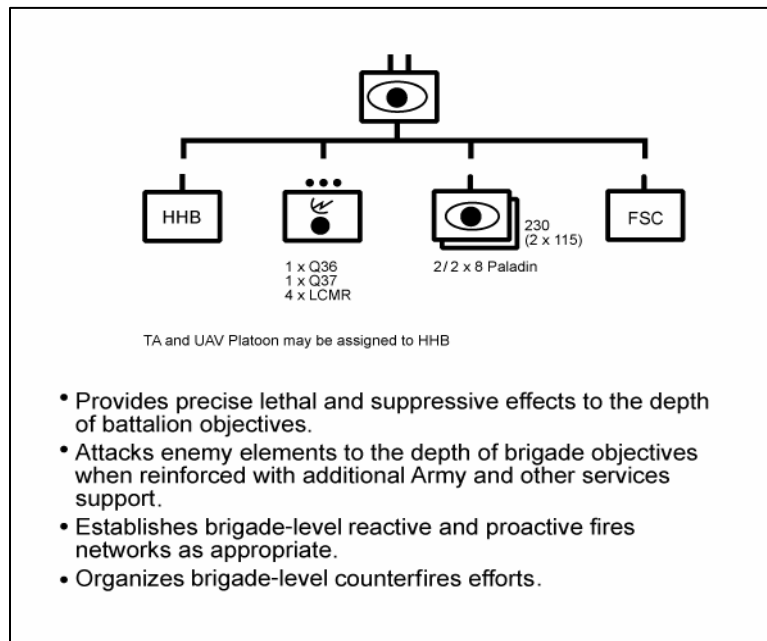


Figure 2-13. Fires Battalion

BRIGADE SUPPORT BATTALION (BSB)

2-59. The brigade support battalion (BSB) sustains the brigade commander’s ability to fight battles and engagements by manning and arming tactical units; fixing and fueling their equipment; moving soldiers, equipment, and supplies; and sustaining soldiers and their systems. The BSB is the key to the brigade’s modularity as it sustains independent operations and can *plug into* the theater logistical system or the UEx sustainment brigade. The BSB commander and his staff work with the brigade and supported battalions to thoroughly integrate the concept of logistical support with the concept of operations during tactical planning. A second basic load is carried by the forward support company of each maneuver battalion. An additional basic load is carried by the BSB and delivered to battalions during the mission or engagement. The forward support companies normally organize into combat and field trains. Maintenance capabilities reside at two levels, within the battalions and at the support battalion. The BSB can be reinforced as the mission requires.

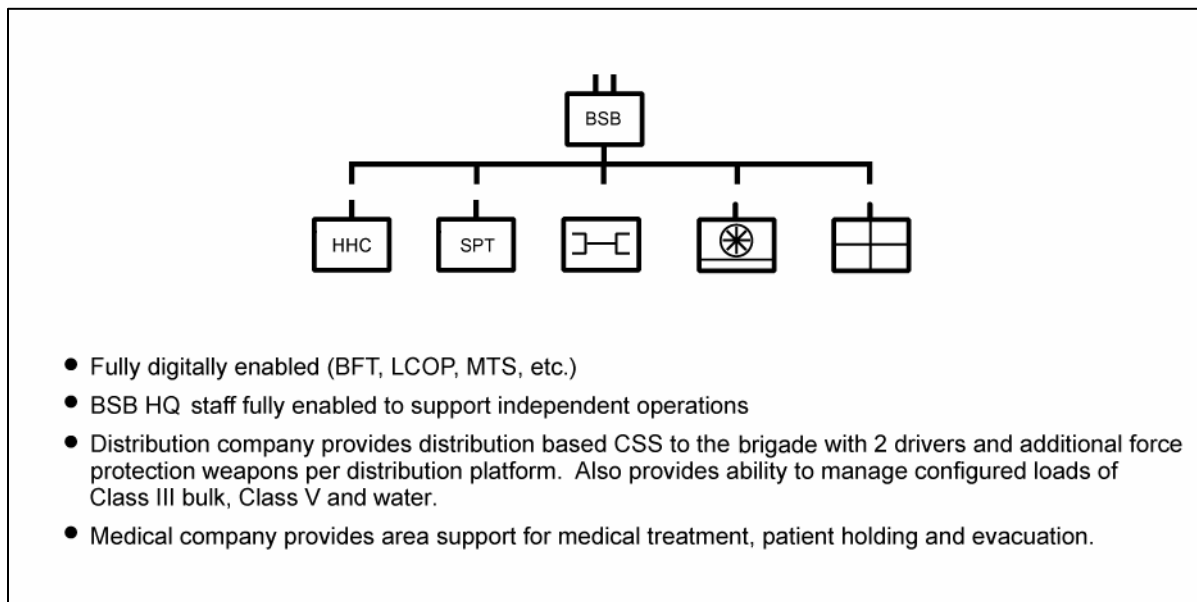


Figure 2-14. Brigade Support Battalion

SECTION VI – ARMY COMMAND AND SUPPORT RELATIONSHIPS

2-60. The process of allocating available assets to subordinate commanders and establishing command and support relationships is called task organizing. A temporary grouping of forces designed to accomplish a particular mission is a task organization. The ability of Army forces to tailor (select forces for a mission) and task organize (temporarily organize units to accomplish a tactical mission) gives them agility and increased capabilities. It allows operational and tactical commanders to organize their units to make the best use of available resources and rapidly transition to offensive and defensive operations, stability operations, and support operations.

2-61. Commanders build combined arms organizations using command and support relationships. Command relationships define command responsibility and authority. Support relationships define the purpose, scope, and effect desired when one capability supports another. Together, they form a framework for developing well-trained and flexible fighting organizations that can quickly adapt to changing mission requirements. These relationships

should not be confused with tactical mission tasks, such as follow and support or follow and assume.

2-62. Army command relationships include the following:

- **Organic.** A unit listed on the parent table of organization and equipment (TOE).
- **Assigned.** A unit is assigned to a higher headquarters on a relatively permanent basis and receives its administrative and personnel support from that higher headquarters.
- **Attached.** A unit is attached to a headquarters on a temporary basis. It works for and receives logistical support from the attached headquarters but continues to receive administration and personnel support from its assigned headquarters.
- **Operational control (OPCON).** A unit is under the OPCON of a higher headquarters for the purpose of task organizing forces and conducting tactical operations. The controlling headquarters issues orders, task organizes, and assigns missions but does not support the unit's logistics or administrative needs.
- **Tactical control (TACON).** A unit is under the TACON of a higher headquarters for the purpose of directing tactical operations. The controlling headquarters does not have the authority to task organize the unit and does not provide logistics or administrative support (see Figure 2-15).

<i>Relationship</i>	Assigned	Attached	OPCON	TACON
Has command relationship with:	Parent unit	Gaining unit	Gaining unit	Gaining unit
May be task organized by:	Parent unit	Gaining unit	Parent unit and gaining unit; gaining unit may pass OPCON to a lower HQ. See note.	Parent unit
Receives logistics support from:	Parent unit	Gaining unit	Parent unit	Parent unit
Assigned position or AO by:	Gaining unit	Gaining unit	Gaining unit	Gaining unit
Provides liaison to:	As required by parent unit	As required by gaining unit	As required by gaining unit	As required by gaining unit
Establishes and maintains communications with:	As required by parent unit	Unit to which attached	As required by gaining unit and parent unit	As required by gaining and parent units
Has priorities established by:	Parent unit	Gaining unit	Gaining unit	Gaining unit
Gaining unit can impose further command or support relationship of:	NA	Attached, OPCON, TACON, GS, GSR, R, and DS	OPCON, TACON, GS, GSR, R, and DS	GS, GSR, R, and DS
NOTE: In NATO, the gaining unit may not task organize a multinational unit, (See TACON.)				

Figure 2-15. Army Command Relationships

2-63. Army support relationships include the following:

- **Direct support (DS).** A mission requiring a force to support another specific force and authorizing it to answer directly to the supported force's request for assistance.
- **Reinforcing (R).** A mission in which one unit augments the capability of another similar type unit.
- **General support reinforcing (GSR).** A mission in which one unit provides support to the force as a whole and provides reinforcement of similar type units.
- **General support (GS).** A mission that requires a unit to support the force as a whole and not any particular subdivision thereof.

2-64. Figure 2-16 summarizes the Army support relationships.

Relationship	Direct Support (DS)	Reinforcing (R)	General Support Reinforcing (GSR)	General Support (GS)
Has command relationship with:	Parent unit	Parent unit	Parent unit	Parent unit
May be task organized by:	Parent unit	Parent unit	Parent unit	Parent unit
Receives logistics support from:	Parent unit	Parent unit	Parent unit	Parent unit
Assigned position or AO by:	Supported unit	Reinforced unit	Parent unit	Parent unit
Provides liaison to:	Supported unit	Reinforced unit	Reinforced unit and as required by parent unit	As required by parent unit
Establishes and maintains communications with:	Parent unit and supported unit	Parent unit and reinforced unit	Reinforced unit and as required by parent unit	As required by parent unit
Has priorities established by:	Supported unit	Reinforced unit and then parent unit	Parent unit and then reinforced unit	Parent unit
Gaining unit can impose further command or support relationship of:	See note	NA	NA	NA
NOTE: Commanders of units in DS may further assign support relationships between their subordinate units and elements of the supported unit after coordination with the supported commander.				

Figure 2-16. Army Support Relationships

2-65. Modularity requires the Army to adjust traditional concepts of command relationships. The Army supports joint force commands (JFCs) by providing tailored, modular packages to accomplish joint missions and dominate enemies and situations on land. For the immediate future, Army forces will retain their traditional command and support relationships (see FM 3-0, *Operations*). However, as the Army converts to UEx and UEy, the command and support relationships used by Army forces may be replaced by joint-derived command relationships. These will include administrative control, supported, and supporting. In this construct, supported and supporting are command relationships. The supported commander requests and receives capabilities or requires the supporting commander to create effects according to the intent of the supported commander. While this may seem abstract to an Army accustomed to more rigid definitions of support, it promotes greater horizontal collaboration between multifunctional organizations in complex operations. The ultimate goal of the evolution is the ability to seize opportunity and exploit at a rate that our opponents cannot match. Where these relationships or those discussed earlier, prove inadequate to achieve the

commander's intent, the OPORD or a FRAGO should be used to state specifically what is required or intended and what degree of authority or responsibility is intended.

- **Supported.** This is a joint command relationship used for a particular mission. The supported commander assigns tactical tasks and requests capabilities from the supporting unit. It does not include the authority to task organize. Logistical responsibility belongs to the parent unit.
- **Supporting.** This is a joint command relationship used for a particular mission. The supporting commander provides the supporting unit with capabilities and executes tactical missions. He also plans and executes missions under parent unit control. Logistical responsibility belongs to the parent unit.
- **Administrative control (ADCON).** Army forces have two distinct chains of command. The operational chain of command proceeds from the President, through the Secretary of Defense, through the combatant commanders, down through the joint force commander, to the controlling land tactical commander. The operational chain of command directs all US forces in the execution of the campaign. The Army retains control of administration and support of all Army forces unless otherwise directed by the Secretary of Defense or the combatant commander. Administration and support includes training, readiness, and leader development as well as all service-specific functions. Unless modified by the joint force commander, it also includes CSS of Army forces. ADCON of Army forces normally follows the assigned chain of command. When Army forces are committed, the administrative chain of command continues from the assigned major Army command (MACOM) through the gaining UEy to the headquarters to which Army forces are attached (for example, a UEx or theater command). The gaining UEy and parent MACOM will publish specific orders specifying which ADCON responsibilities will be retained by the parent MACOM (or UEy, in the case of forward-stationed forces). Unless modified by order, the gaining UEy assumes ADCON for all Army forces in theater.

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Chapter 3

Battle Command

Battle command is the exercise of command in operations against a thinking enemy. Battle command involves the art of combat decision-making, leading, and motivating soldiers and their organizations into action to accomplish missions at least cost to soldiers. Using judgment acquired from experience, training, study, and thought, brigade commanders visualize the current state and desired end state and then formulate a concept of operation to get from one state to the other. In addition to visualizing and formulating concepts, battle command encompasses assigning missions, prioritizing and allocating resources, selecting the critical time and place to act, and knowing how and when to make adjustments to the fight. The Heavy Brigade Combat Team's (HBCT's) battle command systems support the commander by integrating command, control, communications, computers, and intelligence (C4I) and provide him with accurate and timely information on which to base his decisions. This chapter discusses principles and concepts for command and control (C2) of the HBCT. It is in consonance with FM 6-0, *Mission Command: Command and Control of Army Forces*, with emphasis on how the structure and capabilities of the HBCT affect command and control. Appendix B, Command Post Operations, describes specific tactics, techniques, and procedures (TTP) involved in executing command post (CP) operations and employing digital capabilities that support the HBCT commander's ability to exercise battle command.

SECTION I – THE ART OF COMMAND

3-1. Command is the authority a commander in military service lawfully exercises over subordinates by virtue of rank and assignment. It includes the authority and responsibility for effectively using all available resources; planning the employment of military forces; and organizing, directing, coordinating, and controlling them to accomplish assigned missions. Commanders are the senior leaders of their organization and are responsible for applying the leadership element of combat power and training subordinate leaders to reinforce that element.

ROLE OF THE COMMANDER

3-2. The HBCT commander's knowledge, experience, and personality determine how he interacts with his unit through command and control. The commander decides what he needs to do and the best method to do it. He leads his unit through the process in mission accomplishment. He drives the process through mission command. He establishes a command climate for his unit, prepares it for operations, commands it during operations, and assesses his subordinates. The commander refines the HBCT's C2 system and operates it based on his personality. Within the limitations of the current C2 systems architecture, he

establishes a system to meet the unique demands that he places on it, the abilities and personalities of his subordinates, and the capabilities of the equipment in the HBCT.

MISSION COMMAND

3-3. Mission command is the conduct of military operations through decentralized execution based on mission orders for effective mission accomplishment. Mission orders leave the *how* of mission accomplishment to the subordinates by allowing them maximum freedom of planning and action to accomplish missions. Successful mission command results from subordinate leaders exercising disciplined initiative to accomplish missions within the commander's intent. Mission command requires an environment of trust and mutual understanding. The four elements of mission command are commander's intent, subordinate initiative, mission orders, and resource allocation.

COMMANDER'S INTENT

3-4. The commander's intent is a clear, concise statement of what key tasks the unit must do and what conditions the unit must meet to succeed with respect to the enemy, terrain, and the desired end state. The commander formulates and communicates his intent to ensure unity of effort during operations, allowing subordinates to exercise disciplined initiative.

SUBORDINATE INITIATIVE

3-5. Initiative is the assumption of responsibility to decide and initiate independent actions when the commander's concept or order is no longer applicable or when an unanticipated opportunity leading to the accomplishment of the commander's intent presents itself. Subordinates decide how to achieve their assigned missions within the delegated freedom of action and the exercise of disciplined initiative during execution; they have an absolute responsibility to fulfill the commander's intent.

MISSION ORDERS

3-6. A mission order is a technique for completing combat orders to allow subordinates maximum freedom of planning and action to accomplish missions that leave the *how* of mission accomplishment to the subordinate. The commander intervenes to direct coordination, restore operations, or exploit success. At a minimum, mission orders state the following:

- Task organization.
- Commander's intent and concept of operations.
- Unit mission.
- Subordinate unit missions.
- Mission-essential coordinating instructions.

RESOURCE ALLOCATION

3-7. The commander allocates appropriate resources to subordinates to enable them to accomplish their missions. The commander also must consider information (or the C2 information systems (INFOSYS) infrastructure) as a resource and share it through all levels of his command.

DECISION-MAKING

3-8. Decision-making is knowing *if* to decide, then *when*, and *what* to decide. It includes understanding the consequence of decisions. Decision brings with it the cost of committing

resources, foreclosing options, incurring risk, and revealing intentions to the enemy. Decision-making includes the following aspects:

- Anticipating outcomes.
- Understanding the consequences of deciding.
- Knowing how irrevocable some commitments will be.
- Understanding how long it will take the brigade to implement a decision.

3-9. Commanders use two forms of decision-making to direct operations. The first is to use an analytical process based on generating several alternate solutions, comparing the solutions to a set of criteria and selecting the best course of action (COA). The commander and his staff use this approach during planning to produce the optimal solution to a problem. Analytical decision-making, such as the full (as opposed to the abbreviated) military decision-making process (MDMP), is disciplined and methodical and can require a significant amount of time. The full MDMP is not appropriate to all situations, especially decision-making during execution. However, when time permits or during the initial deliberate planning for operations, the MDMP analytical approach is the optimum process and will set the baseline for future operational planning.

3-10. The second form is intuitive decision-making. It focuses on assessing the situation rather than comparing multiple COAs. It relies on the experienced commander's (and staff officer's) ability, without benefit of a formal analysis process, to recognize the key elements and implications of a particular problem or situation to reject the impractical and to select an adequate COA to solve a problem. Intuitive decision-making is faster than analytical decision-making, but it is limited in detailed analysis. Commanders use intuitive decision-making during execution, when time is of the essence and problems are not complex (see FM 6-0).

3-11. In practice, the two forms of decision-making are rarely mutually exclusive. Each form has different strengths and weaknesses. Selecting one over the other depends primarily on the experience of the commander and staff and how much time and information are available. Planning (the analytical form) is more appropriate when adequate time and information are available to choose among different COAs or when the staff is inexperienced. The majority of tactical decisions during execution—made in the fluid, changing conditions of war when time is short and information is lacking or doubtful—will be intuitive. It is a mistake to use intuitive decision-making when time and circumstances favor analytical decision-making or to use an analytical decision-making process, such as the MDMP, when circumstances do not permit it.

3-12. Through the production of graphics and overlays, intelligence preparation of the battlefield (IPB) enables the commander and staff to visualize where friendly and enemy forces can move, shoot, and communicate. It supports the conduct of COA comparison and the development and maintenance of threat models and doctrinal templates and also supports the intelligence estimate.

LEADERSHIP

3-13. Leadership translates decisions into action. Leadership is the process of influencing an individual or an organization by providing purpose, direction, and motivation to accomplish the assigned mission. The HBC commander is first and foremost a leader. The commander inspires his Soldiers and subordinate commanders with the desire to win and the conviction that winning is possible, to accomplish the mission, and to persevere in the face of all difficulties. He leads through a combination of example, persuasion, and compulsion as well as the force of will (see FM 6-22 (FM 22-100)).

LOCATION OF THE COMMANDER

3-14. Previously, the commander was torn between the conflicting requirement to visualize the battlefield and the requirement for his physical presence in the main or tactical command post to participate in the MDMP. This dilemma slowed the planning and execution of operations while frustrating the commander's efforts to "get out of the command post."

3-15. All commanders in the HBCT have the ability to visualize their battlespace in all dimensions by way of the Army Battle Command System (ABCS) suite and to share a common operational picture (COP). They also have the ability to precisely locate and track high-payoff targets (HPTs) and conduct simultaneous operations employing lethal and nonlethal means while operating with joint and multinational forces. In addition, HBCT commanders retain the ability to recognize and protect their own and other friendly forces. The commander cannot, however, fully visualize the battlefield while directing and synchronizing the efforts of his HBCT from only a computer screen at a CP. He must move from the CP to assess the situation face to face with subordinate commanders and their Soldiers. The INFOSYS within the HBCT permit a commander to position himself where he can best command without depriving himself of the ability to respond to opportunities and changing circumstances.

3-16. The commander can be virtually anywhere on the battlefield to best affect ongoing operations without disrupting the planning and preparation for future operations. Near-real-time information updates, continuous assessment, and command decisions can be briefed, approved, and disseminated from HBCT to company level via the C2 infrastructure.

SECTION II – COMBINING THE ART OF COMMAND AND THE SCIENCE OF CONTROL

3-17. The commander is the key to command and control in the HBCT. Foremost among his roles is his ability to combine the art of command and the science of control. He must use a methodology of visualizing the battlespace, describing his visualization to subordinates, directing action to achieve results, and leading the unit to mission accomplishment while continually assessing the situation. (See Figure 3-1.)

3-18. *Visualize.* The commander's visualization is the core mental process that supports his decision-making and is the key by which the commander combines the art of command and the science of control. It is the process of achieving a clear understanding of the HBCT's current state with relation to the enemy and the environment, developing a desired end state that represents mission accomplishment, and determining the sequence of activities that moves the HBCT from its current state to the end state. The commander begins to visualize the desired end state when he receives a mission or perceives a change in the mission. He applies his current situational understanding (SU) to the received or perceived mission. As he analyzes or receives staff analysis of the mission, he develops a mental image of the friendly forces in relation to the enemy, the environment, and possible future operations at the conclusion of the operation or the end state. The commander's visualization is his assessment tool throughout the operation, and he should focus on three main factors.

- *Understand the current state of friendly and enemy forces.* This is situational understanding, which the commander derives from applying his judgment, experience, expertise, and intuition to the information provided to him by the staff in the form of the COP and any additional staff estimates. This SU includes physical factors, human factors, and the relationships between friendly and enemy forces and the environment that represent potential opportunities or threats for the HBCT.

- *Foresee a feasible outcome.* The commander must identify a feasible outcome to the operation that results in mission success and leaves the HBCT postured for the next operation.

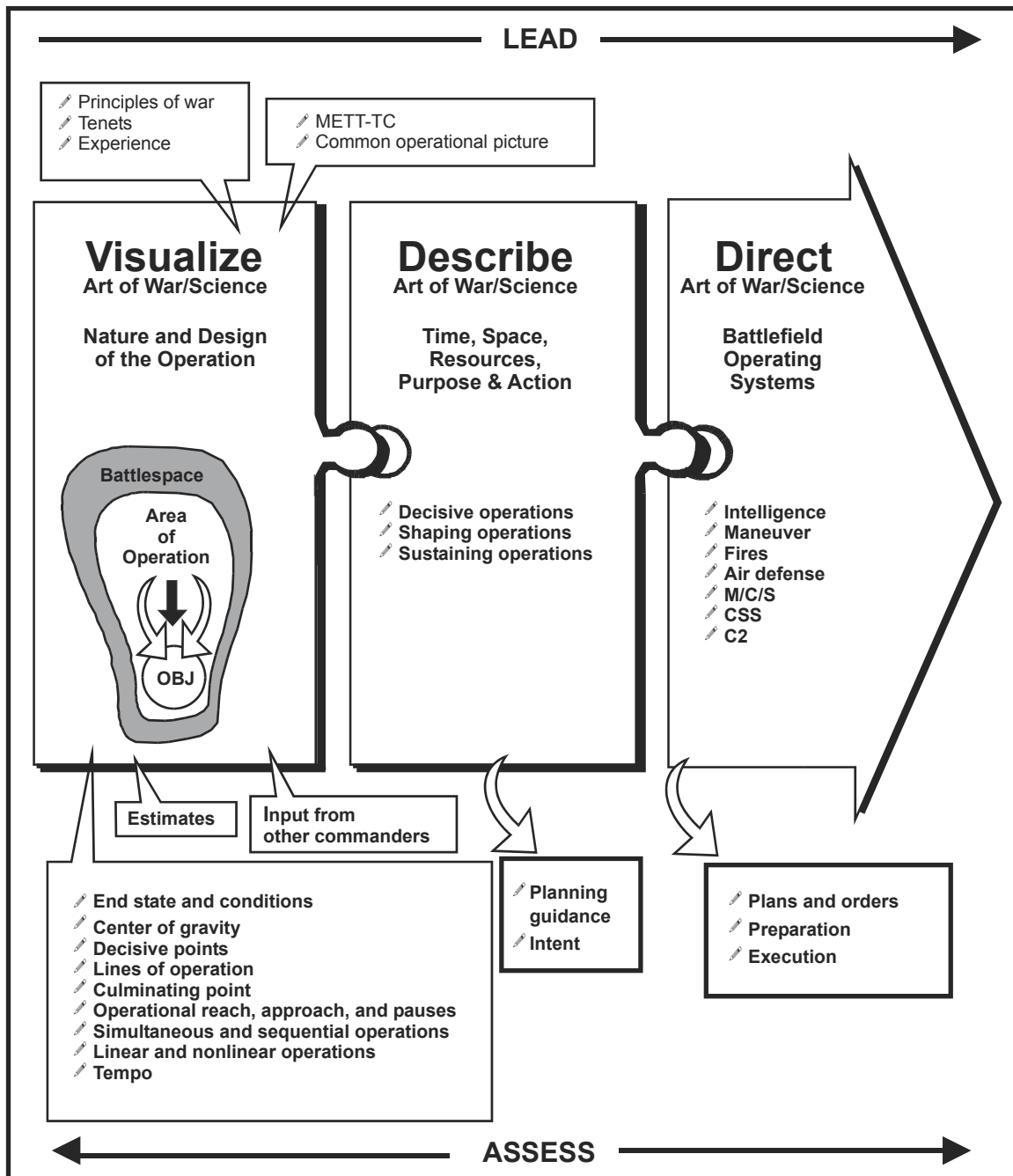


Figure 3-1. Visualize, Describe, and Direct

- *Visualize the dynamics between opposing forces.* The commander must identify the dynamics throughout the sequence of actions. This includes evaluating possible enemy reactions and friendly counteractions. This evaluation may lead to the identification of possible decision points throughout the operation.

3-19. *Describe.* The commander describes his visualization by participating in the MDMF during planning and preparing for an operation and during execution. Specifically, the commander's intent, his planning guidance, the anticipated decision points, and the commander's critical information requirements (CCIR) all serve to guide and to focus the C2 system to support his decision-making and communicate his decision for execution. The C2 system infrastructure is available to help the commander describe his visualization. However, he should not accept the products of the system unquestioned. He must apply his judgment, experience, expertise, and intuition before making a decision and describing that decision to subordinates. During preparation, the commander uses the rehearsal to further describe his intent and concept to his subordinates, identify and discuss options at decision points, synchronize activities within the HBCF and among subordinate units, and add to his own visualization. During execution, the commander continues to visualize the implication of events, and he describes his conclusions to his staff and subordinates through updated CCIR and guidance.

3-20. *Direct.* The commander directs when he has made a decision and communicates that decision to his subordinates through an order.

- *Plan.* Orders should enable subordinates to understand their situation, their commander's mission and intent, and their own mission. The order (warning order (WO) or operation order (OPORD)) should provide unity of effort in exercising disciplined initiative by subordinate commanders. Clear direction is essential to mission success; however, commanders must strike a balance between *necessary, but minimum direction* and *overly detailed direction*. The commander (or the staff) assigns graphical, written, or procedural control measures (permissive or restrictive) to prevent units from impeding one another and to impose necessary coordination. The commander should impose only the minimum control measures necessary to provide essential coordination and deconfliction among units.
- *Prepare.* During preparations, the commander must update and validate his visualization as the results of reconnaissance and surveillance operations become available. He must determine whether new information (on enemy forces, friendly forces, or the environment) invalidates his plan, requires him to adjust the plan, or validates the plan with no further changes. The earlier the commander identifies the need for modifications, the easier it is for him to incorporate and synchronize changes into his plan. He describes the implications of his visualization and directs actions to effect his changes to the plan through an order (WO, OPORD, or fragmentary order (FRAGO)).
- *Execute.* Execution includes a continuous process of assessing the current state of the operation and making adjustments to exploit opportunities and to account for unforeseen enemy actions. Combining the art of command and the science of control is most evident during execution. The commander exercises judgment and initiative continuously, assessing the situation and making decisions, often with incomplete, conflicting, and vague information. Waiting for perfect information is rarely an option. During execution, the commander uses his visualization, continuously updated with a current COP, to ensure that subordinate units execute appropriate measures for the actual situation. A major part of the art of command is to know when the plan must change and what criteria point toward a need for changes and then to determine what required changes will get the maximum effectiveness from the unit. The commander directs these actions primarily through a FRAGO.

SECTION III – COMMAND AND CONTROL

3-21. Command and control (C2) is the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. C2 comprises the ability to envision activities over time and space necessary to achieve an end state, to translate and communicate that vision into a brief but clear intent, to formulate concepts, and to provide the force of will through the presence of leadership throughout the battlefield. These abilities will enable the HBCT to concentrate overwhelming combat effects at the right time and place to win decisively with minimal friendly casualties. Command is the art of war within the domain of the commander. Control is the science of war within the purview of the staff. Command and control has two components: the commander and the C2 system. The commander uses the C2 system to exercise command and control over forces to accomplish a mission.

3-22. The C2 system is the arrangement of personnel, information management, procedures, and equipment and facilities essential to the commander to plan, prepare for, execute, and assess operations.

- *Personnel.* The C2 system in an HBCT begins with people. No amount of technology can reduce the importance of the human dimension since combat involves Soldiers.
- *Information management.* Information management (IM) consists of the C2 INFOSYS and relevant information (RI). The C2 INFOSYS provide the commander with a vehicle for exercising command and control. These systems provide an accuracy and reliability that can accelerate decision-making in the HBCT. The C2 INFOSYS also make mission execution efficient and effective, allowing the commanders and staffs to spend more time and energy on the art and human dimension of command and control.
- *Procedures.* Procedures are standard and detailed sequences of activities in the HBCT to accomplish tasks. They govern actions in the C2 system to effectively and efficiently exercise command and control. Adhering to procedures minimizes confusion, misunderstanding, and hesitance as commanders rapidly shift forces to meet contingencies.
- *Equipment and facilities.* The equipment and facilities provide sustainment and a work environment for the other elements of the C2 system.

C2 INFRASTRUCTURE

3-23. The commander's goal is to control the battlefield tempo and impose his will on the enemy by making and executing decisions faster than the enemy can react. The C2 system is designed to support this goal. The staff is organized within the brigade's CPs to provide SU information, usually in reports and execution information in the form of orders. The CP functions and enabling tasks are the means through which the staff performs this role. The commander and staff use control to monitor, adjust, and coordinate the preparation for and execution of operations.

3-24. The C2 infrastructure is a system of intelligence, surveillance, and reconnaissance (ISR) doctrine; procedures; organizational structures; personnel; equipment; facilities; and communications and computers. It is designed to collect, process, store, display, and disseminate the information needed to develop a COP to support a commander's mission. The C2 infrastructure also supports a commander's exercise of command and control across the range of military operations through regulation of forces and functions in accordance with the commander's intent.

- The C2 infrastructure (Figure 3-2) provides the commander and staff the ability to plan, prepare, and execute using resilient voice and data communications networks (a portion of the INFOSYS) to enable effective command and control on the

battlefield. This capability includes the conduct of operations from alert through redeployment. It also includes conduct of counterintelligence operations to deny the adversary's ability to do the same. The HBCT integrates the C2 infrastructure through maneuver and maneuver support, fires and effects, sustainment, force protection, information operations (IO), and ISR.

- The HBCT's C2 infrastructure is organized to leverage fully the opportunities presented by near-real-time access to all RI and a near-complete COP through the available INFOSYS. The C2 organization provides all commanders in the HBCT the capability to *see* and understand their AO in all its dimensions. It provides a shared COP of the situation, precisely locates and tracks critical targets, synchronizes simultaneous operations with lethal and nonlethal means, operates with joint and multinational forces, and recognizes and protects its own forces. This capability allows significantly enhanced synchronization of widely dispersed, highly mobile forces in execution as well as in planning to mass effects. The HBCT's INFOSYS employ *smart technology* to enable organizations to identify and adapt to the changing patterns of a non doctrinal or difficult-to-template enemy.

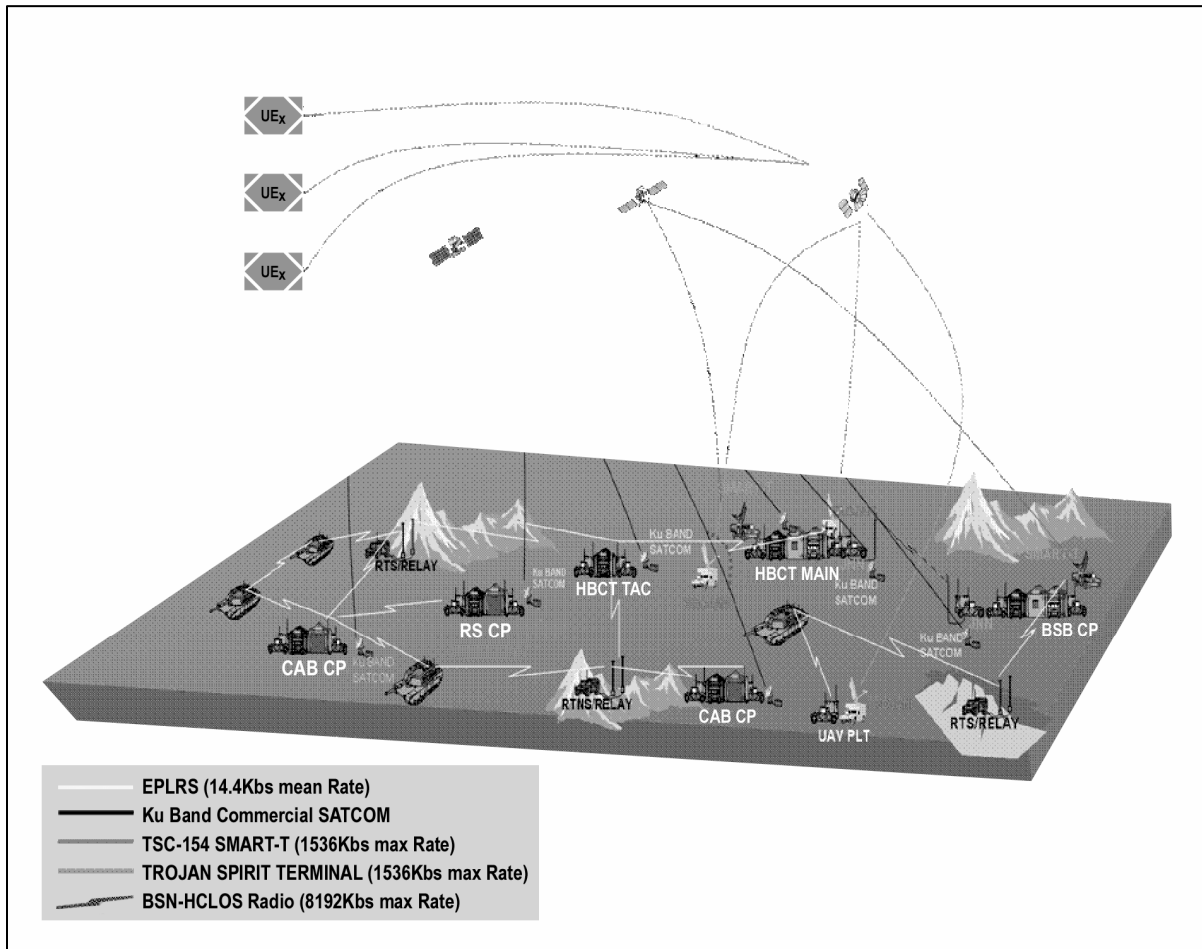


Figure 3-2. Command Control System Infrastructure

EXERCISING COMMAND AND CONTROL

3-25. The HBCT commander must place the C2 system into action to exercise command and control. Exercising command and control is dynamic throughout the operations process.

- Although planning, preparing, executing, and assessing C2 occur continuously in operations, they need not occur sequentially. The HBCT must prepare to perform all four actions simultaneously, with the commander at the center of the process (Figure 3-3).
- The operations process is execution focused rather than planning focused. The C2 INFOSYS compress planning to allow more time to focus on execution. The INFOSYS do this in two ways.
 - The INFOSYS allow better collaborative and parallel planning among echelons within the HBCT.
 - The INFOSYS provide a more accurate COP, allowing forces to execute faster with less detailed planning.

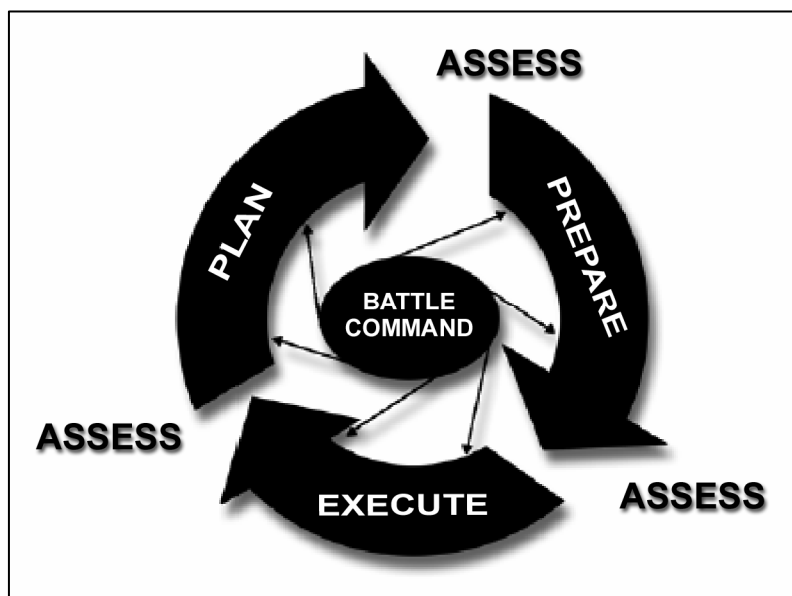


Figure 3-3. The Operations Process

DISTRIBUTION OF HBCT COMMAND AND CONTROL

3-26. The HBCT's staff sections normally are distributed among three C2 organizations: the command group (CG) (HBCT commander and the deputy commander if deployed forward), TAC (tactical command post), and MAIN (main command post). The HBCT commander organizes the staff within each CP to perform essential staff functions to aid him with planning and in controlling operations. Enhanced CP capabilities allow the commander to maintain CP functionality regardless of the spatial positioning of the staff. The modularized design of each function (for example, maneuver and maneuver support, fires and effects, ISR, etc.) provides the commander with the flexibility to tailor his CPs based on his assessment of the current and future situation. These C2 organizations are normally positioned within the HBCT's AO to maintain flexibility, redundancy, survivability, and mobility. The CPs of the brigade support battalion (BSB) and brigade troops battalion (BTB), while not HBCT-level CPs, perform functions that have significant impact on HBCT operations. Accordingly, the BSB and BTB staffs are often closely involved in parallel or collaborative planning with the HBCT CPs.

COMMAND GROUPS

3-27. Command groups observe critical events and direct command and control of HBCT operations across the full spectrum of operations. They are not permanent organizations and are organized based on the mission. CG 1 is the commander's CG, whereas CG 2 is the deputy commander's C2 organization. The CGs are formed any time the HBCT commander or deputy commander relocates to control the operation. They are equipped to operate separately from the TAC or MAIN whenever the commander must locate forward to influence operations with rapid decisions and orders. The commander will determine the battlespace location of the CG. The commander often fights the battle from the CG and positions himself at the decisive point to observe, influence, sense the fight, and ensure communications. The deputy commander's CG complements the commander's CG in the direction of C2 of the HBCT. CG 2 is organized when the HBCT commander requires it to control an operation or the commander needs an additional senior leader presence to influence the operations with rapid decisions and orders. The deputy commander uses the same considerations as the commander in positioning his CG on the battlefield.

- The commander normally fights the battle from the command group and normally locates near the most critical event, normally with the main effort headquarters. From this forward location, the commander is better able to observe critical events, maintain communications, and sense the battle. Despite the increased capability provided by the C2 INFOSYS, command remains a personal endeavor. The commander should leverage the C2 INFOSYS to untether himself from the MAIN so he can physically see his subordinates and the terrain he is to fight on without affecting his decision-making ability.
- The commander considers the following in determining his location on the battlefield:
 - Linkage of the ABCS network to make timely decisions, including the ability to judge the progress, condition, and morale of his forces. Within technical limitations, communications systems adapt to the needs of the commander, not vice versa.
 - Time and location of critical events and/or decision points that have the greatest impact on mission accomplishment. Ideally, the commander selects a location where he can observe the conditions that aid in making a critical decision.
- Security for the command group, including the commander's personal protection.

TACTICAL COMMAND POST (TAC)

3-28. This CP is a lean and forward-deployed CP established when the commander must be positioned away from the MAIN CP location for an extended period, when METT-TC factors do not permit the commander access to the MAIN, and when the MAIN is moving. The TAC focuses on assisting the commander with command and control of current operations. It is commander focused and execution centric. Usually, or in accordance with commander guidance, the HBCT S3 is responsible for the TAC. While desirable, a 24/7 capability is not an overriding consideration in forming the TAC. TAC functions depend on connectivity to the MAIN. The organization of the TAC is smaller and more austere than the MAIN. It operates in functional sections that allow synchronization for maneuver, fires and effects, and ISR. Its connectivity to the more robust MAIN by way of the ABCS suite of systems allows for efficient collaboration to ensure it gets the required information necessary for the commander's decision-making process. The TAC can execute collaborative, distributed, and simultaneous decision-making to translate decision to action. This allows rapid decision-making focused on the current fight.

MAIN COMMAND POST (MAIN)

3-29. The MAIN is the commander's primary C2 facility. The HBCT XO is normally supervises the staff activities and functions of the MAIN. It operates from a relatively secure location and moves as required to maintain C2 of the operation. The MAIN integrates and synchronizes the staff mission functions of maneuver and maneuver support; fires and effects; ISR; planning; sustainment; and command, control, communications, and computers (C4). The MAIN monitors all operations, coordinates with higher and adjacent units, and provides in-depth analysis of information and intelligence to provide recommendations to the commander. If the TAC is not employed, the MAIN controls tactical operations. The MAIN is the focal point for intelligence operations in the HBCT and provides SU to the commander. The MAIN monitors and anticipates the commander's decision points and CCIR. Appendix B, Command Post Operations, provides the composition and highlights those functional tasks executed by the MAIN.

BRIGADE SUPPORT BATTALION COMMAND POST

3-30. The BSB CP controls and coordinates the administrative and logistical support for the HBCT. The BSB CP is located in the brigade support area (BSA). Although its physical presence is normally in the MAIN, the HBCT S1 and S4 sections work closely with the BSB support operations officer to coordinate logistics for the HBCT. The BSB CP serves the following functions:

- Tracks the current battle.
- Provides CSS representation to the plans cell for planning and integration.
- Sustains operations.
- Forecasts and coordinates future requirements.
- Serves as the entry point for units entering the HBCT rear area.
- Monitors MSRs and controls CSS traffic.
- Coordinates the evacuation of casualties, equipment, and enemy prisoners of war (EPWs).
- Coordinates the movement of the BSA with the MAIN.

BRIGADE TROOPS BATTALION COMMAND POST

3-31. The BTB CP commands and controls the separate companies and attachments of the HBCT. The BTB secures all HBCT-level CPs and plans, prepares, and executes security operations in the HBCT rear area with assets provided by the HBCT commander to defeat Level I and Level II enemy threats.

SUCCESSION OF COMMAND

3-32. Succession of command occurs automatically on the death, capture, or evacuation of the brigade commander. It also occurs when communications are lost with the commander for an extended period of time. The brigade must treat succession of command as a type of drill.

3-33. All leaders must understand the procedures required for a quick, smooth succession. The normal succession of command follows:

- Brigade commander.
- Deputy commanding officer.
- Senior maneuver battalion commander.
- Brigade XO.
- Brigade S3.

3-34. The HBCT commander may elect to establish an interim succession of command before an operation because the next senior commander will not be in a good position to immediately assume command of the HBCT. For example, the commander may designate the main effort maneuver battalion commander as second in the succession of command. Then, on completion of the battle, the deputy commander assumes command of the HBCT.

3-35. When loss of the commander or other battlefield conditions necessitate succession, the TAC or the current operations element of the MAIN maintains control of the operation until the new commander can assume command. The MAIN normally notifies the higher command of the succession. When the tactical situation allows, the new commander quickly executes the following tasks in order of priority:

- Establishes communications with all subordinate commands.
- Notifies all subordinate commanders that he has assumed command.
- Reestablishes the chain of command as required.
- Receives status reports (STATREPs) and situation reports (SITREPs).
- Analyzes the situation and issues orders as required to control operations.

SECTION IV – CONTROL

3-36. Control is the regulation of forces and operating systems to accomplish the mission in accordance with the commander's intent. It includes collecting, processing, displaying, storing, and disseminating information for creating the COP and using information, primarily by the staff, during planning, preparing for, executing, and assessing operations. Principles of control include the following:

- Allow maximum freedom of decision and action for subordinates.
- Create, maintain, and disseminate the COP.
- Use common doctrinal procedures, graphics, and terms.
- Provide for flexibility and adaptability.

3-37. Control also includes ensuring that subordinate forces comply with the commander's intent. Control serves its purpose by allowing the commander the freedom to act, delegate authority, and lead from any critical point on the battlefield while synchronizing actions throughout his AO. Control is derived from the following:

- Understanding the commander's intent.
- Implementing good SOPs.
- Training units and soldiers prior to battle.
- Rehearsing.
- Maintaining continuous dialogue between commanders and staffs at all levels.

3-38. The means of applying control include CP functions, the MDMP, OPORDs, and adjusting execution through FRAGOs.

INFORMATION SUPERIORITY

3-39. Information superiority is the operational advantage derived from the ability to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary's ability to do the same. Commanders exploit information superiority to impact enemy perceptions, attitudes, decisions, and actions to accomplish mission objectives. During the course of operations, all sides attempt to gain information superiority to secure an advantage while denying it to adversaries.

3-40. Information superiority allows commanders to make informed decisions more quickly than the enemy. Unable to keep pace, the enemy must deal with new problems before he can

solve current ones. In combat, a rapid tempo sustained by information superiority can overwhelm the enemy's decision-making process and contribute to his destruction. In stability operations and support operations, information superiority allows deploying forces to anticipate problems and requirements. It allows commanders to control events and situations earlier and with less force, creating conditions necessary to achieve the end state.

3-41. Because of the constant adaptation of opposing forces and evolving situations, absolute information superiority is not possible. It is a relative and transitory condition. Commanders recognize that unless they envision and direct operations designed to achieve and renew information superiority, they may lose it. They also know that losing information superiority may result in losing the initiative. FM 3-0 states, "Commanders create conditions for seizing the initiative by acting. Without action, seizing the initiative is impossible. Faced with an uncertain situation, there is a natural tendency to hesitate and gather more information to reduce the uncertainty. However, waiting and gathering information might reduce uncertainty, but will not eliminate it. Waiting may even increase uncertainty by providing the enemy with time to seize the initiative. It is far better to manage uncertainty by acting and developing the situation. When the immediate situation is unclear, commanders clarify it by action, not sitting and gathering information."

3-42. Information superiority consists of three capabilities: information operations, information management, and ISR.

INFORMATION OPERATIONS

3-43. IO are actions taken to affect an adversary's, and to influence others', decision-making processes, information, and information systems while protecting one's own information and information systems. IO have 12 elements: military deception, operations security (OPSEC), psychological operations (PSYOP), physical destruction, electronic warfare (EW), computer network attack (CNA), computer network defense (CND), information assurance, physical security, counterdeception, counterpropaganda, and counterintelligence (CI). All of these elements may be used either offensively or defensively. Related activities to IO are public affairs (PA) and civil-military operations (CMO). Normally, the UEx will not require its subordinate maneuver BCTs to execute offensive IO but will require them to accomplish limited defensive IO.

3-44. An information officer is now in the HBCT's brigade staff section. He coordinates the IO plan for the commander. Additional staff responsibilities related to IO include the following:

- The S2 is responsible for all intelligence and counterintelligence aspects of security programs and planning related to protecting Army personnel, materiel, facilities, and operations from espionage, sabotage, criminal subversion, terrorism, and sedition.
- The S3 plans and executes OPSEC and counterdeception.
- The PSYOP staff planner officer plans and executes PSYOP with attached assets. In the absence of a PSYOP officer, the S3 is responsible.
- The civil affair (CA) officer (fires and effects section of the MAIN) plans and executes CMO with attached assets.
- The effects coordinator (ECOORD) plans and executes IO-related physical destruction targets into the fire plan for offensive, defensive, and stability operations. Physical destruction is not conducted during support operations.
- The S6 is responsible for information assurance and CND.

3-45. In addition to an IO officer, a PSYOP staff planner is normally assigned to the HBCT staff. He integrates, coordinates, deconflicts, and synchronizes PYSOP (including

counterpropaganda) with the other IO elements to support the HBCT. He provides expertise in coordinating theater-level PSYOP objectives into the commander's plan.

3-46. The other requirements for IO elements follow:

- Military deception is executed in offensive and defensive operations and stability operations as stated in the operation plan (OPLAN)/OPORD. Military deception is not normally executed in support operations.
- EW.
 - Electronic attack is executed in offensive and defensive operations and stability operations with attached assets. It is not executed in support operations.
 - EW support is executed in offensive and defensive operations, stability operations, and support operations.
 - Electronic protect is planned and executed in offensive and defensive operations, stability operations, and support operations.
- CNA is not executed at the HBCT level.
- Public affairs operations are planned and executed in offensive and defensive operations, stability operations, and support operations.

INFORMATION MANAGEMENT

3-47. The XO is responsible for information management within the HBCT. He outlines responsibilities and supervises the staff's performance in collecting and processing relevant information. He ensures information and intelligence supporting the CCIR is accurate and presented in a timely manner. While the S3, in coordination with the S2, is responsible for development of ISR plans, the XO is responsible for synchronization of ISR plans, ensuring they focus on answering the CCIR. The commander, XO, and current operations cell of the MAIN supervise the execution of ISR operations. During operations, the XO ensures that all staff members are tracking the CCIR. He ensures all staff members understand the requirements, review incoming and outgoing information traffic, and understand procedures for informing the commander and other designated staff officers of critical or exceptional information.

Categories of Information

3-48. The three general categories of information follow:

- *Critical*. This is information that directly affects the successful execution of operations. CCIR include information the commander requires that directly affects his decisions and dictates the successful execution of operations.
- *Exceptional*. This category also includes specific and immediately vital information that directly affects the success of the operation. Unlike critical information, however, exceptional information is neither published nor explicitly stated; rather, competent subordinates and staffs must recognize it as vital.
- *Routine*. This is standard, repetitive information that occurs during day-to-day operations. Routine information is not time-sensitive in terms of decision-making. It helps to identify future requirements and anticipate potential problem areas.

3-49. Table 3-1 shows examples of information that is typically either exceptional or critical during an operation.

Table 3-1. Examples of information that is either exceptional or critical

ENEMY
<ul style="list-style-type: none"> • Enemy use of NBC weapons. • Enemy force's composition, strength, disposition, and activity. • Enemy obstacle intelligence. • Enemy vulnerabilities, such as exposed flanks, gaps in defenses, or units lacking mutual support. • Enemy air attack. • Enemy threats or attacks against the HBCT's flank or rear area. • Identification of enemy C2 or fire support radio nets. • Location of an enemy CP, FARP, reserve, or designated HPT. • Any enemy action that threatens the HBCT's main effort.
FRIENDLY
<ul style="list-style-type: none"> • Strength and disposition of the main effort and the reserve. • Loss of a subordinate commander or CP. • Change in the mission from division. • Combat power. • Status of critical mobility assets. • Status of obstacle and survivability effort. • Changes in ADW and WCS. • BSA displacements. • Mass casualty situation. • Loss of a communications node, radar, or Striker. • Critical supply shortages. • Location of lanes and bypasses.

Commander's Critical Information Requirements

3-50. HBCT operations produce tremendous volumes of information. Much of this information is useful but not pertinent to the commander during decision-making. The commander controls the flow and collection of critical information through the establishment of CCIR. CCIR are information required by the commander that directly affects his decisions and dictates the successful execution of operations. The commander alone decides what information is critical based on his experience, the mission, input from his staff, the higher commander's intent, and his estimate of the situation. CCIR consist of two primary components (see Figure 3-4):

- *Priority intelligence requirements (PIR)*. PIR are the intelligence requirements that the commander has anticipated and designated as priority in his task of planning and decision-making.
- *Friendly force information requirements (FFIR)*. FFIR cover information the commander needs about the forces available for an operation. This could include unit strength, disposition, capability, and readiness.
- *Essential elements of friendly information (EEFI)*. EEFI are **not** CCIR but become priorities on a level with CCIR when a commander designates them. They also generate CCIR (usually PIR to determine if the enemy is collecting against or has detected EEFI). EEFI are the critical aspects of a friendly operation that, if known

by the enemy, would subsequently compromise, lead to failure, or limit success of the operation and, therefore, must be protected from enemy detection (see FM 3-0).

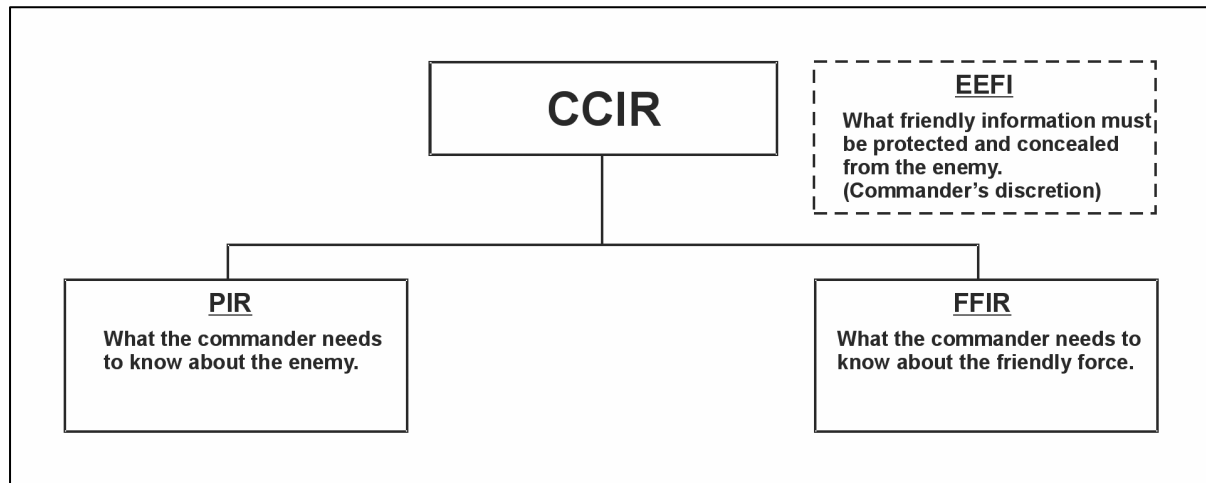


Figure 3-4. Commander's Critical Information Requirements

3-51. As the commander visualizes the operations, he develops his CCIR by considering the following questions:

- What decisions do I need to make?
- What information about the enemy, terrain, and friendly situation do I need to know to make those decisions?
- What friendly information must I conceal from the enemy?
- When during the operation do I need this information to support my anticipated decisions?

3-52. From this analysis, which is aided by the staff, the commander articulates his information requirements to his staff and subordinate commanders. The XO then directs the staff to develop an ISR plan that focuses on answering CCIR.

3-53. The commander should limit his CCIR to 10 or less because a smaller number allows the staff to better focus its efforts. As the operation progresses, the CCIR will change, and both the commander and staff must review them for continued applicability. Also, the commander and staff must be aware that unforeseen events and information not included in the CCIR may directly impact the operation.

Relevant Information

3-54. Relevant information is all information of importance to commanders and staffs in the exercise of C2. Relevant information is categorized into CCIR and information requirements (see FM 6-0). The brigade develops procedures and systems that minimize the time and effort spent on assessing information. This is accomplished by ensuring that subordinate commands clearly understand what information is relevant, when the information is needed, and in what format it is delivered. This ensures the commander is not overburdened by large volumes of information, only receiving that information that he needs to make decisions or to help him understand the situation.

Common Operational Picture

3-55. An operational picture is a single display of relevant information within a commander's area of interest. In analog units, an operational picture equates to battle tracking map

boards used by commanders and by staffs in CPs. With ABCS, HBCTs have greater fidelity in their operational picture as positions are updated in near real time and share a common display. A COP is an operational picture tailored to the user's requirements, based on common data and information shared by more than one command. The COP is displayed at a scale and level of detail that meets the information needs of the command at a particular echelon.

Situational Understanding

3-56. Situational understanding is the product of applying analysis and judgment to the COP to determine the relationships among the factors of METT-TC (see FM 6-0). It enhances decision-making by identifying opportunities, threats to the force or mission accomplishment, and information gaps. SU helps the brigade leadership identify enemy options and likely future actions, the probable consequences of proposed friendly actions, and the effects of the environment on both. SU based on a COP fosters initiative in subordinate commanders by reducing, although not eliminating, uncertainty. It also entails understanding tactical risks and opportunities and the time available to act.

INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE

3-57. ISR is a continuous process of planning and employing collection assets and forces to provide timely and accurate combat information and intelligence (see Chapter 4). ISR enables the brigade to develop SU. ISR provides the basis for freedom of action necessary to conduct decisive and shaping operations at times and places of the HBCT's choosing. Successful ISR enables the brigade to:

- Move or react quicker than the threat.
- Anticipate threat actions.
- Exploit threat weaknesses with your strengths.
- Set winning conditions.
- Execute actions that engage the threat in terms favorable to the force.

3-58. Specific objectives that contribute to information superiority include the following (see Figure 3-5):

- Develop and maintain a comprehensive picture of the enemy and forecast his likely actions.
- Deny the enemy information about friendly forces and operations.
- Influence opposition leader perceptions, plans, actions, and will to oppose friendly forces.
- Influence noncombatants and neutrals to support friendly missions or to not resist friendly activities.
- Inform friendly organizations so they can better support policies, activities, and intentions.
- Protect friendly decision-making processes, information, and information systems.
- Continually provide relevant information (including intelligence) to the commander and staff in a usable form.

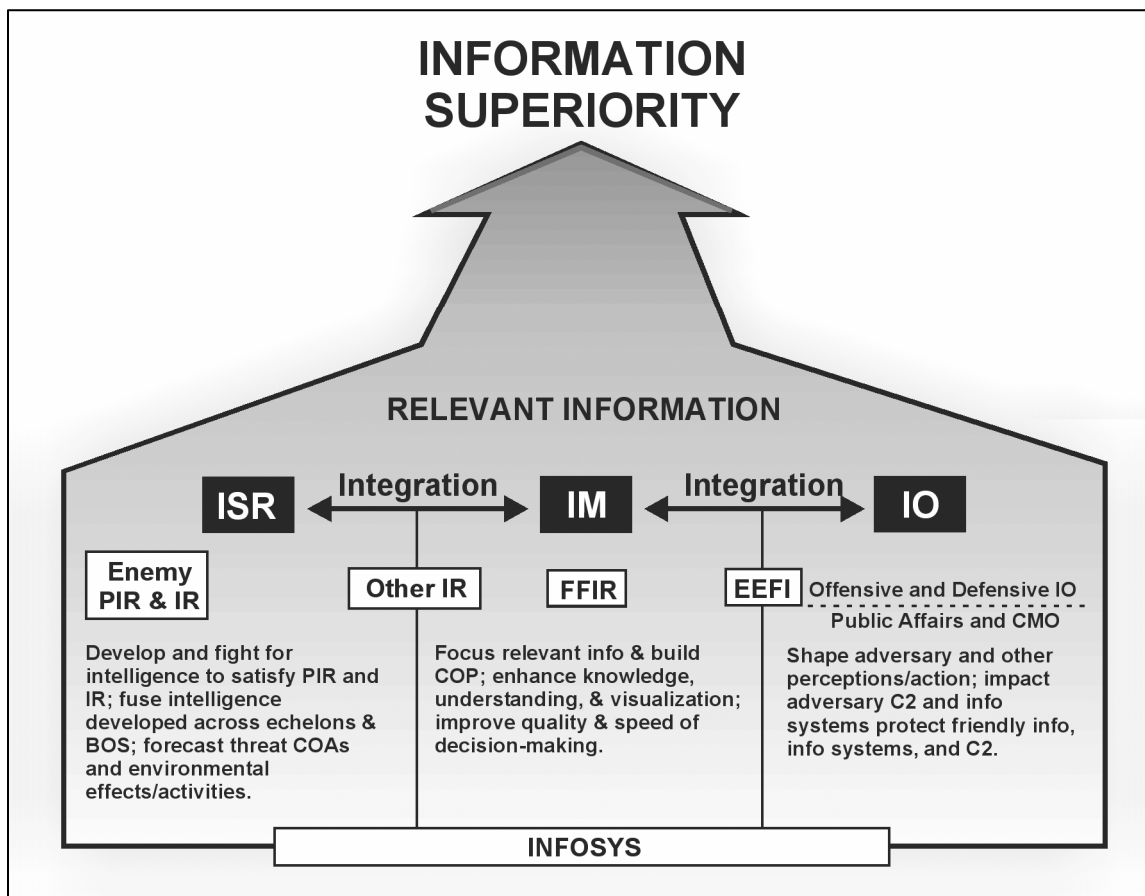


Figure 3-5. Information Superiority

SECTION V – PLANNING FOR OPERATIONS

3-59. Planning for operations supports the commander making decisions during execution. At its core, decision-making is knowing *if* to decide, then *when* and *what* to decide. It includes understanding the consequence of decisions. Decisions are the means by which the commander translates his vision of the end state into action. Decision-making is both science and art. Many aspects of military operations—movement rates, fuel consumption, weapons effects—are quantifiable and, therefore, part of the *science* of war. Other aspects—the impact of leadership, complexity of operations, and uncertainty regarding enemy intentions—belong to the art of war. The MDMP is an established and proven analytical process. The MDMP adapts the Army's analytical approach to problem solving. It is a tool that assists the commander and staff in developing estimates and a plan. The digitization of the Army and its battlefield operating systems (BOS) has not changed the steps of the MDMP; it has enhanced them. While the formal problem-solving process may start with the receipt of a mission and has as its goal the production of an order, the analytical aspect of the MDMP is continuous during operations (including execution) with constant feedback and updates of information.

INFORMATION SYSTEMS ENHANCEMENT TO DECISION-MAKING

3-60. The C2 INFOSYS enhance both the science and the art of war in two primary ways. First, the INFOSYS provide commanders and staffs with a better understanding of their battlespace. Information will be collected more effectively; processed faster and more accurately; stored in a manner that provides instant access through distributed databases; displayed in a more useable, tailored, and current format; and disseminated to the right place faster, with fewer errors, and less lag time than analog systems. The systems include the ability to access analytical expertise and databases of Army, national, and civilian institutions and the ability to create virtual staffs. Virtual staffing, the bringing together of organic and nonorganic elements independent of locations in or out of the area of operation, can be used to develop and update the staff database and refine COAs and the plan. The C2 INFOSYS and information management will make estimates more accurate, complete, and current than was possible with analog systems. Creating and maintaining a current, complete COP is essential to the MDMP and is the foundation for all estimates.

3-61. The second area where these systems improve the MDMP is in parallel and collaborative planning. Parallel planning occurs when two echelons conduct their planning nearly simultaneously. Parallel planning can only happen when the higher headquarters produces timely warning orders and shares information with subordinate headquarters as it becomes available. Parallel planning allows each echelon to make maximum use of time available, and it requires significant interaction between echelons. Collaborative planning is the real-time interaction of commanders and staffs at two or more echelons. It is facilitated by C2 INFOSYS that allow real-time exchange of data, voice, and video so that commanders and staffs can work together during all phases of planning.

- The INFOSYS facilitate both parallel and collaborative planning. These systems make sharing information much easier through a COP; distributed databases; increased speed and accuracy of dissemination of orders, plans, and guidance; and improved connectivity between echelons for the sharing of information and the passing of questions and answers with greater speed.
- Collaborative planning must be used judiciously. While it is a powerful planning tool, it can also be a negative factor. Collaborative planning is not appropriate for all situations.
 - Collaborative planning is most appropriate when time is scarce and a limited number of options are being considered. It is particularly useful when the commander and his staff can benefit from the input of subordinate commanders and staffs.
 - Collaborative planning is not appropriate in cases where the staff is working a large number of courses of action or branches and sequels, many of which will be discarded. Involving subordinates in this instance will waste precious time working options that are later discarded. Collaborative planning is also not appropriate in many cases during ongoing operations where extended planning sessions will take commanders and staffs away from conducting current operations.
 - As a rule, if the commander is directly involved in time-sensitive planning, some level of collaborative planning is probably needed. The commander, not the staff, must make the decision to conduct collaborative planning. Only the commander can commit subordinate commanders to using their time for collaborative planning.

3-62. The INFOSYS improve the timelines to conduct full planning and assist the commander with his situational understanding. Figure 3-6 illustrates the cognitive hierarchy. The commander and staff must process the information available to them. Processing raises the meaning of information from data to understanding. The data is

organized and processed to create the databases of information. Processing then takes the data in the database and adds meaning to the relevant information with progressively higher levels of complex and cognitive methods that create a COP.

3-63. Processing also includes lower level mechanical methods such as organizing, collating, plotting, and arranging data and information. However, effective processing requires analysis and evaluation (higher level cognitive methods) for data to become knowledge. Through its estimates, the staff creates knowledge for the commander. The commander then applies his judgment to the staff estimates and COP and formulates his situational understanding. Processing depends primarily on well-trained and adaptive analysts to provide insight. To achieve understanding, decision-makers apply judgment to the knowledge and the staff estimates. Understanding enables informed decisions with less-than-perfect data. Understanding generates action. With situational understanding and a mission, commanders can then visualize their battlespace and take action by issuing their commanders' guidance, intent, and selection of CCIR.

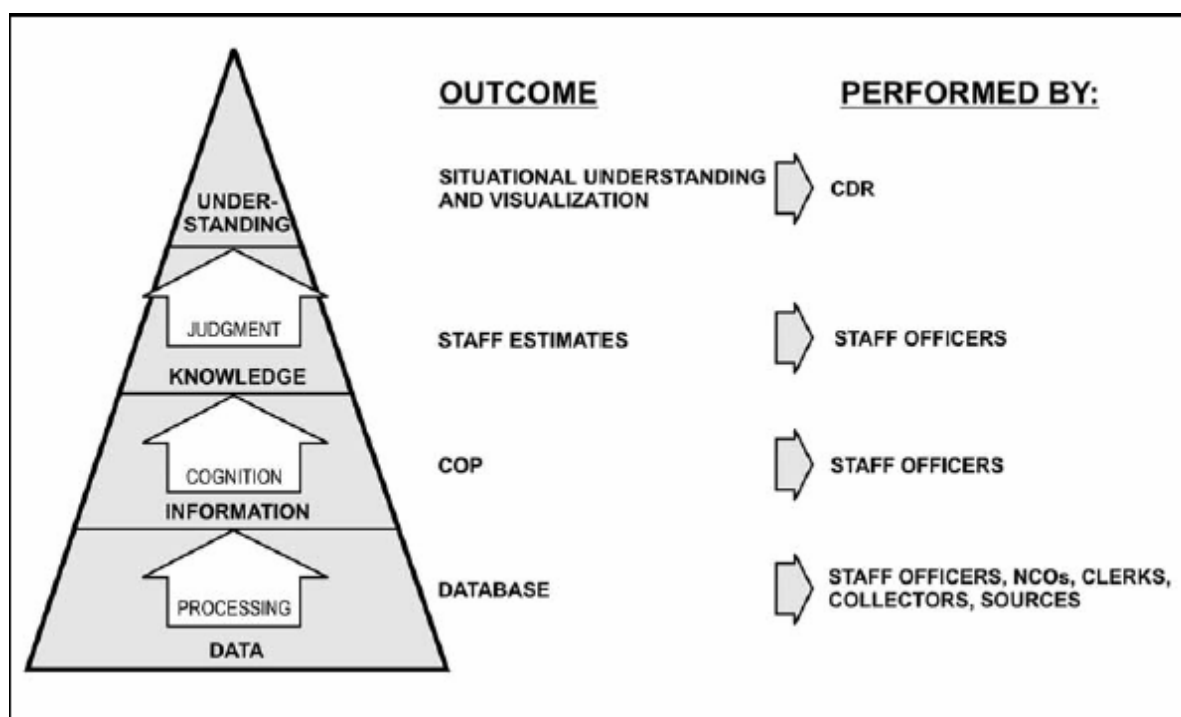


Figure 3-6. From Data to Understanding—the Process

THE MILITARY DECISION-MAKING PROCESS

3-64. The MDMP is a detailed, deliberate process used when adequate planning time and sufficient staff support are available to develop and thoroughly examine numerous friendly and enemy courses of action. This examination typically occurs when developing the commander's estimate and operation plans, when planning for an entirely new mission, and during extended operations. The underlying concurrent processes of IPB, risk assessment, targeting, force protection, and military deception planning provide the information that is used as part of the standardized planning in the MDMP. The MDMP helps the commander and staff examine a specific situation and, by applying thoroughness, clarity, sound judgment, logic, and professional knowledge, reach a logical decision. The MDMP is an accepted, proven analytical process for problem solving. The complete MDMP described in FM 5-0 is summarized below, and depicted in Figure 3-7.

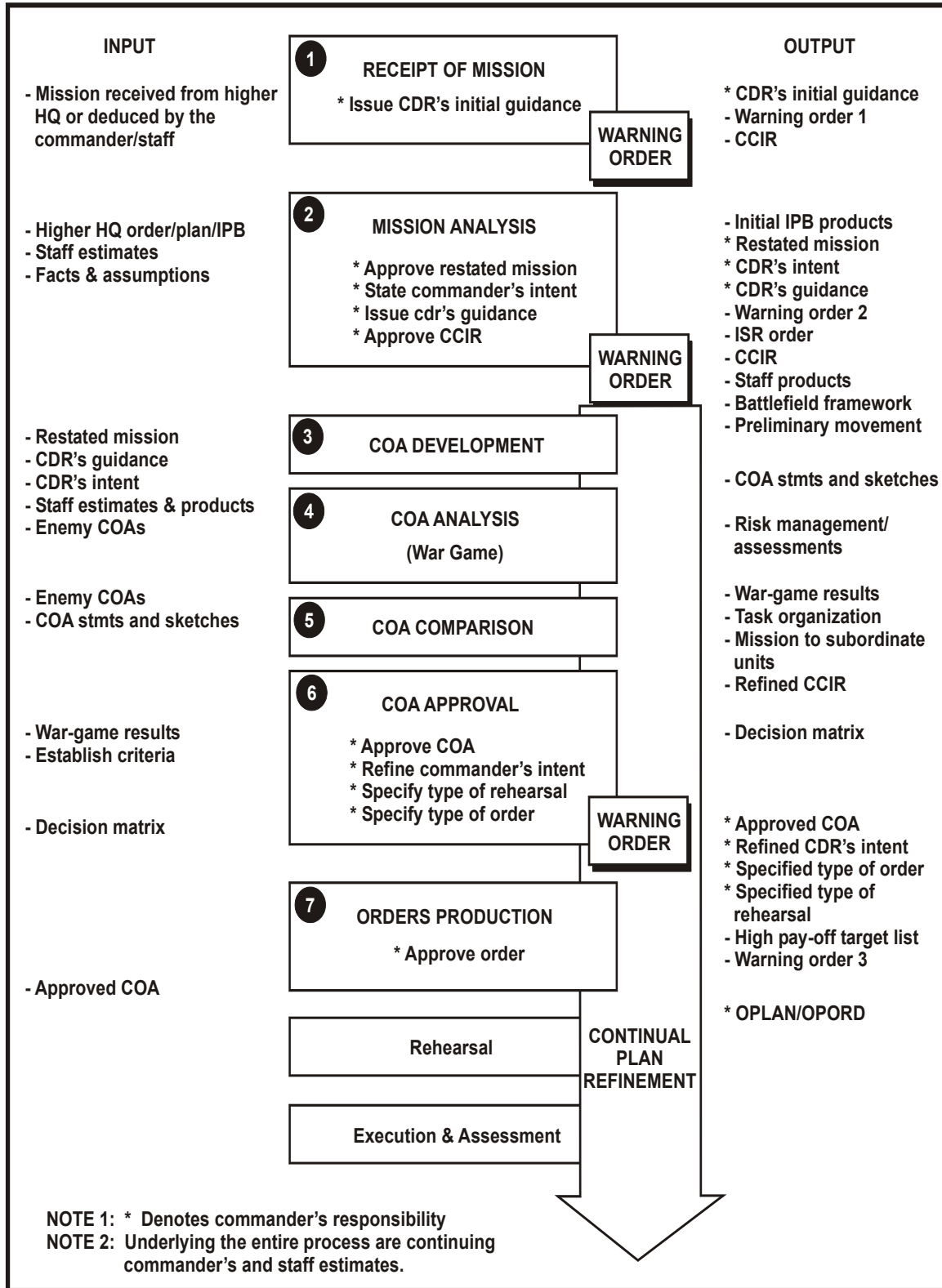


Figure 3-7. The Military Decision-Making Process

3-65. The MDMP is the foundation on which planning in a time-constrained environment is based. The products created during the MDMP can and should be used during subsequent planning sessions when time may not be available for a thorough reexamination but where significant parts of existing information and analysis of the factors of METT-TC have not changed substantially.

3-66. The MDMP relies on doctrine; especially the terms and symbols (graphics) consolidated in FM 1-02, *Operational Terms and Graphics* and the processes found in FM 5-0, *Army Planning and Orders Production*. The professional understanding of a common lexicon particular to the profession of arms and the Army is essential to the MDMP. Using approved terms and symbols facilitates the rapid and consistent assessment of the situation and creation and implementation of plans and orders by minimizing confusion over the meanings of terms and symbols used in the process.

3-67. Using the full (as opposed to abbreviated) MDMP provides the following advantages:

- It analyzes and compares multiple friendly and enemy COAs in an attempt to identify the best possible friendly COA.
- It produces the greatest coordination and synchronization for an operation and minimizes the risk of overlooking a critical aspect of the operation.
- It results in a detailed OPORD or OPLAN.

3-68. The disadvantage of using the unabbreviated MDMP is that it is a time-consuming process.

3-69. The HBCT commander and his staff conduct the MDMP process, ensuring that all key tasks and/or desired effects are considered. *Desired effects* are a set of defined conditions that must be created to achieve the commander's objectives or end state. These desired effects are identified within the commander's intent. These effects may be achieved by various means to include indirect fires, direct fires, maneuver, PSYCOP, CA and other information operations.

MDMP SEVEN-STEP PROCESS

Receipt of Mission

3-70. The staff receives a new mission in the form of an OPORD from a higher headquarters, or the commander recognizes an opportunity that requires a significant change to the current operation. The staff begins to collect the data and resources necessary to conduct mission analysis. The XO develops the timeline to structure the staff's efforts, and the HBCT commander issues initial guidance to his staff that focuses it on developing initial CCIR, authorized movement, level of detail required in the MDMP, and initial reconnaissance requirements. The result of this step is a WO that alerts subordinate units to an impending mission change.

Mission Analysis

3-71. Mission analysis defines the tactical problem and begins the process of determining feasible solutions. Analysis of the higher headquarters mission is the start point that generates the IPB as described in FM 2-91.3. It then analyzes the specified, implied, and essentials tasks laid out in the higher headquarters order. It reviews the available assets, identifies critical facts and assumptions, and evaluates risk. The results of mission analysis are the initial CCIR, an initial concept for the ISR plan, the HBCT's mission, the HBCT commander's initial intent for the operation, and the HBCT commander's guidance for the staff on developing COAs. During this step the Fires and Effects Cell (FEC) also develops, for the commander's approval, both the high-value targets recommended for inclusion in the high-payoff target list (HPTL) and the essential fires and effects tasks (EFET) to bring together the fire support and IO/nonlethal planning processes. An EFET is defined as an

application of fires and effects, lethal or nonlethal, required to support a combined arms COA. These products are distributed to subordinates in the form of WO #2 and an ISR order.

COA Development

3-72. The staff develops COAs for analysis and comparison. This begins with analyzing relative combat power and generating maneuver options. The staff arrays initial forces to accomplish critical tactical tasks and develop the scheme of maneuver that synchronizes the tasks using the battlefield framework. Initial EFETs that were developed during mission analysis are refined during COA development, and will be finalized after COA wargaming. Lethal effects may be employed more in mid- or high-intensity conflicts, and nonlethal effects are more prevalent in low-intensity or stability operations and support operations. In all types of operations, HBCT planners must integrate and coordinate lethal and nonlethal effects to achieve the commander's intent. The final result is a COA statement and sketch that clearly portrays how the brigade will accomplish the mission and explains the scheme of maneuver. The COA statement and sketch serve as the basis for the COA analysis war game.

COA Analysis (War Game)

3-73. The staff develops a set of standards used to evaluate each COA. The standards may be based on the principles of war, commander's guidance, doctrinal principles for the operation being conducted, or what the commander deems important. The staff conducts a war game of each COA using an action, reaction, and counteraction methodology. This allows the staff to view the likely outcome of the battle, allocate resources, synchronize BOS, and develop control measures. The results of each war game are assessed using evaluation criteria established by the commander and recorded for comparison against other COAs.

COA Comparison

3-74. The staff evaluates each COA and compares each one against the others to determine which COA best accomplishes the mission without undue risk. Each COA is briefed to the commander, and the staff makes its recommendation on the most preferred option.

COA Approval

3-75. The brigade commander selects a COA, modifies it as required to better meet his intent, or rejects them all and has the staff develop new ones. He then finalizes his intent and CCIR based on the chosen COA. He gives guidance to the staff on the type of order to produce, rehearsals to conduct, and priorities for CS and CSS assets. The staff issues WO #3 reflecting these changes.

Orders Production

3-76. The staff finalizes the plan based on the commander's approval guidance and prepares to publish a written order, brief an oral order, transmit a digital order, or a combination thereof. The order includes graphical overlays and staff annexes.

ROLES OF THE COMMANDER, DEPUTY COMMANDER, AND EXECUTIVE OFFICER

3-77. The commander is in charge of the military decision-making process. He decides what procedures within the MDMP to use in each situation, including whether to use collaborative planning. The commander's intent is the driving force behind the MDMP. The planning process hinges on a clear articulation of his commander's visualization. The C2 INFOSYS provide the commander an unprecedented level and quality of information that will help

focus his attention on the critical elements of the situation and enable him to better understand the environment in which he is operating.

3-78. The commander is personally responsible for planning, preparing, and executing operations. From start to finish, the commander's personal role is central; his participation in the process provides focus and guidance to the staff. However, there are responsibilities and decisions that are the commander's alone. The amount of his direct involvement is driven by the time available, his personal preferences, and the experience and accessibility of the staff. The less time available, the less experienced the staff, and the less accessible the staff, the greater the commander's involvement. When the commander is linked with his staff by the C2 INFOSYS, he is more accessible and has more tools to provide guidance and to stay involved in the process, regardless of his location within the AO. (See the section on Decision-Making in a Time-Constrained Environment, for a discussion of increased commander involvement in the decision-making process.)

3-79. The commander uses the entire staff during the MDMP to explore the full range of probable and likely enemy and friendly COAs and to analyze and compare his own organization's capabilities with those of the enemy. This staff effort has one objective: to collectively integrate information with sound doctrine and technical competence to assist the commander in his decisions, leading ultimately to effective execution. Through the use of C2 INFOSYS, the commander guides not only the staff but subordinate commanders as well and uses the C2 INFOSYS to access additional data from national or higher echelons to help in analyzing both the environment in which he is operating and the enemy.

3-80. The HBCT staff is significantly expanded compared to earlier brigades. Additionally, the HBCT now has a deputy commander. One of the early critical decisions the commander must make is how to take maximum advantage of these increased capabilities. Given the expanded size of the HBCT staff and the complex nature of the common operating environment (COE), the commander can use the experience and judgment of the deputy commander to overwatch critical staff processes during staff planning.

3-81. Deputy Brigade Commander (DCO). The HBCT commander defines the DCO's role, duties, and relationship with the staff and subordinate commanders, and normally assigns specific tactical tasks and responsibilities that require command oversight. The roles assigned the DCO by the Commander will influence the DCO's role in the MDMP process. For example, in high intensity conflict, the DCO responsibilities may include river crossing operations, passage of lines, or overseeing a critical tactical task at a distant point on the battlefield. Accordingly, the DCO would focus on these tasks during any MDMP process. The DCO also oversees the HBCT's sustainment system to ensure proper anticipation and linkage between current and future operations. The DCO may also oversee selected staff boards and cells during the planning process to provide additional time for the executive officer to accomplish his expanded responsibilities. Refer to Appendix B, Command Post Operations, for additional discussions on roles and responsibilities of the DCO.

3-82. The XO manages, coordinates, and disciplines the staff's work and provides quality control. He must understand the commander's guidance and intent because he supervises the entire process. He ensures the staff has the information, guidance from the commander, and facilities it needs. He determines timelines for the staff, establishes briefback times and locations, enforces the information management plan, and provides any unique instructions to guide the staff in completing the MDMP process.

3-83. By issuing guidance and participating in formal and informal briefings, the commander and XO guide the staff through the decision-making process. In a collaborative environment, the commander can extend this participation directly to subordinate commanders and staffs. WOs are used to facilitate parallel planning. Such interaction helps the staff and subordinates to resolve questions and involves them in the complete process. The selected

COA and its implementing OPORD are directly linked to how well both the commander and the staff accomplish each step of the MDMP.

ROLE OF ISR

3-84. The HBCT commander deploys the reconnaissance squadron (RS) early in the planning process to facilitate early intelligence collection. However, the HBCT RS should not be deployed without first considering, as a minimum, the reconnaissance and surveillance planning factors found during mission analysis.

3-85. The commander and staff analyze the information collected from the RS, military intelligence (MI) company, and other ISR assets (both internal and external) and incorporate this information into the planning process. The commander and staff ensure ISR operations are continuous while planning, preparing for, and executing the mission. Information collected during reconnaissance and surveillance may result in initial plans or COAs being modified or even discarded. The earlier the need for modifications can be identified, the easier the modifications can be incorporated and synchronized into the plan. Further, when the plan changes, the commander must modify his reconnaissance and surveillance objective to support the new plan.

3-86. ISR operations assist significantly in developing COAs. Conducted early in the planning process, it can help confirm or deny the commander's initial assessment (visualization). Information may also allow him to immediately focus on a specific COA or eliminate COAs that the reconnaissance shows to be infeasible. When conducting ISR operations, the commander must determine if the benefits outweigh the risks.

DECISION-MAKING IN A TIME-CONSTRAINED ENVIRONMENT

3-87. The MDMP is designed to deliberately solve a complex problem using the combined expertise of a staff. It has the advantages of being exceptionally thorough and provides several opportunities for midcourse corrections by the commander. In a time-constrained environment, the staff may not be able to conduct a detailed MDMP and will choose to abbreviate the process as described in FM 5-0 (FM 101-5). The abbreviated process uses all seven steps of the MDMP. It saves time by reducing the scope of a staff's analysis to a specific COA and critical events. Under these circumstances, the commander must become more personally involved, using his experience, education, expertise, intuition, and judgment to focus the staff. The commander issues guidance to abbreviate the process by limiting the number of COAs, isolating the war game to critical events and participating directly in the process, thereby eliminating the need for redundant briefings.

3-88. Most planning processes occur in one of two scenarios. These scenarios follow:

- The HBCT staff has approximately 16 to 24 hours (or more) from receipt of the order to issuing the order to subordinate units. When these conditions apply, the deliberate technique is most appropriate.
- The HBCT staff has less than 16 hours from receipt of order to issuing the order to subordinate units. When these conditions apply, the abbreviated technique is appropriate.

3-89. The times listed in the scenarios are approximate and are intended to serve only as a guide. Unit experience, personality of the commander, level of training, and complexity of the assigned mission ultimately determine which process to use under specific time constraints.

3-90. To streamline the planning process, the HBCT staff must develop and practice SOPs that address and incorporate the abbreviated decision-making process (ADMP) factors into its planning processes. HBCT staff SOPs must specifically outline the differences between

the deliberate and abbreviated planning processes. Most important, these SOPs must address the roles and responsibilities of each individual involved in the process, including NCOs and Soldiers.

3-91. The abbreviated technique is the planning process that the brigade will most often use in a tactical environment. The following techniques, many of which are executed simultaneously or executed before the actual orders process, aid and streamline the ADMP:

- The staff must anticipate and prepare for the mission analysis. It must be promptly prepared. The staff should begin to prepare for the mission analysis immediately on receipt of a WO.
- Staff officers and NCOs must have status on all classes of supply and other pertinent information before the mission analysis process.
- The staff develops standardized charts to monitor pertinent data and to assist the commander in obtaining a quick snapshot of his unit.
- The S3/XO identifies the orders group in WOs. The battle captain/NCO issues a WO to the staff, alerting the staff of the pending planning process. If confused by guidance and instructions from higher headquarters, the HBCT must seek clarification immediately. Higher headquarters provides the HBCT S2 all products as they become available. HBCTs should use their liaison officers and multiple WOs to facilitate this.

3-92. The Commander, DCO and S3 play a key role in ensuring an effective ADMP. Savings in time can be found by early guidance from the commander (normally issued through the DCO, XO, or S3), for example:

- Immediate issue of the timelines needed to complete the process.
- Restrict the number of COAs to be developed (for example, “develop no more than 2 separate COAs”, or focus on this specific COA, etc).
- Identify the level of staff analysis (“hasty” versus more detailed analysis and wargaming).
- Directing early inclusion of subordinate units in parallel or collaborative planning
- Early and simplified decision brief to the commander. Inclusion of subordinate commanders at the decision brief.
- Use of abbreviated orders formats.

3-93. The S2 section focuses product development in accordance with the planning priorities set by the S2. Those priorities normally include early preparation of blown-up sketches of critical areas (objectives, engagement areas (EAs), etc.), terrain analysis (modified combined obstacle overlay (MCOO)), doctrinal templates, and other tools as necessary. Other staff officers assist the S2 by providing their BOS expertise as he develops the enemy situation templates (SITTEMPs).

3-94. The brigade commander conducts confirmation briefings with subordinates immediately following order issue to ensure they understand the commander’s intent and concept. Liaison officers who are familiar with the division’s plan can assist by attending and participating in the planning process. When using the abbreviated technique, the commander’s guidance must be specific and direct. The staff develops an SOP that identifies what types of guidance staff officers require from the commander.

3-95. Finally, the staff conducts a mission analysis brief as formal as time permits. This is often the only time the entire staff is present, and it is the only opportunity to ensure that all staff members are starting from a common reference point.

3-96. The planning techniques listed above are not mutually exclusive. When planning for an operation, the HBCT staff may use one or both of the techniques listed. The HBCT staff may initially develop the plan using the deliberate or abbreviated technique. As information

becomes available and the situation changes, the staff may have to make adjustments to the plan using the abbreviated technique depending on the situation. In certain situations, the HBCT staff may use the deliberate technique as it develops its plan while a subordinate headquarters uses the abbreviated technique.

3-97. Whichever planning process is used, the commander and staff focus on quickly developing a flexible, tactically sound, fully integrated, and synchronized plan that prepares the unit for mission success with the fewest casualties possible. There is no set process for abbreviating the MDMP; it depends on the experience level of key personnel, the complexity of the operation, and the time available before forces must be committed to movement. Figure 3-8 provides an example of an abbreviated decision-making process.

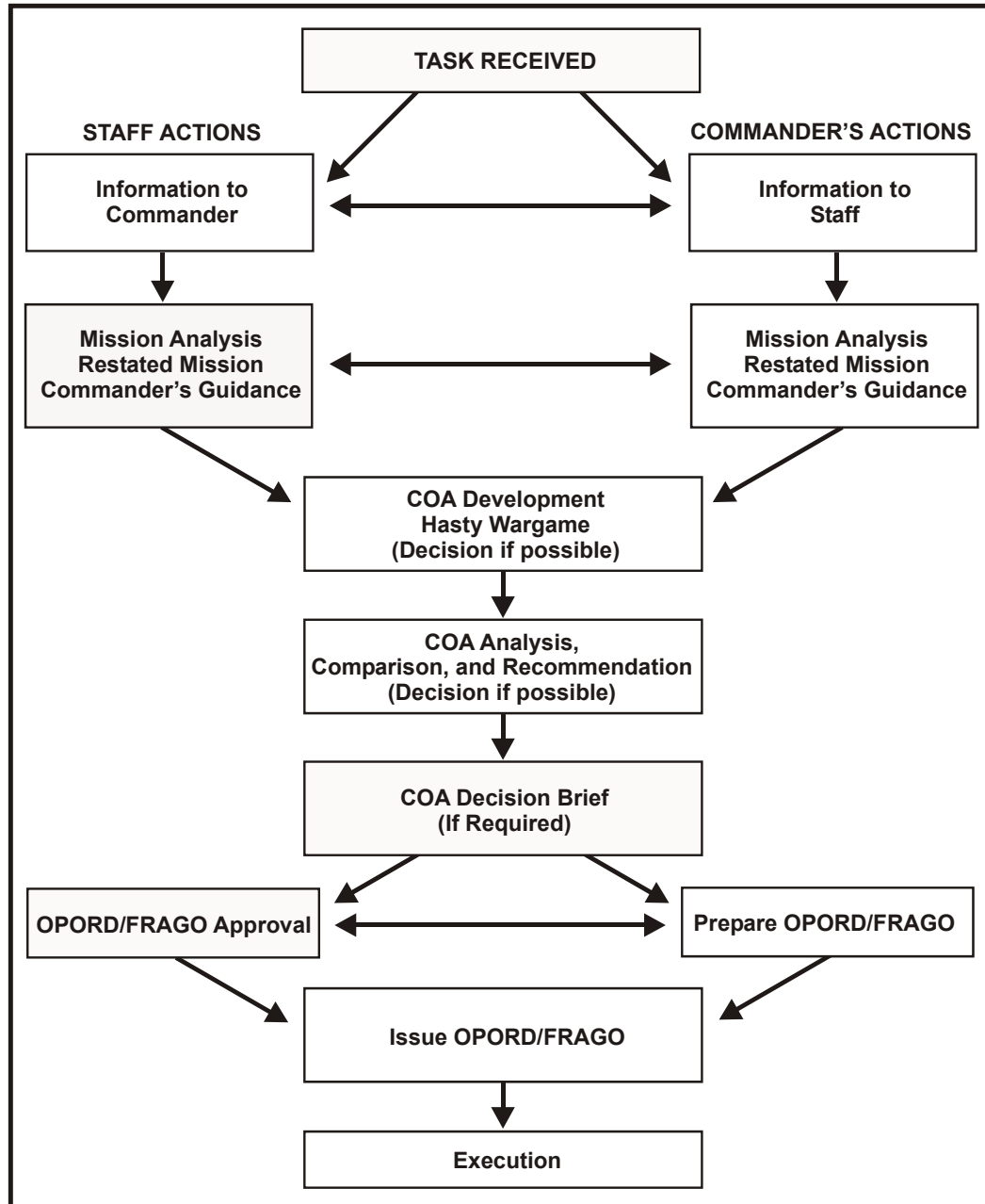


Figure 3-8. Example of an Abbreviated Decision-Making Process

PARALLEL PLANNING

3-98. While the formal MDMP does not begin until the receipt of the OPORD, a change in the situation, or anticipation of an order from the higher command, planning can begin as soon as sufficient information about the upcoming mission is available. This is referred to as parallel planning. It is accomplished by issuing WOs to subordinate units at various stages of the MDMP that gives them the information required to conduct mission analysis. As staff products are prepared and finalized, they should be posted on the HBCT tactical internet to facilitate subordinate unit planning. For example, the division knows the limits of its AO by the time it finishes mission analysis. The brigade receives this information in WO #2. The HBCT staff can begin to gather facts concerning the AO, adjust map sets and databases, and begin the IPB terrain analysis. By WO #3, the division will have assigned the brigade a specific COA. This will narrow the AO and further focus the brigade staff's preparation before receiving the division order.

3-99. The desired outcome of parallel planning is efficiency in time management by disseminating decisions and specific instructions to subordinate units as they are made.

DISTRIBUTED PLANNING

3-100. Digital effects on distributed planning allow members of the same staff to execute the MDMP without being collocated. This is done through information-sharing systems such as ABCS, video teleconferencing (VTC), telephonic communications systems, and databases. Distributed planning saves time and increases the accuracy of available information by allowing for the rapid transmission of voice and data information that can be used by staffs over a wide geographical area. The commander can remain forward at his command group with subordinate commanders and receive the mission analysis brief without having to travel to the MAIN. As with parallel planning, the desired outcome is efficiency in time management. Distributed planning focuses on the rapid transmission of information that allows the commander to make timely decisions.

COLLABORATIVE PLANNING

3-101. Planning should be collaborative to the extent that the situation permits. The main benefits of collaborative planning come as much from engaging meaningfully in the process as from the product itself. While the plan may convey the decision, participating conveys the context of the decision as well as understanding the available options and the relationships among forces. This is made possible by the same INFOSYS that make distributed planning possible (such as ABCS). Having subordinate staffs directly involved in the process provides several advantages:

- Makes subordinates aware of decisions as they happen.
- Ensures subordinates develop an increased understanding of the higher commander's vision and intent.
- Provides dynamic update to staff estimates.
- Increases the brainstorming effect by adding diverse experiences.
- Reduces briefing requirements.
- Shortens the subordinates' planning time requirements.

3-102. Some risks are associated with conducting collaborative planning:

- Information overload can overwhelm staffs during MDMP in a time-constrained environment.
- Too many participants can slow down COA development and COA analysis.
- The process cannot become a democracy.

- A strong subordinate commander or staff can unduly influence an inexperienced higher staff toward a favored COA rather than the best COA.
- All subordinate elements may not be able to participate. This could leave a void that requires special briefings and instructions to synchronize the unit into the plan.

3-103. For these reasons, collaborative planning should occur during some phases of the MDMP and not during others. It is appropriate during mission analysis, where information sharing is at a premium and decision-making is not being conducted. It is also useful during COA analysis (war gaming) where diverse viewpoints can quickly identify, troubleshoot, and propose solutions to any issues that arise. Staffs should use collaborative planning during the COA decision so that subordinates can eavesdrop on the commander's final decision and guidance. Collaborative planning is not as appropriate during COA development where assets are allocated in an unconstrained environment and headquarters have not yet been assigned. It is also not useful during COA comparison where subordinates may bring an agenda to the decision-making process.

3-104. Collaborative planning is best conducted for specific purposes. For example, the HBCT commander is given the mission to cover the UEx front with his RS. He may conduct collaborative planning with just the RS staff to draw on its expertise in security operations, or he might utilize the expertise of the BSB when planning a support operation.

3-105. The HBCT staff is sufficiently robust and technologically enabled to conduct collaborative planning with its higher headquarters. It is designed to execute current operations and plan future operations simultaneously. Its subordinate battalion staffs and company commanders are not sufficiently robust to do this. If the HBCT attempts to conduct collaborative planning with subordinates, they must accept a reduced capability to control current operations.

SECTION VI – PREPARING FOR OPERATIONS

3-106. The HBCT's preparation activities improve its ability to successfully conduct contemplated operations. At a minimum, these activities include plan refinement, rehearsals, reconnaissance and surveillance, coordination, inspections, and movement. Preparation occurs anytime the HBCT is not executing. Ideally, preparation begins with the receipt of an order (as does planning) and ends as execution begins. Assessment during preparation monitors the progress of readiness to conduct operations. The commander evaluates preparations against his criteria for success to determine variances and to forecast the significance of those variances for mission accomplishment.

INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE

3-107. ISR integration is fundamental to information superiority. Effective ISR synchronization and coordination eliminates unit and functional collection efforts that are conducted in isolation. To that end, each component element of ISR must be clearly understood:

- Intelligence is the product resulting from the collection, processing, integration, analysis, evaluation, and interpretation of available information concerning foreign countries or areas and information and knowledge about an adversary obtained through observation, investigation, and analysis.
- Surveillance involves continuously observing an area to collect information.
- Reconnaissance assets collect information and can validate current intelligence or predictions. Reconnaissance units, unlike other units, are designed to collect information.

3-108. During preparation, the HBCT commander answers his CCIR and improves his knowledge about the enemy and terrain through the RS and other ISR assets that may be available to him. An ISR operation is planned and executed with the same level of importance as any operation. Reconnaissance and surveillance is not a static, one-time effort that achieves a single goal and then ends. As the RS and other ISR assets gather information (answering the CCIR), the staff should modify the collection plan to account for new information requirements and to redirect efforts to collect additional information. The commander and staff must continuously review intelligence products against the current situation; they redirect the RS or other ISR assets to focus on the most important unknowns remaining, emphasizing the current CCIR. The HBCT commander must balance his need for information with the ability of the RS to gather it, the risk to the RS during collection, the ability to sustain the RS over time and distance, the requirement to have the RS available at critical times and places to support the decisive action, and the availability (time, type, and quantity) of other ISR assets. (See Chapter 4, Intelligence, Surveillance, and Reconnaissance Operations.)

SECURITY

3-109. Security measures taken during preparation prevent surprise and reduce uncertainty through local security and OPSEC. Local security and OPSEC prevent the enemy from discovering the HBCT's plan and protect the force from unforeseen enemy actions. The goal in conducting security operations is to prevent the enemy from gathering EEFI. Security operations are a dynamic effort that anticipates and prevents enemy intelligence-gathering efforts.

FORCE PROTECTION

3-110. Force protection includes air and missile defense; nuclear, biological, and chemical (NBC) defense; antiterrorism; defensive information operations; and security to operational forces and means. Unable to challenge the Army in conventional combat, adversaries seek to frustrate Army operations by resorting to asymmetric means, weapons, or tactics. Force protection counters these threats. The HBCT uses skillful and aggressive counterintelligence and threat assessments to decrease the vulnerability of friendly forces. Dispersion during movement helps reduce losses from enemy fires and asymmetric actors. Camouflage discipline, local security, and field fortifications do the same. Protection of electronic links and nodes is vital to protecting information, information systems, and Soldiers. The commander and staff develop and initiate actions during planning but conduct the actions during preparation and execution.

REVISE AND REFINE THE PLAN

3-111. The HBCT commander adjusts plans based on new information. The enemy is also acting while the HBCT is preparing for an upcoming operation. As assumptions prove true or false, as the RS (or other ISR assets) confirm or deny enemy actions and dispositions and as the status of subordinate units change, the HBCT commander determines whether the new information invalidates the plan, requires him to adjust the plan, or validates his plan.

COORDINATION AND LIAISON

3-112. During preparation, the HBCT conducts necessary coordination with higher, lower, adjacent, and supporting units. This may include sending and receiving liaison teams. Coordination includes the establishment of all communication links to guarantee continuous contact during execution. This is especially critical when the HBCT is a subordinate element of an organization that lacks the C2 INFOSYS and when units that lack the same INFOSYS

are subordinated to the HBCT. Coordination is essential for synchronization during execution.

3-113. Coordination may be both internal and external. Internal coordination occurs within the HBCT staff. External coordination involves subordinate and supporting units and/or staffs and higher headquarters. External coordination is sometimes referred to as “collaborative planning.” Coordination has four objectives:

- It ensures an understanding of the commander’s intent and an understanding of subordinate and supporting unit roles.
- It ensures that all affected and interested personnel have been consulted or/informed so they may respond as desired or adjust their plans and actions.
- It avoids conflict and duplication of effort among subordinate units, reducing the risk of fratricide and the needless expenditure of resources.
- It ensures that the commander and staff consider all relevant factors and effectively employ all available assets.

3-114. Liaison parties are a key means of ensuring coordination and direct communications between headquarters. Major subordinate formations should provide a liaison party to the HBCT. Likewise, the HBCT provides liaison to, as a minimum, the UEx, and normally to adjacent units. Regardless of what level of command, liaison parties must be able to accurately convey their parent unit status and issues, participate in staff planning actions, and effectively communicate back to their unit what is occurring in the headquarters they are supporting.

3-115. The HBCT contains a breadth of staff expertise not found in earlier brigades. This talent further enables the HBCT to coordinate effectively.

REHEARSALS

3-116. The intent of a rehearsal is to practice actions to improve performance during execution. The extent of rehearsals depends on the time available. Rehearsals allow participants to become familiar with the plan and to translate the plan into a visual impression that orients them to the environment and other units when executing. Rehearsals imprint a mental picture of the sequence of key actions within the upcoming operation. Rehearsals also provide a forum for subordinate and supporting leaders to coordinate. Rehearsals emphasize times, locations, and solutions for coordinating actions to achieve synchronization at critical points during execution.

SECTION VII – EXECUTION

3-117. Execution is putting a plan into action by applying combat power to accomplish the mission using INFOSYS to assess progress and make decisions. Inherent in the dynamic nature of execution is deciding to execute planned actions as well as deciding to adjust the plan based on changes in the situation. Combining the art of command and the science of control is most evident during execution. The commander exercises judgment and initiative continuously, assessing the situation and making decisions, often with incomplete, conflicting, and vague information. During execution, the commander uses his visualization, continuously updated with a current COP, to assess the progress of operations. His CCIR, continuously updated during the operation, guides his information updates. Decision-making during execution follows the assess- decide- and direct model, with the MDMP at its core.

THE C2 SYSTEM DURING EXECUTION

3-118. During execution, the C2 system must continuously manage relevant information. It must compare the COP against the commander’s intent; identify variances from the plan;

and recommend solutions for the commander to decide, correct, or exploit the variances. Finally, the C2 system must direct actions to execute decisions to counter unforeseen enemy or friendly actions or to exploit opportunities.

ADAPTING TO CHANGES

3-119. The HBCT uses one of two methods to adapt to changes. The first method begins during planning and consists of anticipating changes and developing branches and sequels to the plan to deal with them. Anticipating changes does not end with planning; it continues throughout preparation and execution. The second method of adapting to changes is improvising, taking action, or adopting solutions to unforeseen changes during the operation. While improvisation is not the preferred method, situations frequently arise requiring its use. The real difference between the two methods is time. Anticipation occurs when the enemy actions are foreseen early enough to develop an analytical response. Improvisation occurs when the enemy action is unexpected and does not allow time for formal planning of a response.

ASSESSMENT

3-120. Assessing an operation during execution is an essential and continuing task. It is a deliberate comparison of forecast outcomes to actual events using the commander's criteria for success to judge operational success at any point during the operation. The commander and staff assess the probable outcomes of the ongoing operation to determine whether changes are required to accomplish the mission, react to unforeseen threats, or take advantage of unforeseen opportunities.

MONITORING THE OPERATION

3-121. The commander and staff monitor the ongoing operation to determine if it is progressing satisfactorily according to the current plan (including any FRAGO that may have modified it). The staff monitors the various facts and assumptions that were the basis of the plan to ensure these remain valid or to see if there is a need for new facts and assumptions that might affect current and future operations. Monitoring uses relevant information to develop a clear understanding of the HBCT's current state in relation to the enemy and the environment. The staff processes this relevant information and presents it to the commander as a clear operational picture. The commander positions himself or his command group where he can monitor and influence the operation.

EVALUATING THE CRITERIA FOR SUCCESS

3-122. The commander and staff continue to evaluate the commander's criteria for success during execution. The staff must continuously update its estimates and its source of assessment to supplement and support the commander's visualization. Assessing success results in two outcomes:

- The operation is progressing satisfactorily, and observed variances between expectations and the current situation are minor or within acceptable levels. Progress meets the commander's intent, and the concept of operations is still relevant to the situation. The result is that the operation continues as planned and leads to decisions foreseen by the plan.
- The operation as a whole is not proceeding according to expectations. The observed variances endanger the success of the operation. This assessment can result from unforeseen enemy successes or friendly failures, and it also can result if performance of critical indicators is much better than expected, presenting a significant opportunity to the Stryker BCT. The commander makes a decision to eliminate the threat or to take advantage of the unforeseen opportunity.

DECISIONS

3-123. The HBCT commander should not hesitate to modify his plan if it is necessary to save the force, accomplish the mission, or achieve greater success. Adhering to a plan when the situation has changed might waste resources and opportunities. The flexibility to adapt to changing situations is the hallmark of a good commander. The HBCT must train to take advantage of unforeseen opportunities and to leverage the C2 INFOSYS to disseminate decisions quickly. Deciding during execution consists of two basic types of decisions: execution decisions and adjustment decisions.

EXECUTION DECISIONS

3-124. Execution decisions implement anticipated actions and are directed by the order. The most basic form of this type of decision is applying combat power or conducting activities as outlined in the plan or in the commander's intent. Executing branches and sequels are execution decisions.

Critical Routine Functions

3-125. The HBCT must accomplish routine tasks during execution. Although these tasks occur routinely, the commander must consciously consider them during execution. Failure to consider these routine tasks can waste resources, squander opportunities, or lead to mission failure.

- *Conduct continuous ISR operations.* ISR operations are a continuous process that feed the commander information to assist his decision-making. The HBCT commander should never keep the RS and other ISR assets in reserve. During execution, these assets should be focused on answering the CCIR and looking for opportunities for the HBCT to exploit.
- *Adjust IR and CCIR based on the situation.* The commander and staff must continue to review the CCIR during execution. The staff continues to analyze information requirements against the mission and updated commander's intent to identify those indicators that may directly affect the commander's decision-making. As CCIR are answered or the situation changes, the commander must develop new CCIR. The staff must disseminate these new CCIR to subordinate and supporting units. The staff must develop a new collection plan and allocate assets to answer the new CCIR.
- *Track the battle.* Battle tracking monitors designated elements of the COP that is tied to the commander's criteria for success. Battle tracking requires special attention on the part of all staff officers. The XO and S3 must continue to monitor the progress of movement and recommend changes as required.
- *Refine the targeting process.* The commander's decisions provide the basis for targeting decisions made to support the continuing operation (execution). The commander remains alert to situations when he must give or modify targeting guidance to the staff. His guidance will synchronize the targeting process to continue achieving effects (lethal and/or nonlethal) on the enemy.
- *Manage the movement and positioning of combat support and combat service support units.* Massing the effects of combat power at a decisive point requires not just the maneuver of combat forces but also the movement of CS and sustainment forces. Using CS and sustainment forces to shape must not interfere with the movement of combat forces to the decisive point. In the heat of executing a mission, it is easy to lose sight of the time required to reposition CS and sustainment forces. The commander and staff must ensure that the movement of combat units does not outpace the movement of CS and sustainment units.

- *Continue terrain management.* The HBCT must carefully track the location and land utilization of all units within the AO. Deconflicting land use among units in the HBCT's AO is difficult but necessary during execution. The staff must ensure that adequate space, including the use of routes, is available at the right time to support critical activities. The commander's visualization should determine what space is required for what force at what time to support the decisive action.

Planned Actions

3-126. The commander or staff must recognize that a particular event or action directed by the OPORD has met preconditions (events or triggers) for execution and direct the execution of this planned action. Modifying planned actions to fit the current situation is still considered a planned action. Branches and sequels to an order (or plan) are planned actions.

ADJUSTMENT DECISIONS

3-127. Adjustment decisions modify the plan to respond to unanticipated threats or opportunities. Typically, a commander's adjustment decision requires further synchronization across the BOS. The commander describes his visualization of the adjustment through additional guidance. He must pay particular attention to the effects of adjustment decisions on targeting and give sufficient guidance to support the targeting process. Adjustments take one of three forms: reallocation of resources, changing the concept, or changing the mission.

Reallocation of Resources

3-128. The simplest adjustment is to reallocate resources. The commander can allocate additional combat support or reinforce a combat unit with additional combat forces. The commander should reinforce success if it creates the opportunity for more success.

Changing the Concept

3-129. Changing the concept of the operation adjusts the way in which the operation is conducted without changing the mission. Most often, this modifies the decisive action to exploit an unforeseen opportunity or to counter an unexpected threat. The commander's most important adjustment decision is the commitment of the reserve. Employing the reserve successfully requires anticipation and visualization. These allow the commander to task organize, position, and move the reserve force in a manner that minimizes any loss of momentum with its commitment.

Changing the Mission

3-130. The commander may opt to change his mission if, during execution, he sees that he cannot resolve a problem to accomplish his mission by reallocating resources or changing the concept. He should only do this as a last resort, and the change to the mission must still accomplish the higher commander's intent. Synchronizing the HBCT's new actions is the greatest problem this type of decision presents.

ADJUSTMENT DECISION METHODS

3-131. When making adjustments to a unique or complex situation, and if time is available, the MDMP is preferred. When there is not sufficient time for the MDMP or during fast-paced combat operations, decision-making may become more intuitive for the commander. Intuitive (or recognition) decision-making emphasizes the commander's knowledge, judgment, experience, education, intellect, boldness, perception, and character.

- *Using the MDMP.* The commander may opt to use an abbreviated MDMP, focusing the staff on one COA. This method also uses intuitive decision-making. It begins with the commander using his current SU to visualize and mentally formulate a single COA that solves the unforeseen problem. He directs the staff to analyze and refine the COA. The commander resolves any inadequacies the staff detects through its analysis by revising or modifying the given COA rather than developing a new one.
- *Recognition decisions.* This type of decision-making requires the greatest involvement of the commander and the least involvement from the staff. It relies on the commander's experience in the use of intuitive decision-making to be successful. The commander visualizes the solution to a problem immediately, with little or no analysis of alternatives or outcomes necessary. Recognition decisions do not necessarily follow the MDMP; however, the commander's decisions are well grounded in an understanding of the enemy and terrain, the updated commander's estimate and staff estimates, and the OPORD that began the operation. This approach focuses on SU, assessing significant variances, and selecting and/or refining an acceptable decision mentally instead of comparing multiple options to select the optimal answer.

DIRECTING ACTION

3-132. Any decision to change a plan requires a change in the application of combat power and a resynchronization to mass effects on the enemy. The HBCT commander must direct action that applies combat power to effect execution or adjustment decisions. The FRAGO is the normal means to direct changes during execution. The C2 INFOSYS give the C2 system the capability to automate orders (and graphics) production and dissemination, especially for execution decisions that use data and information stored on a shared database.

Synchronize Operations

3-133. After the HBCT commander makes a decision during execution, his staff must resynchronize the ongoing operation to maximize the application of combat power against the enemy. This resynchronization includes informing subordinates, integrating assets, incorporating the decision into the targeting process, and deconflicting subordinate actions. The staff uses the INFOSYS to reduce duplication, confusion, and problems that may occur from the change. Resynchronization should be used only to the extent required to ensure mission accomplishment. Excessive synchronization may waste valuable resources and opportunities.

Maintain Continuity

3-134. Continuity (fewest changes) allows for a greater chance of successful execution. Continuity does not inhibit flexibility; the HBCT commander and his staff should make changes to only the current operations necessary to solve a problem. Maintaining the current plan as much as possible allows subordinates to focus on only a few discrete changes. The commander and staff should avoid changes that may preclude options for future operations.

ADJUSTING EXECUTION

3-135. Planning is not fighting. The continuous adjustments made during the conduct of operations are vital to success. All plans are developed based on various facts and assumptions. However, enemy actions as well as the uncertainty and friction inherent in operations almost always guarantee the operation will not unfold exactly as planned. Adjusting execution involves the continuous evaluation of the progress of the operation in

relation to the desired end state, anticipating outcomes, and making adjustments to meet the end state.

3-136. The commander primarily adjusts execution of operations through the use of FRAGOs. The commander issues a FRAGO to modify an existing order. Several situations may cause the need to change the original plan, such as new orders from higher headquarters, new enemy intelligence, unanticipated difficulties, or unexpected success. These situations are normally triggered by and associated with critical or exceptional information. The commander also uses FRAGOs to initiate execution of previously planned events, such as launching a counterattack, executing a contingency plan, committing the reserve, or consolidating on an objective. Figure 3-9 shows typical situations that lead to changes and FRAGOs.

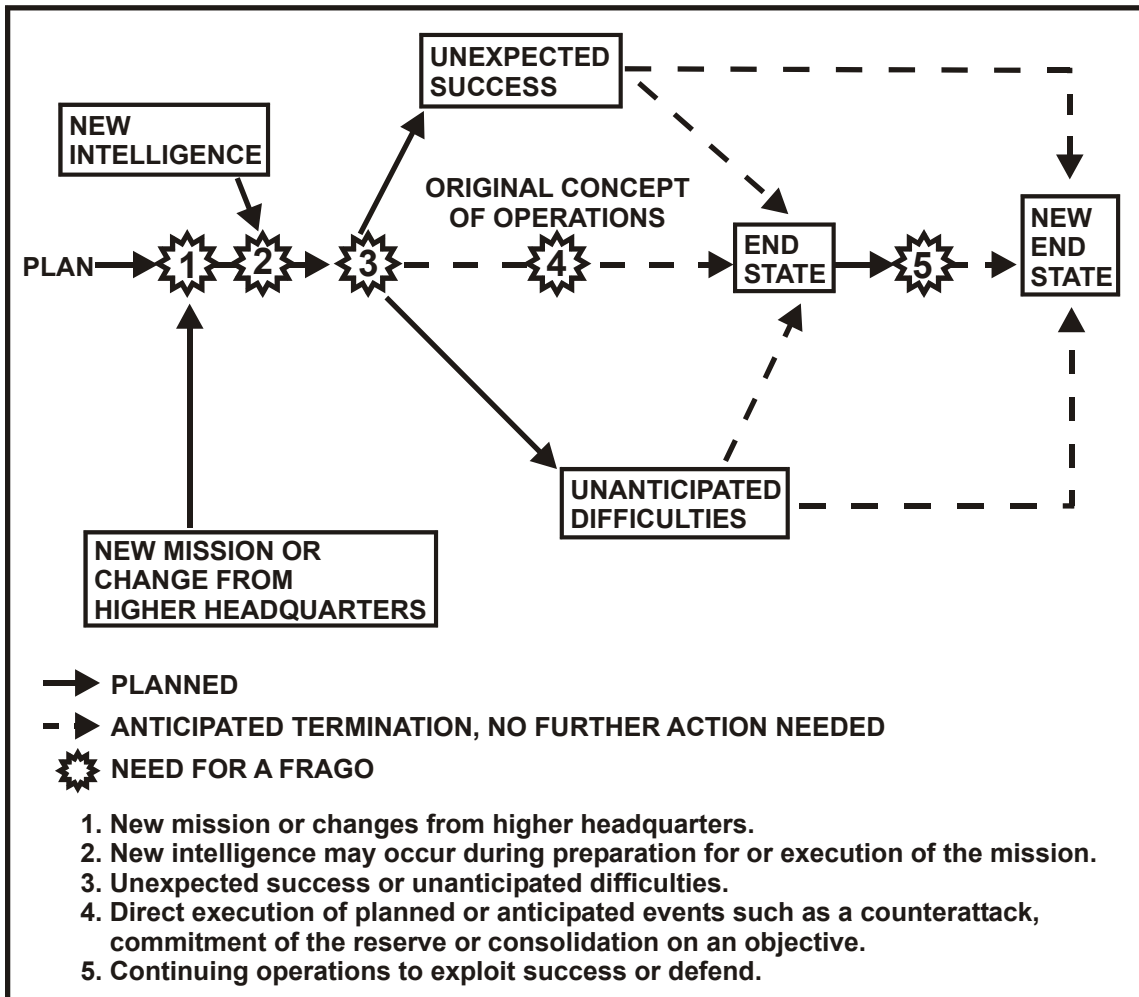


Figure 3-9. Typical Situations Requiring a FRAGO

3-137. During mission planning, the commander and staff should anticipate the potential events that will require a FRAGO. During COA analysis, the staff should identify events, actions, or potential branches to the plan that require additional detail or modification to the plan. If time allows, the staff should develop plans and some portions of the FRAGO to prepare for the event. A key aspect of adjusting execution is anticipating events that may require modification of the original plan or additional instructions/details for execution. The commander, aided by his staff, must continuously evaluate the current and anticipated

results of friendly actions and enemy reactions to determine if the operation is progressing satisfactorily according to the plan currently in effect. If the operation is not following the current plan, a FRAGO may be necessary. Answers to the following questions guide this process:

- Does the enemy's disposition or actions invalidate the current plan?
- Is the friendly force achieving the desired results at an acceptable cost? If not, what changes are required to achieve the commander's intent?
- Is the progress of the operation leading to a disposition of friendly forces that can transition effectively to anticipated future operations?
- Has the situation changed so that friendly forces can exploit unexpected opportunities to achieve the end state more effectively than what is called for in the original plan?
- Does a future friendly action require additional instructions to initiate and control?

3-138. On determining the need for a modification or additional instructions, the commander and staff determine how long they have to develop and issue the FRAGO. When time is limited, the commander and staff will most likely use the ADMP to develop the FRAGO. The FRAGO may be issued as a written/digital order, overlay order, or, in extreme situations, a verbal order.

3-139. Under severe time constraints, the commander, using the ADMP, may choose to personally develop and issue a FRAGO. In this case, the commander analyzes the situation (METT-TC), determines the desired end state (if changed), develops a concept, and issues the order. He primarily focuses on maneuver, fires, reconnaissance, and security. The staff assists the commander by providing immediate input or recommendations based on the current staff estimates (see Figure 3-10). Once the commander issues the order, the staff coordinates and synchronizes all required actions to support the new plan.

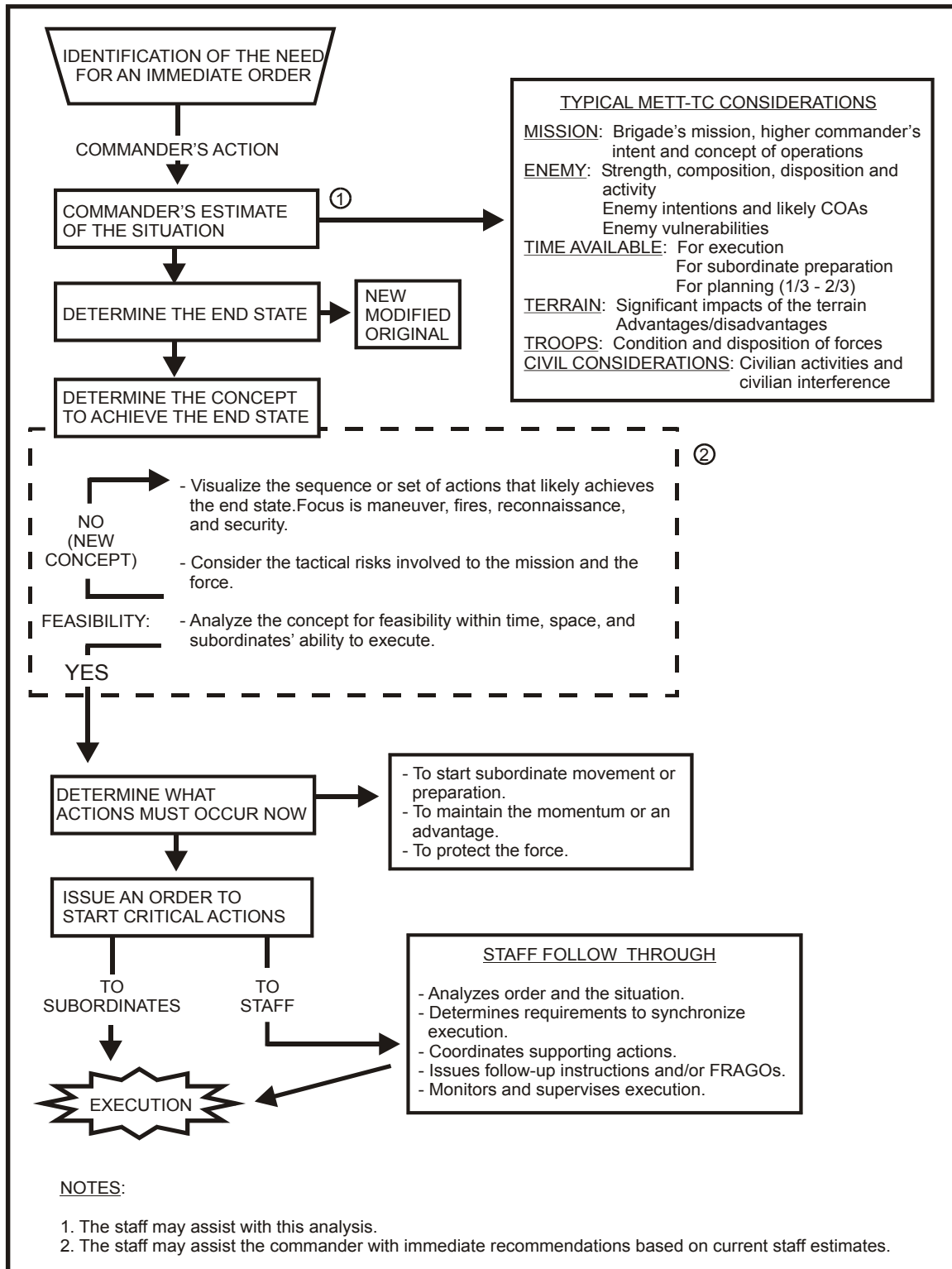


Figure 3-10. Developing an Immediate FRAGO

3-140. When the commander issues a FRAGO, he must ensure it has sufficient detail for subordinates to execute the operation. The time available is the most important factor that drives the level of detail and coordination in a FRAGO. Table 3-2 shows the minimum essential contents of a FRAGO.

Table 3-2. Minimum Essential Contents of a FRAGO

<p>1. SITUATION. Brief enemy and friendly situation as it pertains to the need for the FRAGO. Changes to task organization.</p> <p>2. MISSION (if changed).</p> <p>3. EXECUTION. Intent (if changed). Scheme of Maneuver. Relation of friendly forces to one another, the enemy, and the terrain. Outline of the movement of forces; formations. Concept of Fires. Includes essential fire support tasks. Tasks to Maneuver Units. Tasks to CS Units. Changes to CCIR. Changes to the ISR Plan.</p> <p>4. SERVICE SUPPORT. By exception.</p> <p>5. COMMAND AND SIGNAL. Changes to control measures.</p> <p>ACKNOWLEDGEMENT/CONFIRMATION</p>

3-141. As changes in the situation accumulate, the commander and staff must remember to fight the enemy and not adhere strictly to the plan. The brigade commander and subordinate commanders should not hesitate to modify or make changes in the original plan. Since plans rarely unfold as initially written, the flexibility to adapt to changing situations is the hallmark of a good C2 system.

CRITICAL ON-GOING FUNCTIONS OF CONTROL

3-142. In addition to changes made to the plan during execution, there are on-going tasks that the C2 system must accomplish to adequately control operations. Although these functions are routine during any operation, the commander must closely consider them during execution.

CONDUCT CONTINUOUS ISR

3-143. ISR is a continuous process at brigade level. When the brigade's main body is directly engaged with the enemy, ISR assets continue to report critical information and assist in target acquisition and controlling fires. Some ISR assets should continue to work the flanks, looking beyond the area of immediate close combat and seeking out opportunities for the commander to exploit. The commander and staff must always ensure the intelligence and targeting efforts, particularly organic reconnaissance and acquisition assets, are focused to gather the CCIR and targeting priorities.

CONTINUE SECURITY OPERATIONS

3-144. The commander and staff must continually assess the security posture of the brigade. If there are no friendly units to the flank or rear of the brigade, a flank is potentially exposed

to the enemy, or a gap develops between adjacent units, the brigade must cover them with some form of security. This security may take the form of surveillance, screen, or a guard.

ENSURE ALL ASSETS ARE CONTRIBUTING TO THE DECISIVE OPERATION

3-145. During every stage of an operation, all actions should contribute to the decisive operation. The commander and staff must ensure all shaping efforts are creating the conditions for the decisive effort to succeed. During execution, situations may render shaping efforts irrelevant or cause shaping assets to be out of position. The commander, assisted by the staff, must continuously monitor all assets and ensure they are in position and are supporting the decisive operation.

ADJUST FIRE SUPPORT COORDINATING MEASURE

3-146. Full integration of maneuver and fires requires the adjustment of the family of fire support coordinating measures (FSCMs) to account for the movement of forces and changes in the situation. The effects coordinator (ECOORD) must continuously monitor the execution of both air and ground forces and expeditiously recommend changes as required.

CONTINUE LIAISON AND COORDINATION

3-147. The commander and staff must know where adjacent units (front, flank, and rear) are, what they are doing, what enemy situation they are facing, and whether there are unsecured approaches into the brigade's AO because of gaps between units. The staff must ensure it knows immediately of any significant changes in the situation of adjacent units. The staff must determine the potential impact of these changes on the brigade's operations and make recommendations to the commander. The commander must establish positive controls (normally periodic reports) to ensure that communications with all adjacent units are functioning.

CONTROL THE MOVEMENT OF COMBAT SUPPORT AND LOGISTICS UNITS

3-148. The focus of any operation is to mass overwhelming combat power at decisive locations and times to accomplish the mission. The commander must ensure all supporting CS and sustainment units are synchronized to provide continuity of operations and freedom of action. The movement of CS and sustainment units during a movement to contact, exploitation, and pursuit is particularly important. The commander must include these units in all movement formations, and the movement of maneuver units must not outpace the ability of these units to support them.

MANAGE TERRAIN AND AIRSPACE

3-149. The HBCT must carefully track the location and land utilization of all units in its AO. The focus of terrain management is ensuring that adequate space, including the use of routes, is available at the right time to support critical activities. The staff must ensure that space is available to the units that need it, when they need it. Effective management and coordination of the HBCT's airspace is also a vital function performed by the staff. The air defense airspace management (ADAM) cell and the brigade aviation officer (aviation cell) of the maneuver and maneuver support section of the MAIN, in conjunction with the fires and effects section, coordinates Army airspace command and control (A2C2).

ADJUST CCIR BASED ON THE SITUATION

3-150. The commander and his staff must regularly examine the CCIR during execution. As critical information requirements are answered or the situation changes, the commander must develop and disseminate new CCIR to all subordinate and supporting units. The

commander, assisted by the XO and staff, must then update the ISR plan to answer the new priority intelligence requirements (PIR).

BATTLE TRACKING

3-151. Battle tracking is the process of obtaining combat information regarding both enemy and friendly units that the commander uses to develop a clear understanding of his current state in relation to the enemy and environment during an operation. The staff collects, organizes, and presents the commander with the information he requires to maintain SU and to make decisions. The staff analyzes information and events to make recommendations to the commander during preparation for and execution of an operation. The focus of battle tracking is directed toward identifying the conditions and information the commander needs to make critical decisions.

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Chapter 4

Intelligence, Surveillance, and Reconnaissance Operations

Heavy Brigade Combat Teams (HBCT) conduct intelligence, surveillance, and reconnaissance (ISR) operations producing intelligence on the enemy, environment (to include weather and terrain), and civil considerations necessary to support the commander in developing situational understanding (SU) and making decisions. ISR provides information to commanders and staffs needed to identify decisive and shaping operations required to accomplish the unit's mission. Unlike reconnaissance and surveillance (R&S) missions, ISR operations are fully developed plans that begin during mission analysis, are modified during execution, and ends with a change of mission. ISR operations are a commander's function supported by the entire staff and subordinate units. ISR operations are multifaceted and develop, synchronize, and integrate intelligence from a multitude of collection sources to eliminate functional "stovepipes" for planning, reporting, and processing information and producing intelligence. ISR operations must be nested from UEx to battalion level to ensure integration of all available assets towards a single purpose that results in increased security and flexibility to gain and maintain the initiative.

The new HBCT design has nearly doubled collection assets available to the HBCT commander. As future adversaries will combine conventional and unconventional forces and methods to attempt to defeat our forces, HBCTs will experience deadly tactical environments where the enemy will be fleeting and unseen. To find, fix, finish, and assess enemy forces that mix with the civilian population, hide in complex and urban terrain, and attempt to avoid decisive engagement, the requirement for better reconnaissance and surveillance capabilities is essential and reflected in the organic assets available to the HBCT commander. This will allow HBCTs to conduct aggressive patrolling, reconnaissance in force, and a multi-layered and integrated reconnaissance effort.

ISR operations are cyclic processes that allow units to produce a continuous feed of relevant intelligence on the enemy, environment, and civil considerations required for the commander to make critical decisions. This information answers requirements developed during throughout the operations process. Timely and accurate intelligence developed by aggressive and continuous ISR encourages audacity and can facilitate actions that may negate enemy superiority in soldiers and materiel.

SECTION 1 – ISR RESPONSIBILITIES

4-1. The HBCT commander and the XO must insure an integrated staff process to conduct planning and dissemination of ISR orders. In the past, while the S3 was doctrinally responsible, development of the ISR plan habitually fell on the brigade S2 since he normally coordinated ISR assets and was the primary user of ISR products. Given the complex nature of the COE, combined with the significantly enhanced ISR capabilities of the HBCT, it is imperative the S3, S2, the Effects Coordinator and other required staff work together to develop the ISR plan. Further, the significance of ISR operations on unit success dictates involvement by the entire staff, not just the ISR section. This allows the S2 to focus on fusing information from national through tactical intelligence sensors, better enabling him to provide the commander with timely and accurate intelligence assessments. The commander uses the fused intelligence provided by ISR to make decisions that allow him to place combat effects on the enemy to impede, harass, or attrite him, and then employ maneuver forces to destroy him. The HBCT XO integrates the staff actions of the S2 and S3, as well as the rest of the staff and reconnaissance squadron commander to identify collection requirements and implement the ISR plan.

STAFF SUPPORT OF THE ISR PROCESS

4-2. With staff participation, the HBCT S2 supports the ISR effort by focusing the collection, processing, analysis, and intelligence products on the critical needs of the commander. The HBCT S3, in coordination with the S2, tasks and directs the available ISR assets to answer the commander's critical information requirements (CCIRs). The required information is obtained through various detection methods and systematic observation, reconnaissance and surveillance. A continuous process, this task has four subtasks: perform intelligence synchronization, perform ISR integration, conduct surveillance, and conduct reconnaissance.

PERFORM INTELLIGENCE SYNCHRONIZATION

4-3. The S2, with staff participation, synchronizes the entire collection effort to include all assets the commander controls, assets of lateral units and higher echelon units and organizations, and intelligence reach to answer the commander's priority intelligence requirements (PIRs) and information requirements (IRs). Intelligence synchronization activities include the following:

- Conducting requirements management (RM): anticipate, develop, analyze, validate, and prioritize intelligence requirements. Recommend PIRs to the commander. Manage the commander's intelligence requirements, requests for information (RFIs) from subordinate and lateral organizations, and tasks from higher headquarters. Eliminate satisfied requirements and add new requirements as necessary.
- Developing indicators for each Enemy COA.
- Developing specific information requirements [SIRs] that will answer the PIR and IR
- Converting the SIRs into ISR tasks by developing specific orders and requests (SOR) that tailor the reporting criteria to the collection capabilities of tasked assets (See Figure 4-1 for the ISR task development process). The S2 assigns intelligence production and reach tasks to subordinate intelligence elements or personnel, submits RFIs to higher and lateral echelons, and coordinates with (or assists) the S3 to develop and assign ISR tasks.
- Comparing the ISR tasks to the capabilities and limitations of the available ISR assets (in coordination with the S3).

- Forwarding SIRs that cannot be answered by available assets to higher or lateral organizations as RFIs.
- Assessing collection asset reporting and intelligence production to evaluate the effectiveness of the ISR effort.
- Maintaining situational understanding to identify gaps in coverage and to identify the need to cue or redirect ISR assets.
- Updating the intelligence synchronization plan. The S2 manages and updates the intelligence synchronization plan as PIRs are answered and new requirements arise

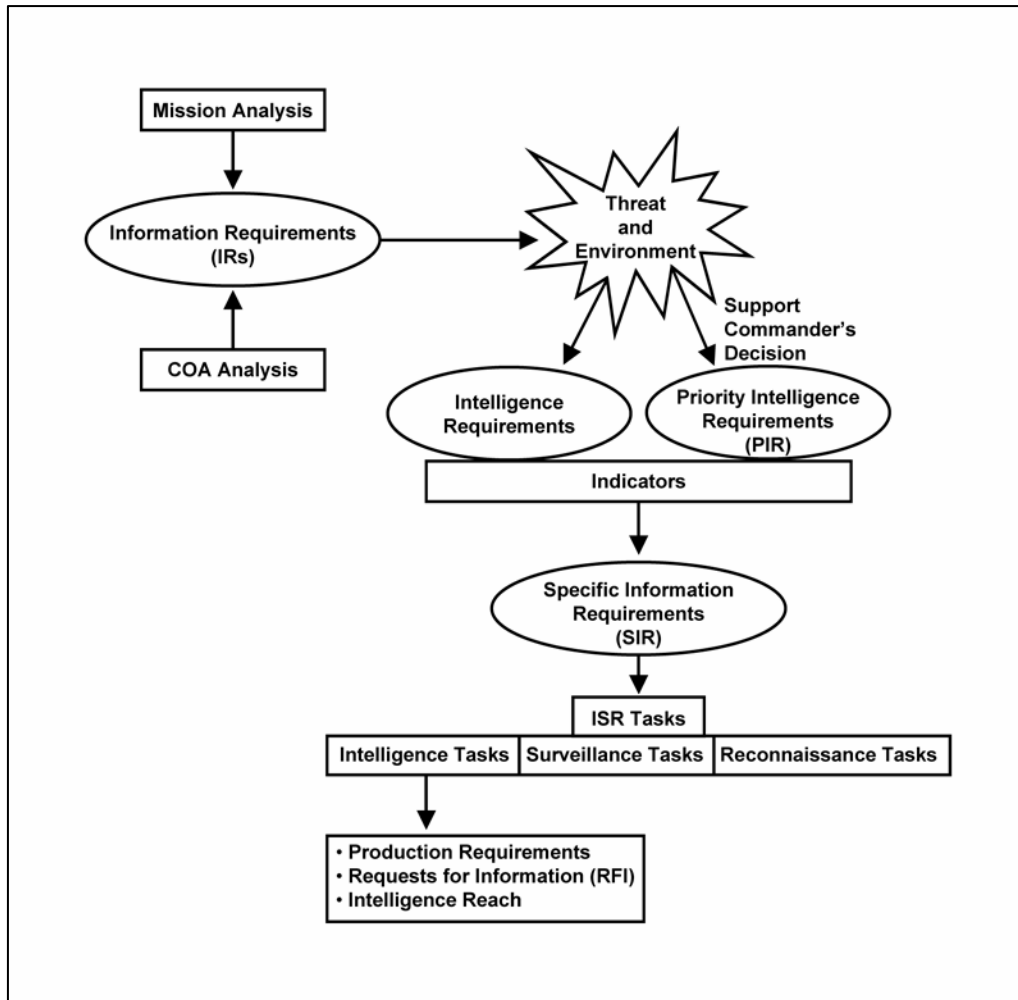


Figure 4–1. ISR Task Development Process

4-4. Intelligence Synchronization Considerations. The S2 generally follows six considerations in planning intelligence synchronization and ISR activities: anticipate, integrate, prioritize, balance, control, and reach. (Refer to FM 34-2 for more information regarding intelligence synchronization.)

- Anticipate. The intelligence staff must recognize when and where to shift collection or identify new intelligence requirements. The overall intent of this principle is to identify a new, or adjust an existing requirement, and present it to the commander for approval before waiting for the commander or his staff to identify it.

- Integrate. The intelligence staff must be fully integrated into the unit's orders production and planning activities to ensure early identification of intelligence requirements. Early and continuous consideration of collection factors enhances the unit's ability to direct collection assets in a timely manner, ensures thorough planning, and increases flexibility in selecting assets.
- Prioritize. Prioritize each intelligence requirement based on its importance in supporting the commander's intent and decisions. Prioritization, based on the commander's guidance and the current situation, ensures that limited ISR assets and resources are directed against the most critical requirements.
- Balance. ISR capabilities complement each other. The intelligence staff should resist favoring or becoming too reliant on a particular unit, discipline, or system. Balance is simply planning redundancy when required, eliminating redundancy when not desired, and ensuring an appropriate mix of ISR assets or types. The intelligence synchronization matrix (ISM) is useful in determining or evaluating balance.
- Control. To ensure timely and effective responses to intelligence requirements, a unit should first use the ISR assets it controls. These assets usually are more responsive to their respective commander and also serve to lessen the burden on the ISR assets of other units, agencies, and organizations.
- Reach. Intelligence reach may be the only way to satisfy an intelligence requirement. If at possible, one should not depend solely on intelligence to answer a PIR.

4-5. An effective discussion of ISR has to include an understanding of the CCIRs. The CCIRs are elements of information required by commanders that may affect decision-making and dictate the successful execution of missions. The commander decides what information is critical based on experience, the mission, the higher commander's intent, the staff's input, initial intelligence preparation of the battlefield (IPB), information, intelligence, and recommendations. Refer to FM 3-0 for more information regarding CCIRs.

4-6. Based on the CCIRs, two types of supporting IRs are generated: PIRs and friendly forces information requirements (FFIRs). However, commanders may determine that they need to know whether one or more essential elements of friendly information (EEFI) have been compromised or that the enemy is collecting against a designated EEFI. In those cases, commanders may designate that question as one of their CCIRs.

4-7. IRs are all of the information elements required by the commander and his staff for the successful planning and execution of operations; that is, all elements necessary to address the factors of METT-TC. Vetting by the commander or his designated representative turns an IR into either a PIR or an intelligence requirement. IRs are developed during COA analysis based on the factors of METT-TC.

4-8. PIRs are those intelligence requirements for which a commander has an anticipated and stated priority in his task of planning and decision-making. PIRs are associated with a decision based on action or inaction, or the battlespace that will affect the overall success of the commander's mission. The commander designates intelligence requirements tied directly to his decisions as CCIR (PIR and FFIR). Answers to the PIRs help produce intelligence essential to the commander's situational understanding and decision-making.

4-9. The S2 recommends to the commander those IRs produced during the military decision-making process (MDMP) that meets the criteria for PIR. They do not become CCIR until approved by the commander. Additionally, the commander may unilaterally designate PIRs. The IRs that are not designated by the commander as PIRs become intelligence requirements. The intelligence requirement is a gap in the command's knowledge or understanding of the battlespace or threat that the Intelligence BOS must fill.

4-10. The S3 then tasks the unit's assets to answer both the PIR and intelligence requirements through the ISR plan. PIR should:

- Ask only one question.
- Support a decision (usually one associated with the decision support template - DST).
- Identify a specific fact, event, activity (or absence thereof) that can be collected.
- If linked to an ECOA, indicate an ECOA prior to, or as early as possible in, its implementation.
- Indicate the latest time the information is of value (LTIOV). The LTIOV is the absolute latest time the information can be used by the commander in making the decision the PIR supports. The LTIOV can be linked to time, an event, or a point in the battle or operation Friendly Force IRs. The staff also develops FFIRs which, when answered, provide friendly force information that the commander and staff need to achieve situational understanding and to make decisions.

4-11. Friendly Force IRs. The staff also develops FFIRs which, when answered, provide friendly force information that the commander and staff need to achieve situational understanding and to make decisions.

4-12. Essential Elements of Friendly Information. EEFI establish information to protect, not information to obtain. Thus, EEFI are established to inform or direct HBCT unit and element efforts to deny enemy efforts to collect against specific HBCT actions, units, intentions, or capabilities. In some cases EEFI may form the underlying basis for tasks to subordinate units, particularly during security operations. Further, commanders may determine that they need to know whether one or more EEFI have been compromised or that the enemy is collecting against a designated EEFI. In those cases, commanders may designate that question as one of their CCIRs, using the Intelligence Synchronization Matrix (ISM) which generates PIRs and/or FFIRs. For example, a commander may determine that if the enemy discovers the location and movement of the friendly reserve, the operation is at risk. In this case, the location and movement of the friendly reserve are EEFI. He designates determining whether the enemy has discovered the location and movement of the friendly reserve as one of his CCIR. That CCIR, in turn, generates PIR and FFIR to support staff actions in determining whether the EEFI has been compromised.

4-13. Develop the Intelligence Synchronization Plan. The entire unit staff develops their IRs and determines how best to satisfy them. The staff uses reconnaissance and surveillance assets to collect information. The intelligence synchronization plan includes all assets that the operations officer can task or request and coordination mechanisms to ensure adequate coverage of the AOIs.

4-14. The intelligence synchronization plan, often presented in a matrix format, aids in synchronizing the entire ISR effort with the overall operation and the commander's decisions and/or decision points (DPs). The intelligence synchronization plan is often produced in conjunction with the ISR plan. However, before performing intelligence synchronization and finalizing the intelligence synchronization plan, the S2 must have the following:

- The CCIR (PIR and FFIR).
- A prioritized list of the remaining intelligence requirements.
- Evaluated ISR assets and resources.
- All of the assigned ISR tasks.

ISR INTEGRATION

4-15. . The S3, in coordination with the S2 and other staff members, orchestrates the tasking and directing of all available ISR assets to answer the PIRs, FFIRs, and IRs by matching requirements with specific collection assets using the following factors:

- *Availability.* Determine what assets are organic and readily available. When will attachments arrive? What systems are not fully mission capable and when will they be repaired? What are the maintenance and crew rest requirements? What systems are available in higher, adjacent, and subordinate units? How long will it take the asset to get into position?
- *Capability.* Determine if the asset can answer the questions asked? Does it have sufficient range? Can it operate in the expected climate and visibility conditions? Will you need to maintain contact with the target when it is identified?
- *Vulnerability.* What is the threat's ability to locate, identify, and destroy the collector both at the target area and on the route to and from the mission? Is the risk of loss greater than the potential gain of information? Will the asset be needed for other subsequent operations?
- *Performance History.* How reliable is the specific asset based on training, leadership, and past experience. Who are the "work horses" that can get the job done?

4-16. . The result of this process is the forming of the ISR plan. The ISR plan provides a list of all the ISR tasks to be accomplished, both internal and external to the HBCT. The S2 and the S3 develop tasks, orders and requests from the SIRs. These tasks , orders and requests are then assigned based on the capabilities and limitations of the available ISR assets and the LTIOV taking into account the concepts of -

- *Cuing.* Cuing involves the use of one or more sensor systems to provide data that directs collection by other systems. For example, sweeping the battlefield electronically with a wide area surveillance system may reveal activity that in turn triggers direct collection by a more accurate, pinpoint sensor system such as a UAV or scout team.
- *Redundancy.* Redundancy involves the application of several identical assets to cover the same target. Use redundant tasking against high-payoff targets (HPT) when the probability of success by any one system is low. For example, several scout teams infiltrating over different routes when the risk of detection is high, but no other systems are capable of collecting the required information.
- *Mix.* Mix refers to planning for complementary coverage by a combination of assets from multiple disciplines. Sensor mix increases the probability of collection, reduces the risk of successful enemy deception, facilitates cueing, and provides more complete reporting. For example, thermal imagery from a UAV may indicate several vehicle-like hot spots in a suspected enemy battle position (BP). A scout team observing the same NAI may reveal that half of those hot spots are actually decoys and not enemy armored vehicles.
- *Integration.* Integration is the resource management aspect of collection strategy development. Barring a decision to use redundant coverage of a critical target, attempt to integrate new requirements into planned or ongoing missions. Integration helps avoid the common problem of under-tasking very capable collectors. During limited periods of time, collection capability may exceed that of the tasking. Brigades can resolve this by reevaluating each collection asset for excess capability; focusing excess collection capability on the most important of the remaining unfulfilled requirements; and finally redirecting assets to maximize support to the most important requirements—new or old.

4-17. The ISR Plan. The finalized ISR plan is produced as an ISR order in the ISR Annex to an HBCT OPORD (Annex L, Intelligence Surveillance, and Reconnaissance (Refer to FM 5-0 for specific information on the ISR Annex)). However, an initial ISR order is usually prepared at the conclusion of Mission Analysis during the planning process and issued prior to the completed HBCT operations order to start reconnaissance and surveillance operations required to achieve the intended ISR effect. ISR is a continuous combined arms effort led by the operations and intelligence staffs in coordination with the entire staff that sets reconnaissance and surveillance in situational understanding and the fidelity of the COP about the enemy and terrain through the deployment of his ISR assets. Commanders integrate reconnaissance and surveillance to form an integrated ISR plan that capitalizes on their different capabilities. The ISR plan is often the most important part of providing information and intelligence that contributes to answering the CCIRs. For the commander, an effective ISR plan is critical to answering his/her PIR.

4-18. Execute and Update the ISR Plan. The S3 updates the ISR plan based on information he receives from the S2. The S3 is the integrator and manager of the ISR effort through an integrated staff process and procedures. As PIRs are answered and new information requirements arise, the S2 updates intelligence synchronization requirements and provides the new input to the S3 who updates the ISR plan. He works closely with all staff elements to ensure the unit's organic collectors receive appropriate tasking. The ISR plan reflects an integrated collection strategy and employment, production and dissemination scheme that will effectively answer the commander's PIR.

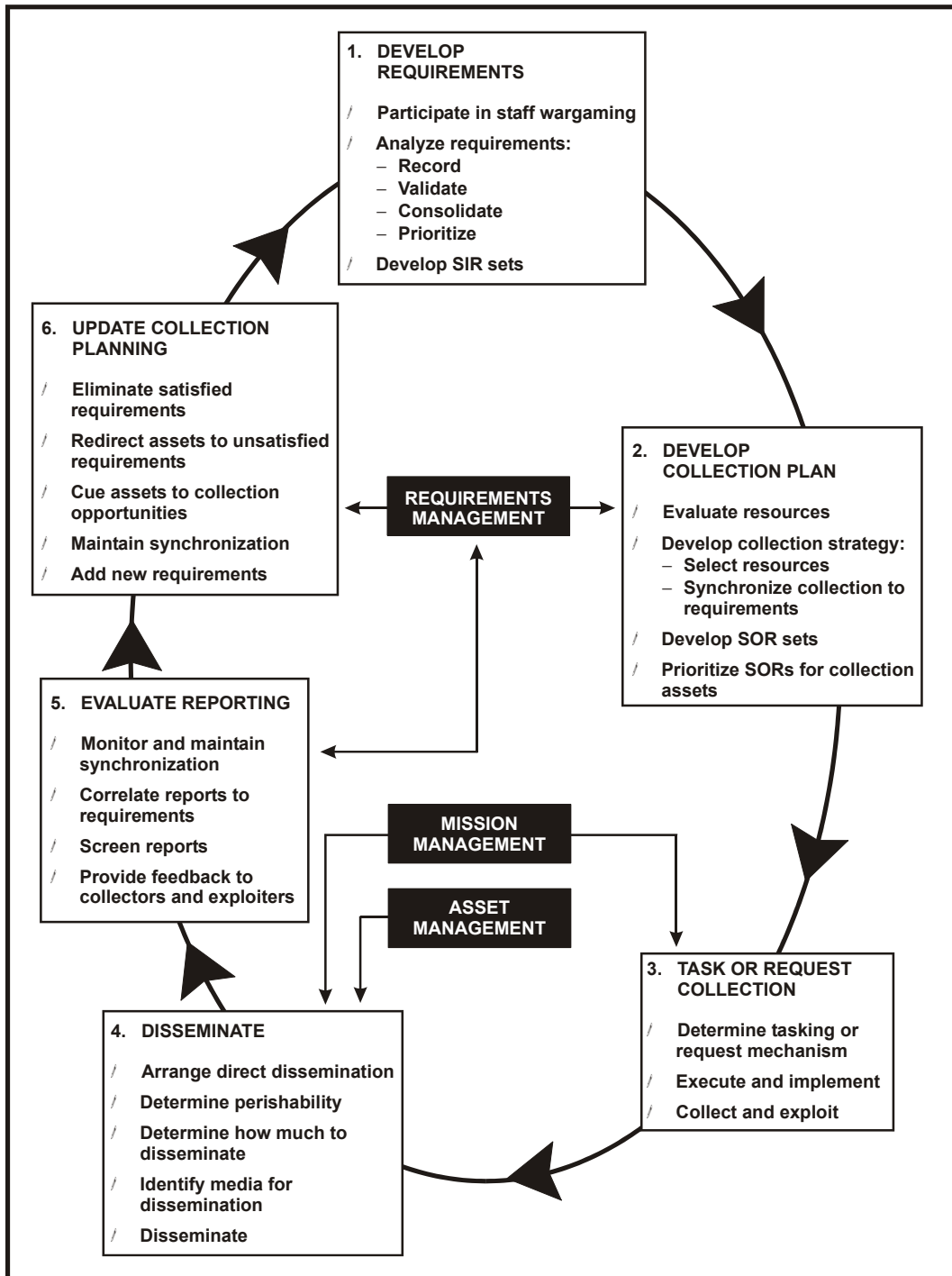


Figure 4-2. Intelligence, Surveillance, Reconnaissance Integration Cycle

SECTION II. –TECHNIQUES AND PRODUCTS SUPPORTING THE ISR PLAN AND IPB PROCESS

4-19. The following sections provide examples of techniques that can support rapid, efficient, and effective production of the ISR plan and IPB products. In full-spectrum operations the ISR process must be tailored based upon the specific environment the HBCT is operating in. Accordingly, there are examples provided that pertain to Stability Operations and Support Operations.

4-20. ISR must begin as early as possible, with direct and early involvement by the commander to focus the staff during the process. Guidance must be pushed forward early and refined later. The HBCT's MDMP begins with the receipt of the UEx mission. The three WOs depicted in the figure are normally the minimum number issued; a unit may well issue more. UEx WO #1 should provide the necessary information to start development of the ISR plan —

- UEx mission
- UEx commander's intent
- Reconnaissance objectives for the brigade
- CCIR
- Focus, tempo, and engagement criteria
- Specified reconnaissance tasks

4-21. UEx WO #1 and WO #2 provide the staff with the essential elements required to start IPB, but the staff cannot truly begin mission analysis until they receive a finalized COA and specific tasks found in WO #3 and the OPORD from the UEx headquarters. To ensure ISR integration with division, collaborative planning must be incorporated using the HBCT LNO or the commander's designated representative. With UEx WO #2, the commander issues his initial reconnaissance guidance and focuses the staff on his initial CCIR. The HBCT staff conducts a mission analysis of the ISR requirements based on the commander's guidance and WO #2 from UEx. ECOAs (based upon UEx G2 ECOAs provided in WO#2) are developed and prioritized in order of probability as the basis for determining information requirements for ISR assets. The staff develops situation and event templates (see FM 2-01.3 [FM 34-130]). NAIs are tied to CCIR assisting in the development of situational understanding and effective decision-making. These actions are not the sole responsibility of the S2, rather a collective staff task. The following lists examples (not all inclusive) of staff input to ECOA development, SITTEMP, and event template development and reconnaissance objectives:

- Air Defense
 - Evaluates likely air corridors
 - Likely timing of air strikes or air assault operations
 - Likely targets and objectives of enemy air operations
 - How the enemy ADA is organized to protect its force
 - Will enemy use air in reconnaissance or counter-reconnaissance role
 - Likely locations of enemy air defense systems
- Fire *Support*
 - Where are enemy target acquisition assets (radars etc.)
 - Where will the enemy deploy his artillery and mortar systems
 - Determine high-value targets (HVT). Further develop into high-payoff targets (HPTs) during wargaming and targeting process.
 - How deep can his indirect fires range
- Engineer
 - Where will enemy emplace obstacles (protective, tactical, situational)?

- Time required emplacing each type of obstacle.
- Time required breaching obstacles.
- Time required entrenching a mechanized company.
- Ability to bridge different size rivers and streams and time required for each.
- NBC
 - Threat capabilities to employ nuclear, biological, chemical (NBC) weapons and obscurants.
 - Types
 - Threat NBC protection capabilities.
 - Indicators of preparations to employ NBC weapons.
 - Likely location and time, or triggering event for an NBC attack.
 - Friendly assets the enemy is likely to consider HPTs for NBC targeting.
 - Existing contaminated areas that may indicate COA adopted by enemy.
- Signal
 - Ability to locate or intercept friendly systems.
 - Speed that the enemy can collect, process, and target communication and command and control (C2) sites.
 - Ability to link collection systems to indirect fires.
 - Deployment patterns of signals intelligence (SIGINT) collection systems.
 - Techniques of electronic deception or network attack.
- *Civil Affairs (CA) and Psychological Operations (PSYOPS)*. (these are separate sections, but the issues apply to both).
 - What is the political situation in the AO?
 - What factions are friendly, neutral, or a threat?
 - Where are the areas that civilians gather to protest or demonstrate?
 - Who or where is information gained on particular AOs?

4-22. The products produced for mission analysis are used to develop the ISR order. The ISR order addresses all aspects of the operation to include insertion methods, supporting fires, casualty evacuation (CASEVAC) and CSS, communications methods and extraction contingencies. The commander's guidance for reconnaissance includes focus, tempo, and engagement criteria. The HBCT's initial counter-reconnaissance plan is also part of the ISR order. Other essential products in the ISR order include the ISR graphical overlay, the enemy SITTEMP, and the ISR tasking matrix.

INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE OVERLAY

4-23. The ISR overlay expresses the ISR order in graphic form. If it is transmitted over digital systems it may need to be broken into component parts to speed transmission and reduce clutter. For example, it could be broken into one overlay showing the basic operational graphics and boundaries, one showing infiltration graphics, and one showing sensor locations and range fans (see Figure 4-3). Regardless, the overlay should contain the following:

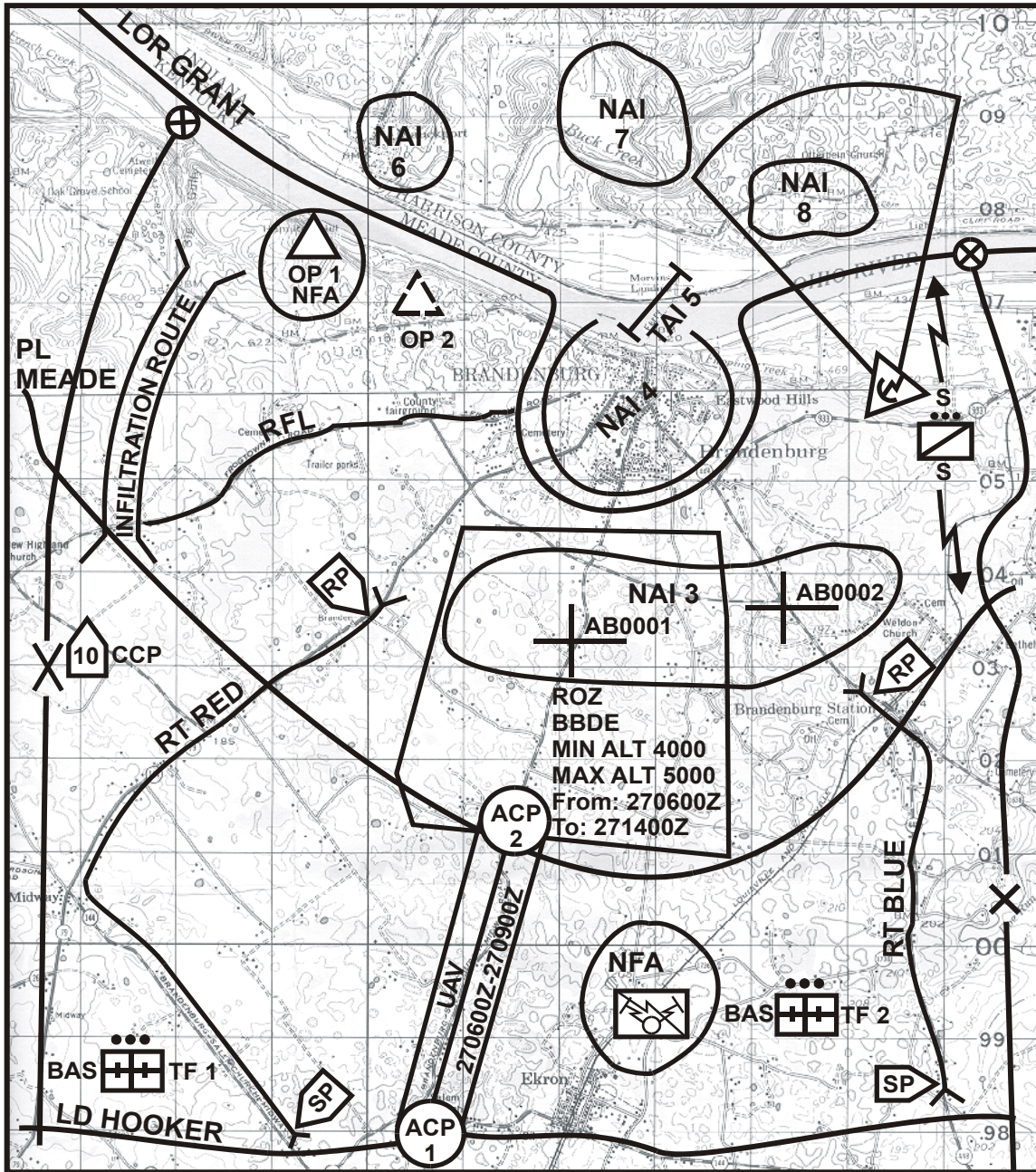
- Friendly boundaries and phase line (PL)
- Reconnaissance handover lines (RHLs). The RHL is a designated phase line on the ground where reconnaissance responsibility transitions from one element to another (FM 1-02, *Operational Terms and Graphics*)
- NAIs/ Target areas of interest (TAIs)
- Limits of advance (LOA) and limits of reconnaissance (LOR)
- Counter-reconnaissance area of operations (AOs) for all units

- Fire support coordinating measure (FSCM)
- Graphics depicting zone, area, or route reconnaissance
- Routes, start points (SP), release points (RP), and checkpoints
- Primary and alternate observation post (OP) locations
- Ambulance exchange points (AXP) and logistics release points (LRP)
- Planned or existing obstacles
- Scan sectors for sensors
- Unmanned aerial vehicle (UAV) flight paths
- Retrans locations

ENEMY SITUATION TEMPLATE

4-24. The S2 develops an enemy SITTEMP for the ISR operation that focuses on the enemy's reconnaissance and counter-reconnaissance efforts. It is designed to aid in planning friendly infiltration and survivability by identifying enemy actions that will impact on friendly reconnaissance efforts (see Figure 4-4). It also includes enemy main body activities required to focus the reconnaissance unit on the reconnaissance objective that they are collecting against. The enemy SITTEMP should include:

- Locations of known and suspected enemy locations
- Suspected enemy boundaries
- Enemy avenues of approach for the main body with time phase lines (TPL)
- Likely enemy reconnaissance and infiltration routes with TPLs
- Likely enemy OPs and patrols
- Enemy artillery range fans
- Known and templated obstacles



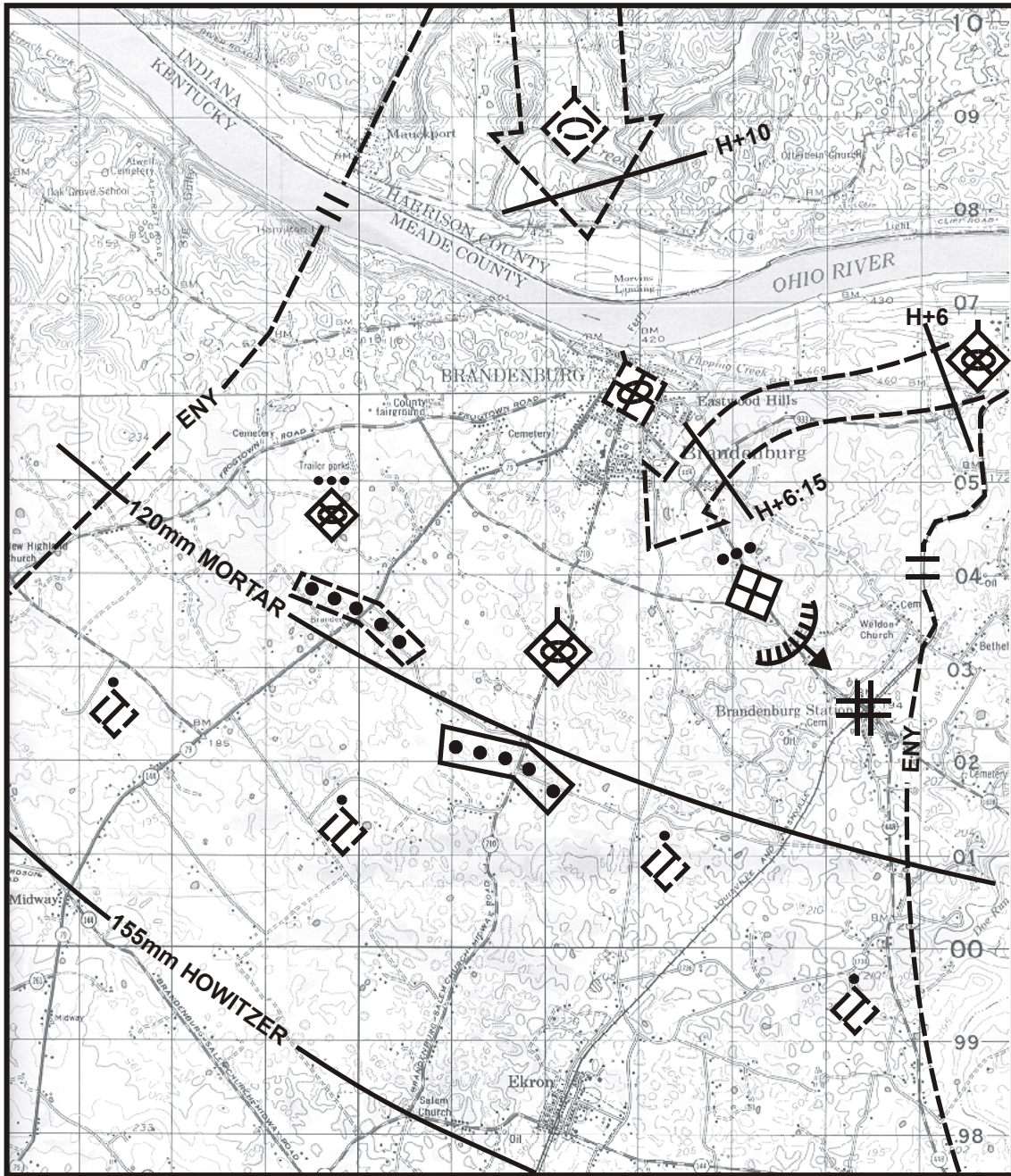


Figure 4-4. Situation template

INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE TASKING MATRIX

4-25. The ISR tasking matrix is used to provide detailed instructions for each collection asset. It is a summation of the collection effort. It does not provide the instructions on how to employ assets; it only details the results that need to be achieved. Reconnaissance leaders use the overlay, SITTEMP, MDMP (full or abbreviated), and tasking matrix to conduct troop-leading procedures (TLP) in support of the ISR operation.

4-26. Figure 4-5 shows an example of the ISR tasking matrix. The first column shows the priority of each mission and depicts which ones are the commander's PIR. The second column provides the asset with the NAI number and grid coordinates. The start/stop column provides the times the NAI is active. The fourth column lists the SIR that describes exactly what to look for. The next set of columns lists the actual assets tasked to conduct each mission. Multiple assets may be "Xed" in these columns. The coordination column lists points of contact for coordination. The final column details specific reporting requirements or special instructions.

DTG: _____											
MISSION: _____											
ISR TASKING MATRIX											
PRIORITY	NAI	START / STOP	SIR/SOR INSTRUCTIONS	UNITS						COORDINATION	REMARKS

Figure 4-5. Example ISR tasking matrix

IPB IN STABILITY, SUPPORT, AND URBAN OPERATIONS.

4-27. IPB in support of stability and urban operations may require tools and techniques that differ from the "conventional" process described in previous sections. There are numerous products and tools that may be employed in assessing these environments and supporting development of situational understanding.

4-28. There are software applications that can be used as tools to do analysis as well as to create relevant intelligence products for the operations in complex terrain or stability operations. These software applications range from such programs as Analyst Notebook and Crimelink which have link analysis, association matrix, and pattern analysis software tools to the Urban Tactical Planner (UTP), which was developed by the Topographic Engineering Center as an operational planning tool and is available on the TSS. The focus of this section, however, is on the types of tool that could be used in the urban environment rather than on the software or hardware that may be used to create or manipulate them.

4-29. In many cases doctrine is still under development for these tools and techniques. The following sections provide some examples of the techniques that are found in STs and FMIs still undergoing final approval, but which have proven useful in recent operations in OIF (ST 2-91.1). They are provided merely as examples.

- Pattern Analysis.* Pattern analysis includes multiple map overlays and text assessing military, terrorist, or other threat activity in an urban area. These events can be related by any of several factors to include location and time. These events can be analyzed by plotting them on maps over time, using multiple historical overlays (analog or digital) that can be compared to one another over time, using a time-event wheel or other analysis tools. An example is depicted in Figure 4-6.

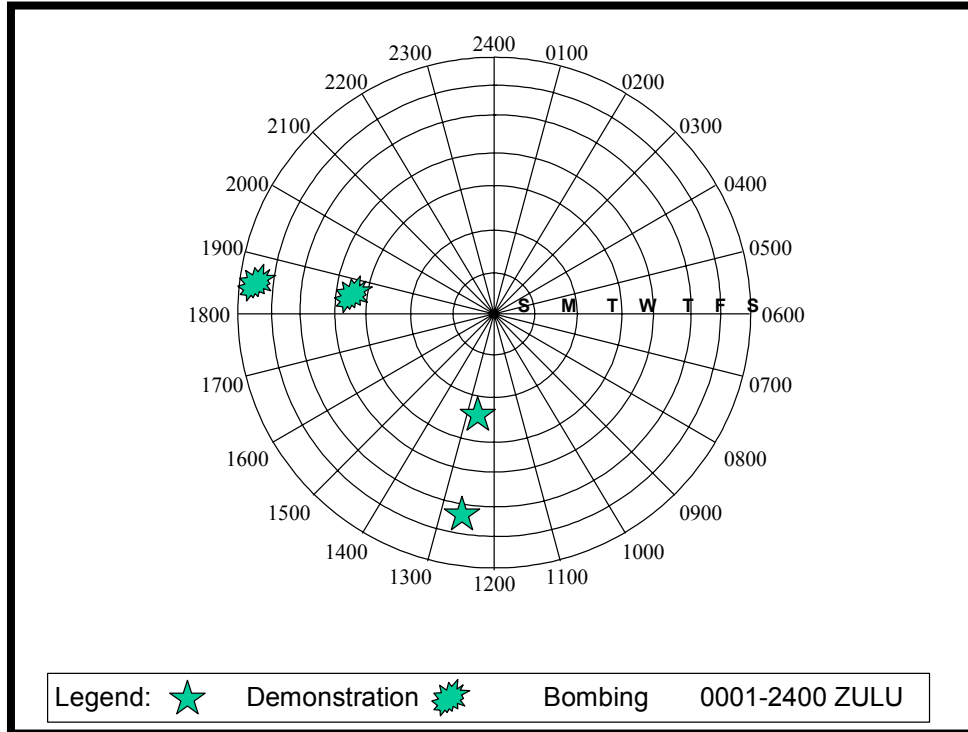


Figure 4- 6. Example of Pattern Analysis Plot Sheet

- NGO Matrix.* Potentially a form of the association matrix, this matrix contains each NGO’s location, capabilities, and relationships (with specific elements of the civilian population, threat and friendly forces, and other NGOs).
- Media Analysis Matrix.* This conceptual tool can be used to evaluate each information medium (and the multiple elements within each). Such mediums can include radio, television, print, word of mouth, Internet, and graffiti with its effect on specific sectors of urban population (or larger audiences). This can assist in the perception analysis.
- Population Capabilities and Dependencies Matrix.* This matrix is similar to the NGO matrix above. It describes the capabilities and dependencies of the various urban population elements and is essential in identifying each element’s role (threat or friendly) and influence. Depending on their location along the threat-friendly continuum, dependencies may be vulnerabilities that must be attacked or sustained and protected.
- Link Analysis Tools.* Link analysis is used to depict contacts, associations and relationships between persons, events, activities, and organizations. Five types of link analysis tools are:

 - Link Diagrams.
 - Association Matrices.
 - Relationship Matrices.

- Activities Matrices.
- Time Event Charts.
- *Area Assessment Checklist:* In stability operations and support operations, commanders must expand intelligence preparation of the battlefield beyond geographical and force capability considerations. The centers of gravity frequently are not military forces or terrain but may be restoring basic services or influencing public support. Cultural information is critical to gauge the potential reactions to the operation, to avoid misunderstandings, and to improve the effectiveness of the operation. Changes in the behavior of the populace may suggest a needed change in tactics or even strategy. Biographic information and leadership analysis are key to understanding adversaries or potential adversaries, their methods of operation, and how they interact with the environment. Knowledge of the ethnic and religious factions in the AO and the historical background of the contingency underlying the deployment are vital to mission success, preventing mission creep, and ultimately achieving the objectives of the operation. This checklist is designed to assist commanders and staff in gaining a better understanding of the environment their unit must accomplish its mission in.
- Refugee Interaction
 - Where are the refugees originally from?
 - What is the size of the original population?
 - What is the size and population of the surrounding countryside the village services?
 - What is the size of the refugee population?
 - Why did they come here?
 - What is the relationship of the village with the surrounding villages? Are they related? Do they support each other? Are they hostile? Is any portion of the population discriminated against?
- Food and Water
 - What is the food and water status of the village?
 - Where do they get their food?
 - What other means of subsistence are available?
 - Are the villagers farmers or herders?
 - What is the status of their crops or herds?
 - What is the quality of the water source?
- Medical
 - What is the status of the public health system/services for the AO?
 - How many public health personnel and facilities are available and what are their capabilities?
 - What is the health and nutritional status of the general population or specified subpopulation?
 - What are the primary endemic and epidemic diseases and percent of the population is affected?
 - What is the leading cause of death for the population or specified subpopulation?
 - What are the names and titles of key personnel within public and private health care infrastructure?
- Civil-Military/Nongovernmental Organizations
 - What civilian and military organizations exist in the village or surrounding countryside?

- Who are their leaders?
 - Which organization, if any, does the local populace support?
- United Nations or other Relief Agencies
 - What NATO, UN, or other relief agencies operate in the village?
 - Who are their representatives?
 - What services do they provide?
 - What portion of the population do they service?
 - Do they have an outreach program for the surrounding countryside?
- Commerce
 - What commercial or business activities are present in the village?
 - What services or products do they produce?
- Miscellaneous
 - Determine the groups in the village in the most need. What are their numbers? Where did they come from? How long have they been there? What are their specific needs?
 - What civic employment projects would village leaders like to see started?
 - Determine the number of families in the village. What are their family names? How many in each family?
 - What food items are available in the local market? What is the cost of these items? Are relief supplies being sold in the market? If so, what items, from what source, and at what price?
 - What skilled labor or services are available in the village?
 - What are the major roads and routes through the village? How heavily traveled are they? Are there choke points or bridges on the routes? Are there alternate routes or footpaths?
 - What is the size of any transient population in the village? Where did they come from and how long have they been there?

SECTION III – SURVEILLANCE

4-30. Surveillance is the systematic observation of airspace or surface areas by visual, aural, electronic, photographic, or other means. The focus and tempo of the collection effort primarily comes from the PIR derived from the brigade CCIR, the commander's intent and the specific (critical) areas in which information is needed. Surveillance is gaining observation of activities, conducted by the threat, factions, and/or local populace in a critical NAI. These activities may be occurring or expected to occur. Surveillance may be conducted as a stand-alone mission, or as part of a reconnaissance mission (particularly area reconnaissance). Primarily surveillance is static in nature, but some systems can perform this task while moving (such as UAVs).

4-31. Successful surveillance operations are planned and performed with the following three fundamentals:

- *Maximize surveillance assets.* Scouts are the “eyes and ears” of the commander. Previous surveillance doctrine focused on surveillance as part of a reconnaissance mission. This may still be appropriate in some situations; but with the increasing likelihood of noncontiguous operations and expansion of the HBCT's battlespace, surveillance operations may be oriented in multiple directions over large areas. One ISR asset could be utilized in a highly visible checkpoint, another conducts mounted surveillance of an intersection, while a third conducts a covert surveillance mission of a suspected weapons storage facility.

- Maintain continuous surveillance of all assigned named areas of interest. Once the surveillance of an NAI commences, surveillance must be maintained until the mission is completed or terminated by the appropriate commander. The commander must carefully plan all available assets to ensure constant observation of all NAIs.
- Report all information rapidly and accurately. The commander may base his battle planning and tactical decisions on information obtained through the ISR collection efforts. Intelligence loses its relevance as it ages. ISR collection assets must accurately report what they observe and report it in a timely manner. Digitization speeds both the accuracy of the intelligence information gathered as well as the timeliness with which it can be sent. Using all communications means available, the HBCT can receive and transmit this vital combat information and intelligence in near-real time.

4-32. The HBCT can conduct surveillance at all levels of conflict (stability operations and support operations, SSC, and MCO) and in all terrain (open/rolling to complex/urban) to provide the brigade with the SU it needs to execute decisive maneuver within the battlespace. The optimum situations conducive to successful squadron surveillance operations are stability operations and support operations and SSC conflicts in complex/urban terrain. Surveillance planning considerations are as follows.

- Information received from higher
- UEx commander's intent and guidance
- Overall focus for the surveillance mission
- Importance of NAIs
- Critical tasks to be accomplished
- Task organization and attachments
- Duration
- Tempo

4-33. Considerations the HBCT commander and staff determine the following:

- Surveillance focus.
- Method of getting to and from area (such as infiltration/exfiltration).
- Number of OPs available.
- Specified and implied tasks.
- Critical tasks to be performed by ISR assets.
- Task organization and C2.
- Subordinate troop missions and sectors.
- Actions on contact/compromise.
- Displacement.
- Follow-on missions.
- Communications plan (architecture and required support).

4-34. The HBCT may receive attachments in any type of conflict. It is definitely required in an MCO. These assets may be pushed down to subordinate battalions/squadron, MI Company or reserved for use at the HBCT level. Attachments may include additional engineers, artillery and intelligence teams, rotary-wing aircraft, air defense, civil/public affairs teams, and PSYOP teams.

4-35. . There are four methods for the conduct of surveillance at troop level—dismounted, mounted, aerial, and sensor. The squadron commander may use any method or combination of methods to accomplish surveillance based on the factors of METT-TC, the higher commander's intent/guidance, and CCIR.

- *Dismounted.* Dismounted surveillance permits a troop to collect detailed information against a fixed site or threat from a close proximity with the reduced chance of detection by the threat. However, dismounted reconnaissance is also the most time-consuming in terms of OP preparation. Dismounted surveillance may occur when:
 - Stealth is a requirement.
 - Detailed information is required.
 - Surveillance target is a stationary threat, fixed site/area, or terrain feature.
 - Surveillance is required over an extended period of time.
 - Scout vehicles cannot move through an area because of terrain or threat.
 - Security is the primary concern.
- *Mounted.* Mounted surveillance permits the squadron to collect adequate information on an NAI in the least amount of time. It also allows the squadron to transition more rapidly to another mission. This method provides less security to the vehicles from the threat, particularly a dismounted threat. Mounted surveillance may occur when:
 - Surveillance is conducted for a short period of time.
 - Threat is expected to be moving.
 - Squadron needs to remain mobile/flexible.
 - Threat contact is not likely.
 - Stealth and security are not primary concerns.
- *Aerial (Unmanned Aerial Vehicle).* Aerial surveillance provides a low risk means of conducting surveillance to gain basic information in the least amount of time. It is also the most flexible asset at the commander's disposal. Complex terrain, adverse weather, and threat deception/countermeasures can degrade the UAV's effectiveness. A combination of aerial and dismounted/mounted methods is the most effective surveillance method. Aerial surveillance may occur when:
 - Time is extremely limited or information is required quickly.
 - Extended duration surveillance is not required.
 - Objective is at an extended range.
 - Terrain restricts approach by ground units.
 - Terrain (highly complex) and weather conditions are favorable.
- **Sensor.** Sensor surveillance allows the commander the flexibility to economize his reconnaissance assets. Sensors can be used to cover areas where contact may not be expected but likely, or used for surveillance of areas that need to be covered over extended periods. The commander can also use sensors to provide depth in the AO. Sensor surveillance may occur when:
 - Squadron conducts missions in a large AO.
 - Missions are of an extended duration.
 - Detection of threat movement into NAI is desired.
- A combination of all methods is the most effective approach to surveillance and will effectively provide depth and redundancy throughout the AO.

SECTION IV – RECONNAISSANCE

4-36. Reconnaissance is a mission designed to obtain information on the enemy or characteristics of a particular area. Reconnaissance is the precursor to all operations and may be accomplished through passive surveillance, technical means, human interaction, or by fighting for information (see FM 3-20.95).

4-37. Successful reconnaissance operations are planned, prepared, executed, and assessed by applying these seven fundamentals:

- *Conduct continuous commander-centric reconnaissance.* Effective reconnaissance is continuous and commander-centric to facilitate integrated ISR operations and to ultimately achieve and maintain information superiority. The commander directs reconnaissance before, during, and after all operations. ISR operations in general and reconnaissance in particular are integral components of battle command processes such as the MDMP, the targeting process, and the IPB process. Reconnaissance operations are integrated with other ISR assets first and foremost to answer the CCIR. Reconnaissance assets are also focused on detecting HPTs and facilitating delivery of the battle commander's choice system as part of the targeting process. Reconnaissance tasks are synchronized with other ISR assets and tasks to support the continuous IPB process.
- *Orient on the multidimensional reconnaissance objective.* The commander designates a reconnaissance objective to focus reconnaissance unit efforts. The commander assigns a reconnaissance objective that describes a specific piece of information or end state that the commander desires. When time, unit capabilities and limitations, or threat action prevents a unit from accomplishing all the critical tasks for a particular form of reconnaissance, the unit uses the reconnaissance objective to focus the reconnaissance effort.
- *Maintain the reconnaissance focus and tempo.* The commander uses his reconnaissance assets based on their capabilities and METT-TC to achieve the assigned reconnaissance objective and the desired end state. To achieve this end state, the reconnaissance assets must maintain the reconnaissance focus and tempo described in their higher commander's essential reconnaissance guidance. This focus and tempo will define the method or "how" to conduct the reconnaissance and at what pace. The reconnaissance may be force or terrain oriented, or may focus on select aspects of the infrastructure or societal and human factors in the AO. The focus will also assist in prioritizing which primary and secondary doctrinal tasks to perform that are associated with a particular form of reconnaissance. The reconnaissance tempo may be defined by a specific time limit for accomplishing the reconnaissance objective or may be described in more general terms such as stealthy, forceful, deliberate, rapid, aggressive, or discreet. The assigned tempo will affect what planning timelines, type movement formations, and reconnaissance techniques are employed. Key factors in maintaining the tempo are the designated bypass criteria and methods of aerial assets.
- *Report information rapidly and accurately in accordance with the information management plan (IMP).* Reconnaissance assets collect and disseminate combat information in accordance with the unit IMP. Reconnaissance assets must acquire and report accurate and timely information on the threat, terrain, infrastructure, and other societal or human factors that could impact friendly operations. The purpose of this fundamental is to confirm the COP, increase the commander's SU, and to gain and maintain information superiority. Reporting information rapidly and accurately is an enduring reconnaissance fundamental that becomes more complex and involves more choices as information technology improves and matures.
- *Gain and maintain ISR contact.* Contact is any condition ranging from an initial sighting during surveillance to physical contact while engaging in close combat. Once a unit conducting reconnaissance gains contact with the threat, it maintains that contact unless the commander directing the reconnaissance orders otherwise. To do differently could risk the survival of the unit because gaining and regaining contact are inherently risky endeavors. This does not mean that individual scout and reconnaissance teams cannot break physical or visual contact with the threat.

Responsibility for maintaining contact does not rest solely with the scout or small unit first gaining it. The concept for gaining and maintaining contact during full-spectrum operations in the COE is:

- Make contact with ISR assets.
 - Develop the COP and SU out of contact.
 - Maneuver the force out of contact.
 - Make physical contact on your own terms.
- *Develop the situation, both in and out of contact, rapidly.* During reconnaissance, units will encounter tactical situations that require immediate actions on contact and rapid situation development. These tactical dilemmas may concern terrain obstructions, man-made obstacles, or threat activities. If an obstacle is encountered, reconnaissance must determine the type and extent of the obstacle and whether it is covered by fire. Terrain or man-made obstacles often require close reconnaissance to find a bypass, mark the obstacle, and conduct a hasty breach, if necessary. Obstacles can provide the attacker with information concerning the location of threat forces, weapon capabilities, and organization of fires. If a threat force is encountered, the unit determines its size, composition, disposition, activities, and movement. ISR integration and IPB products will provide additional threat information to assist the effort and help mitigate risk. In most cases, the reconnaissance unit developing the situation immediately employs actions on contact. Reconnaissance techniques, often in the form of battle drills, are used to rapidly develop the situation to maintain tempo and to avoid relinquishing the initiative to the threat.
 - *Retain freedom of maneuver.* Reconnaissance assets must retain the ability to maneuver to successfully complete their missions. Decisive engagement occurs when a unit is fully committed and cannot maneuver or extricate itself. If these assets are decisively engaged, reconnaissance stops and a battle for survival begins. Reconnaissance assets must have clear commander's guidance concerning engagement, disengagement, and bypass criteria that support the maneuver commander's intent. To prevent decisive engagement, units must employ proper movement and reconnaissance techniques, use overwatching fires, and execute battle drills or other applicable SOPs. Initiative and knowledge of the terrain, the threat, the infrastructure, and relevant societal factors reduce the likelihood of decisive engagement and help maintain freedom of movement.

RECONNAISSANCE GUIDANCE

4-38. Reconnaissance operations require the commander to provide specific guidance to the reconnaissance force. The commander's guidance for reconnaissance includes focus, tempo, and engagement criteria. This guidance is an extension of the commander's intent and is designed to focus the reconnaissance commander's efforts in relationship to the brigade.

FOCUS

4-39. The focus is an expression of what types of information the brigade commander is most concerned with. It allows reconnaissance leaders to prioritize taskings and narrow their scope of operations. An operation may have a terrain focus where status of routes, bridges and obstacles are more important than the threat. Conversely, the operation may focus on the threat where locating the enemies' security zone, main body, and reserves are essential. Additionally, commanders may express their focus in terms of reconnaissance pull and push.

4-40. Reconnaissance pull is used when the enemy situation is not well known and/or the situation is rapidly changing. Reconnaissance pull fosters planning and decision-making based on changing assumptions into confirmed information. Initial assumptions and PIR are

used to deploy reconnaissance assets early to collect information for use in the development of COAs. The commander uses ISR assets to confirm or deny initial PIRs prior to the decision on a COA or maneuver option, thus pulling the brigade to the decisive point on the battlefield. Success of the reconnaissance pull requires an integrated reconnaissance plan that can be executed prior to the commander having to make a COA decision.

4-41. Reconnaissance push is used once the commander is committed to a COA or maneuver option. The commander pushes his ISR assets forward as necessary to gain greater visibility on specific NAIs to confirm or deny the assumptions that the COA is based on. Information gathered during reconnaissance push is used to finalize the brigade plan.

TEMPO

4-42. The commander establishes the time requirements he envisions for the reconnaissance force and expresses them in a statement that describes the degree of completeness, covertness, and potential for engagement he is willing to accept. The following describes the rate BCT commanders use to control the momentum of reconnaissance operations:

- *Deliberate.* Operations are slow, detailed, and broad-based. They require the accomplishment of numerous tasks. This is a description of the degree of completeness required by the commander. Significant time must be allocated to conduct a deliberate reconnaissance.
- *Rapid.* Operations are fast paced, focused on key pieces of information, and entails a small number of tasks. This is a description of the degree of completeness required by the commander. It describes reconnaissance operations that must be performed in a time-constrained environment.
- *Stealthy.* Operations are conducted to minimize chance contact and prevent the reconnaissance force from being detected. They are often conducted dismounted and require increased allocation of time for success. This is a description of the level of covertness required by the commander.
- *Forceful.* Operations are conducted without significant concern about being observed. They are often conducted mounted or by combat units serving in a reconnaissance role. It is also appropriate in a stability or support operation where the threat is not significant in relationship to the requirement for information. This is a description of the level of covertness required by the commander.
- *Aggressive.* Operations have very permissive engagement criteria, and allow the reconnaissance commander to engage in combat to meet his IRs. This is a description of the potential for engagement.
- *Discreet.* Operations have very restrictive engagement criteria, and restrain the reconnaissance forces from initiating combat to gain information. This is a description of the potential for engagement. Engagement Criteria – The commander establishes what enemy forces he expects reconnaissance forces to engage and with what level of force. It assists the reconnaissance commander in planning direct and indirect fires and establishing bypass criteria. It is particularly important when the reconnaissance force is augmented with combat systems to conduct reconnaissance in force or security operations.

4-43. The commander establishes what enemy forces he expects reconnaissance forces to engage and with what level of force. It assists the reconnaissance commander in planning direct and indirect fires and establishing bypass criteria.

FORMS OF RECONNAISSANCE

4-44. To logically group SIRs and tasking into missions for subordinate commanders, the brigade commander uses one of four forms of reconnaissance (see FM 3-20.95 [FM 17-95]).

The forms of reconnaissance serve to further refine the scope of the reconnaissance commander's mission and give it a spatial relationship. The four forms of reconnaissance are:

- *Route.* A route reconnaissance is an operation focused on obtaining detailed information on a specific route and all adjacent terrain from which the threat could influence the route. The route may be a road or an axis of advance. Route reconnaissance is performed to ensure that the route is clear of obstacles and threat, and that it will support planned movement. A route reconnaissance may be performed as part of an area or zone reconnaissance. There are several critical tasks associated with a route reconnaissance:
 - Trafficability of the route.
 - Location of threat forces that can influence movement on the route.
 - Identifying lateral routes in the area of responsibility.
 - Bridge classification.
 - Identifying overpasses, underpasses, and culverts that might restrict access.
 - Clear or locate bypass to any defiles.
 - Locate mines, obstacles, or barriers.
 - Locate bypass around built up or contaminated areas.
- *Area.* An area reconnaissance is a directed effort to obtain detailed information concerning the terrain or threat activity within a prescribed AI. The reconnaissance of the area can be conducted maneuvering elements through the area or establishing observation posts (OP) within or external to the AI. See below for critical tasks associated with an area reconnaissance.
- *Zone.* A zone reconnaissance is the directed effort to obtain detailed information concerning all threat forces, routes, obstacles, and terrain within a zone defined by boundaries. A zone reconnaissance is assigned when the situation is vague or when information about cross-country trafficability is desired. It is appropriate when previous knowledge of the terrain is limited or when combat operations have altered the terrain. The reconnaissance may be threat-oriented or terrain oriented. A zone reconnaissance is deliberate, time consuming. Critical tasks associated with zone and area reconnaissance are:
 - Determine location and strength of enemy forces.
 - Reconnoiter terrain for its impacts on the operation.
 - Locate and determine the extent of contaminated areas.
 - Locate bypasses to all natural or manmade obstacles.
 - Classify all bridges, underpasses, overpasses, and culverts.
 - Conduct route reconnaissance as required.
- *Reconnaissance in Force.* A reconnaissance in force is a deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reaction, or obtain other information. A commander uses a reconnaissance in force when the enemy is known to be operating within an area and the commander cannot obtain adequate intelligence by other means. A unit may also conduct a reconnaissance in force in restrictive terrain where the enemy is likely to ambush smaller reconnaissance forces. A reconnaissance in force is an aggressive reconnaissance, conducted as an offensive operation in pursuit of clearly stated CCIR. The overall goal of a reconnaissance in force is to determine enemy weaknesses that can be exploited. It differs from other reconnaissance operations because it is normally conducted only to gain information about the enemy, and not the terrain. The RS is not organized to execute a reconnaissance in force mission but a maneuver battalion of the HBCT may accomplish the mission. Specific tasks include:
 - Penetrate the enemy's security zone to determine its size and depth.
 - Determine the location and disposition of enemy main positions.

- Attack the enemy main positions to cause the enemy to react with local reserves, counterattack forces, fire support assets, or specific weapon systems.
- Determine weaknesses in enemy dispositions that can be exploited.

RECONNAISSANCE HANDOVER

4-45. Reconnaissance handover (RHO) is an operation between two units that transfers information and responsibility for R&S of an assigned area or enemy contact from one unit to another. Many of the tasks involved in RHO are similar to battle handover and relief in place. The difference lies in the purpose for RHO that is maintaining contact with the enemy or observation of a specific area, and that the reconnaissance units are not always within direct fire range of each other. RHO is normally associated with a designated area or reconnaissance handover line (RHOL) (phase line [PL]); it may be of a sector or zone, NAI, TAI, and/or threat contact. RHO can be visual, electronic, digital, or analog. Coordinating RHO responsibility occurs from higher to lower unit.

4-46. Reconnaissance operations must be nested with higher, lower, and adjacent units to provide a coordinated and integrated effort. ISR orders are collaborative efforts from division to battalion that support CCIR. Planning includes coordinating RHO from the division to the brigade and from brigade to battalion task forces. During planning and liaison with the division, the brigade ensures that the width and depth of their assigned reconnaissance AO is commensurate with its ISR capabilities. Brigade NAIs are developed to exploit information gained from division NAIs, whether to discern ECOA or disposition of forces. The brigade commander ensures that his battalions are fully integrated into the ISR plan and issues the brigade ISR order after mission analysis but before COA development. The information collected from ISR assets is used to develop and refine COAs against enemy vulnerabilities.

4-47. Figure 4-7 describes a RHO conducted in the defense from the HBCT reconnaissance squadron, and the maneuver battalion scout platoons.

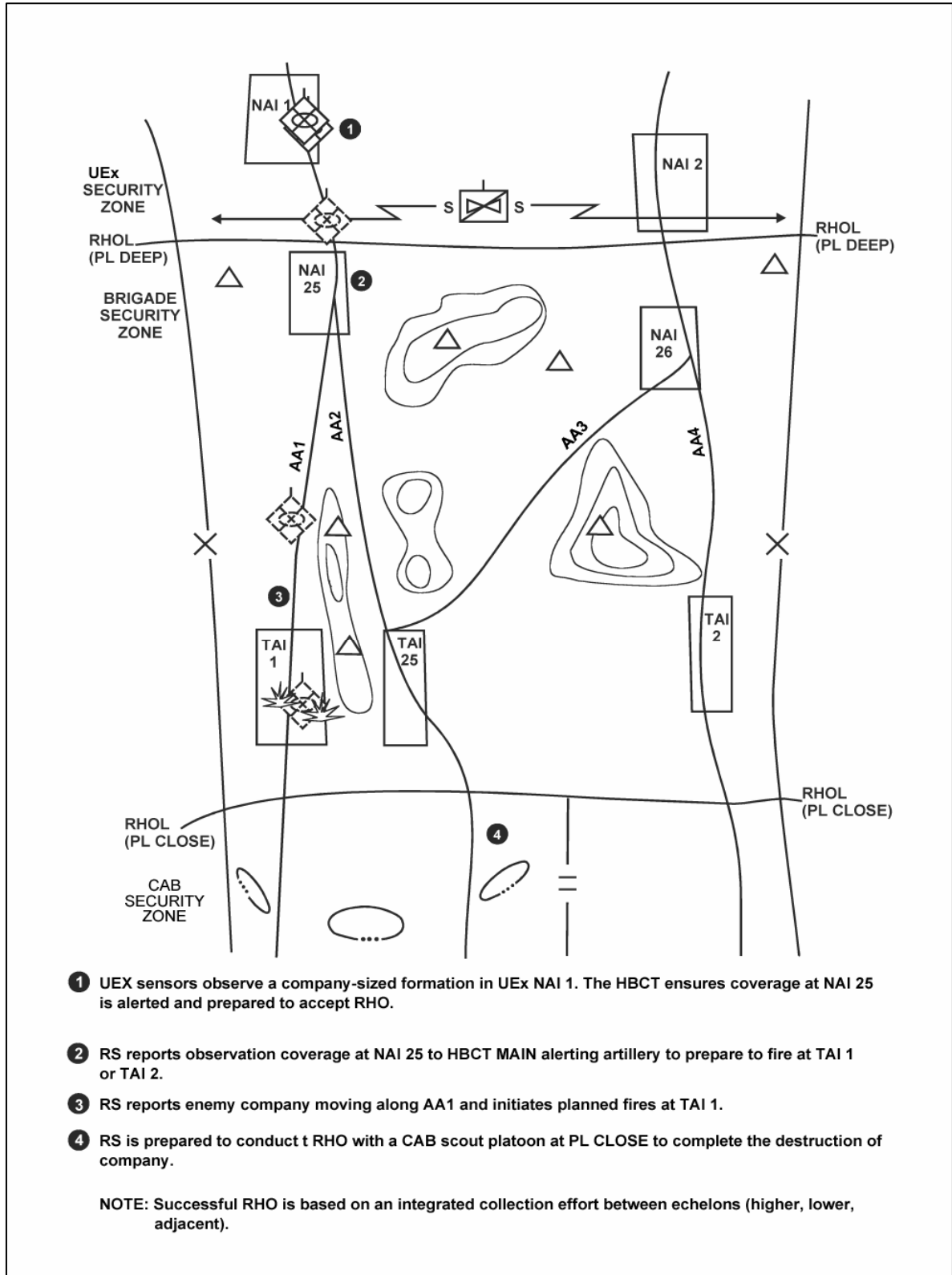


Figure 4-7. Reconnaissance Handover Example

RECONNAISSANCE RESPONSIBILITIES

4-48. The Reconnaissance Squadron commander is responsible for finding and tracking the enemy throughout the HBCT area of operations. While previous brigades relied upon reconnaissance and surveillance organizations above and below them to be informed, the trend in new organizational designs has been to provide robust reconnaissance capabilities at the brigade echelon. The HBCT is organized with a robust, two layered reconnaissance system consisting of a robust reconnaissance squadron of three ground troops and scout platoons in each of the maneuver battalions. In addition a dedicated ISR Integration Cell systematically integrates all R&S disciplines (Scouts, radars, electronic, EO/IR, Chem/Bio, Mines, UAV, HUMINT). This comprehensive brigade reconnaissance effort is integrated within a Joint multi-echelon recon network, in which higher cues lower, lower feeds back to higher and adjacent units share knowledge.

4-49. The S2 and his staff form the ISR Integration Cell to provide recommendations for the organization and employment of all HBCT-level ISR assets and capabilities. Those recommendations include effective integration of battalion and squadron scouting efforts, the positioning of various ground based surveillance systems, air and ground reconnaissance, air space surveillance to identify hostile attack or reconnaissance efforts, and the Fires Battalion's counter-fire radars and UAVs.

4-50. Several techniques are available that can facilitate the integration of effort and flow of information. While the enhanced network capabilities of the HBCT significantly improve the ability to pass and coordinate information, there is still benefit to direct exchange of information and knowledge between key personnel. Two basic approaches for achieving this are either collocating specific RS elements with key HBCT nodes, or vice versa. For the first, an example is positioning the reconnaissance squadron S3 with the HBCT's forward command post (normally the TAC). The Recon squadron S-3 (acting for the squadron commander) and an assistant S-2 (acting for the HBCT S-2) ensure effective reconnaissance planning and integration work. If not possible for the RS S3 to be present, another technique may be to establish an LNO from the RS at the HBCT MAIN to provide feeds to the HBCT S2 and XO per the collection effort. The Reconnaissance Squadron Commander (or his S3) may position with the Brigade commander and his command group to facilitate the flow of information from the reconnaissance squadron to ensure the HBCT commander has the most up to date information/intelligence. The Reconnaissance Squadron XO may position in the command post concerned primarily with the command and control, security, and support of squadron elements. An example of the second basic approach is positioning selected HBCT C2 elements forward with the RS. An example would be to co-locate the HBCT TAC forward with the RC CP.

4-51. While the squadron is "armed" to "go in harms way" to fulfill the reconnaissance mission, it is not organized to conduct "reconnaissance in force" operations. The Reconnaissance Squadron is capable of conducting screening operations, but not guard and cover operations unless augmented with additional assets. Assigning the RS security missions invariably will degrade the squadron's ability to focus on ISR operations and thus is normally avoided. While the RS has an array of individual and crew-served weapons systems, those systems are primarily intended for force protection and to enable engaged forces to break contact. In order to minimize detection by enemy forces, RS elements that uncover HPTs (High Payoff Targets) and decide to, or are directed to, engage them will normally employ use indirect or joint effects.

4-52. The Fires and Effects Section (MAIN CP) coordinates the lethal and non-lethal effects that will support the conduct of HBCT ISR operations.

4-53. The Maneuver Support Cell provides information concerning the trafficability of roads, bridges and urban areas. The cell must be able to not only support the units conducting ISR

operations but also direct subject matter experts to answer information requirements for the commander.

4-54. The HBCT S4 directs and synchronizes assets to support the RS and other HBCT assets conducting ISR operations within the AO. This includes emergency classes of supply (Class III and V) and medical assets.

SECTION V – HBCT INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE ASSETS

4-55. The HBCT has a significant collection capability inherent in its organic reconnaissance squadron, maneuver battalion Scout platoons and MI company and may be augmented with ISR assets from the UEx. This portion describes the capabilities and potential uses of the systems found within the HBCT organization. Note that many of the capabilities listed are greatly affected by the factors of METT-TC and may require adjustment when operating in extreme weather, terrain, or against very well or very poorly trained adversaries.

RECONNAISSANCE SQUADRON (RS)

4-56. The RS is organized with a headquarters troop and three reconnaissance troops. The troop organization allows for M3 and LRAS3 teaming; has SUAVs in each troop; and a fires and effects cell (FEC) in the headquarters and headquarters company (HHC) which includes a Joint Tactical Air Control Party (JTACP) with an Fire Support Element (FSE) . Each Recon Troop also has an organic combat observation lazing team (COLT) squad. Figures 4-8 and 4-9 below show the Recon Troop and HHT organization.

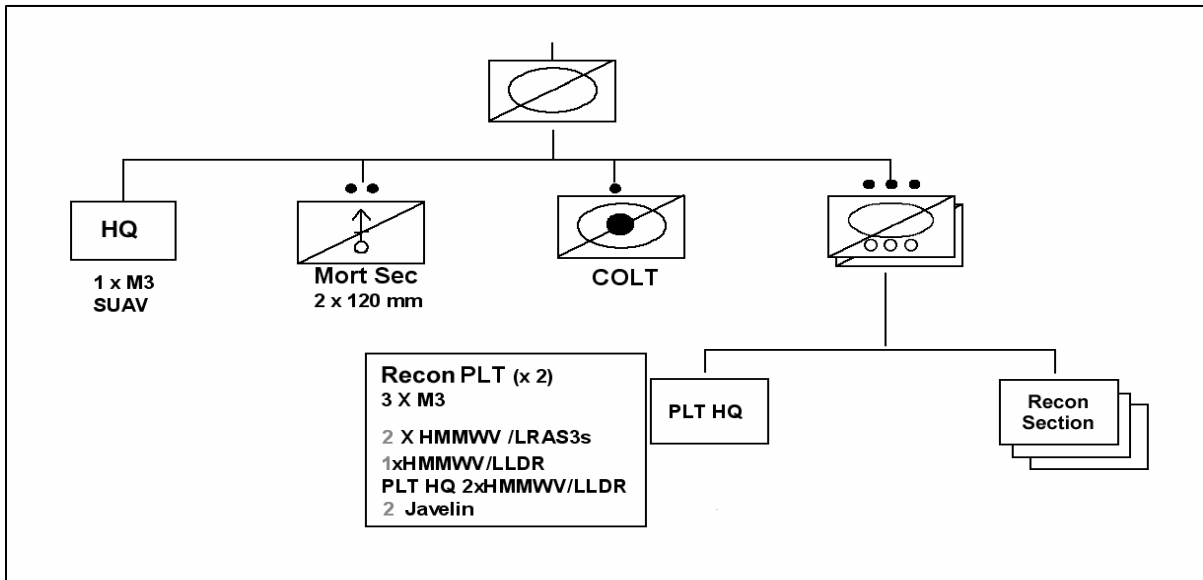


Figure 4-8. The Reconnaissance Troop

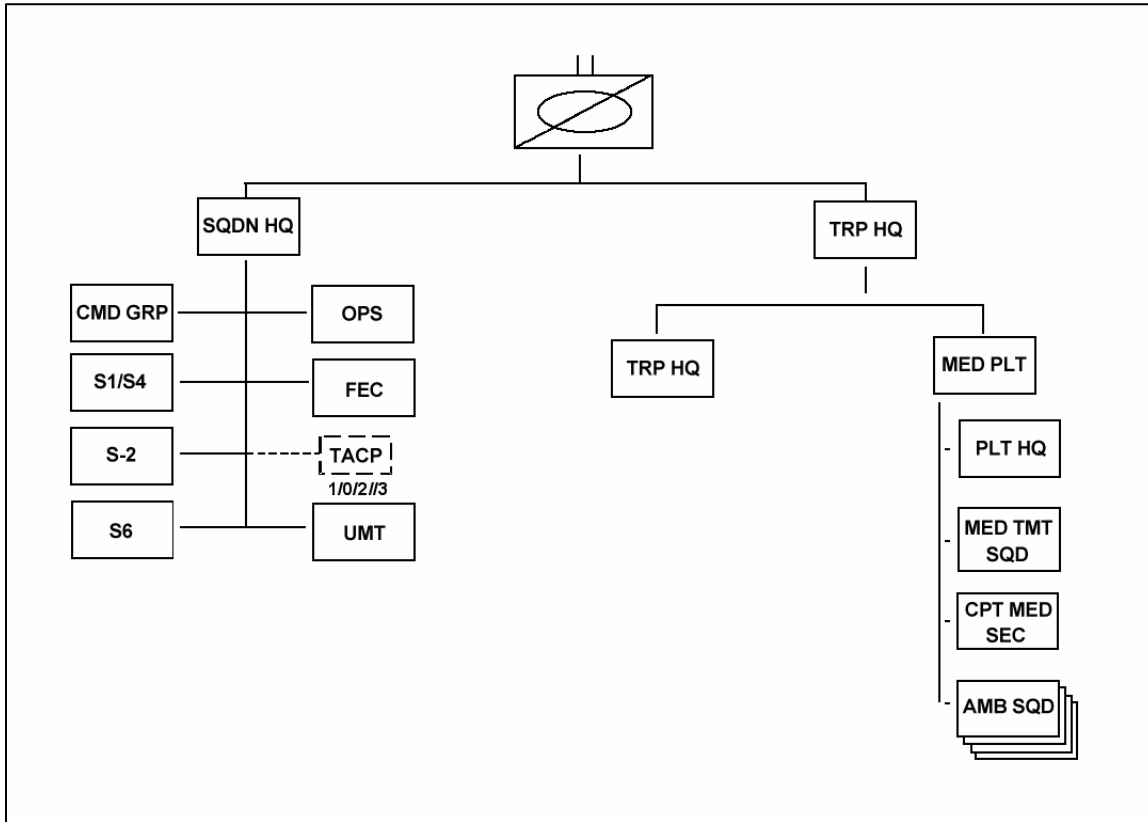


Figure 4-9. HHT, Reconnaissance Squadron

4-57. The primary mission of the RS is to obtain information for the HBCT commander, answering his CCIR. The RS is optimized for conducting reconnaissance and counter-reconnaissance to the depth of the brigade objective. It is capable of conducting screening operations, but requires augmentation to conduct guard or cover operations. It can sense all threats in all dimensions in the area of influence. Each of the ground reconnaissance troops is capable of:

- Conducting a zone reconnaissance 3 to 5 km wide at a rate of 1 kph.
- Conduct an area reconnaissance of a 2x2 km area in two hours.
- Man six short duration (less than 12 hours) OPs.
- Man two long duration (greater than 24 hours) OPs.
- Communicate with its headquarters from 10 to 35 km via FM voice.
- Communicate with its dismounted OPs and patrols up to 10 km via FM voice.
- Operating mounted with an operating range of 300 km.
- Infiltrate dismounted at a rate of 1 kph.
- Defeating light skinned vehicles with .50 cal, MK19, and AT4.
- Man two hasty or one deliberate checkpoint.
- Call for fire via Force XXI Battle Command Brigade and Below (FBCB2) or FM voice.
- Sustain itself with Classes I/III/V for 48 to 72 hours.
- Provide combat lifesaver (CLS) care and limited CASEVAC for wounded personnel.

COUNTERFIRE RADARS

4-58. The Fires battalion of the HBCT has organic weapons-locating radars – an AN/TPQ 36 (Q-36), and an AN/TPQ 37 (Q-37) radar. Four Lightweight Countermortar Radars (LCMRs) will be added to the fires battalion as these systems become available. The primary mission of the Q-36 and Q-37 radars is to detect and locate enemy mortars, artillery, and rockets quickly and accurately enough to permit immediate engagement. The Q-36 is optimized to locate shorter-ranged, high-angle, lower velocity weapons such as mortars and shorter-range artillery. The Q-37 is optimized to locate longer-range, low-angle, higher velocity weapons such as long-range artillery and rockets. These radars support the fires missions of the Fires battalion. The Q-36 and Q-37 radars search for enemy artillery using two techniques. First, they establish a critical friendly zone (CFZ) over friendly locations that detect rounds landing in friendly locations and provide the locations to the firing units. Alternately, they search a call-for-fire zone (CFFZ) that is placed over suspected enemy artillery positions and locates any units firing from that zone. Counterfire radar capabilities include:

- The Q36 can detect artillery out to 14.5 kms, mortars out to 18 km, and rockets out to 24 km.
- The Q37 detects mortar and artillery out to 30 km and rockets out to 50 km.
- Both Q-36 and Q-37 radars can establish electronic OPs that search 90 degree (1600 mils) sectors. The Q-36 has an extended azimuth search function that, based on operator input, automatically traverses the antenna from two to four positions to perform the search function. The Q-37 is not equipped with the extended search function but the antenna can traverse a full 360 degrees (6400 mils). The current LCMR can detect mortars out to 6.5 kms over a 360 degree search sector. Scheduled improvements will significantly extend the acquisition range and add digital connectivity.

NUCLEAR, BIOLOGICAL, CHEMICAL FOX RECONNAISSANCE PLATOON

4-59. The HBCT is supported with an organic NBC reconnaissance platoon in the BTB. Each Fox is capable of:

- Conducting NBC route reconnaissance of one route.
- Conducting NBC survey (determine limits of contamination) at 1 km an hour.
- Conducting one long duration OP.
- Operating 10 to 30 km from controlling headquarters.
- Identifying non-persistent agents out to 5 km.
- Identifying most liquid agents on contact.
- Detecting radiological contamination.

MILITARY POLICE PLATOON

4-60. The MP platoon consists of a headquarters section and three MP squads of three vehicles. The MP platoon is capable of:

- Six short duration OPs.
- Two long duration OPs.
- Route reconnaissance of one route.
- Man two checkpoints.

LONG RANGE ADVANCED SCOUT SURVEILLANCE SYSTEM (LRAS3)

4-61. The LRAS3 provides the HBCT (Reconnaissance Squadron and battalion Scout platoons) with a long-range reconnaissance and surveillance sensor system. The LRAS3 permits scouts to detect targets at ranges three times beyond the old AN/TAS6, Night

Observation Device, Long Range (NODLR). This stand-off capability enables scouts to operate well outside the range of currently fielded threat direct fire and sensor systems. The LRAS3's line-of-sight, multi-sensor suite provides real time target detection, recognition and identification capability with 24-hour and adverse weather operation. The LRAS3 also determines far-target location coordinates. It can be mounted or dismounted. The LRAS3 consists of a second-generation forward-looking infrared (FLIR) with long-range optics, an eye safe laser rangefinder, a day video camera, and Global positioning System (GPS) with attitude determination. The LRAS3 also exports far-target location coordinates to FBCB2.

UNMANNED AERIAL VEHICLES

4-62. UAV sections are organic throughout the HBCT. These remotely piloted vehicles provide real time imagery that can be transmitted back to the CP for analysis and retransmission over digital systems. The Raven SUAV is organic to the specific company/troops of the battalions and the Shadow TUAV is organic to the MI Company. These UAVs may be utilized to perform reconnaissance, security, target acquisition or battle damage assessment operations. The UAV employs a variety of sensor payloads including IR and thermal capabilities.

- The Raven UAV can:
 - Conduct surveillance for less than an hour at an altitude up to 3,000 meters
 - Conduct aerial route reconnaissance out to 15 km
 - Carries a high-resolution camera or a thermal imager
 - Weighs less than 30 pounds and is hand launched
- The Shadow can
 - Carry 60 lbs of intelligence gathering payloads (EO-IR, EW and others)
 - Fly for up to 5 plus hours with a max altitude of 15,000 feet
 - GPS guided and capable
 - Provide aerial retransmission of FM and Enhanced Position Location Reporting System (EPLRS) nets for a four-hour period
- A TUAV ground control station may be pre-positioned with the Fires battalion TOC or at the reconnaissance squadron to facilitate prioritization and shifting of UAVs during execution.

SIGNAL INTERCEPT (PROPHET)

4-63. The HBCT MI Company provides signal intercept support capable of establishing a signal baseline that can detect signal emissions that broadcast in sufficient strength to reach the intercept system. The intercepted signal can be attacked or exploited for content by linguists. Emissions tracked by multiple systems produce grid locations. Signal intercept:

- Produces an emitter map showing locations of emitter nodes.
- Jams selected frequencies.
- Translates intercepted signal transmissions.
- Reports intelligence via FM nets.

MANEUVER BATTALION SCOUT PLATOON

4-64. Each maneuver battalion has a scout platoon consisting of three Scout sections. The platoon has an SUAV, three M3s, two HMMWVs/LRAS3, and a three HMMVs w/LLDR. The brigade may recommend tasking a specific requirement to a subordinate units scout platoon, but normally tasks the subordinate task force for the requirements and lets the maneuver battalion commander allocate resources internal to his organization.

MI COMPANY

4-65. The MI Company, organic to the BTB, provides all-source analysis and ISR integration for the HBCT. It also has the Ground Collection platoon with SIGINT, MASINT and HUMINT assets and the TUAV platoon for reconnaissance, target acquisition and battle damage assessment tasks. TAC HUMINT (MI company) and PSYOPS teams (Information Operations) operating in the AO provide invaluable information and intelligence to the collection effort. Due to their cultural awareness and their close engagement with local populations, these teams provide the commander unique insights and valuable information in satisfying CCIR and input to decision-making.

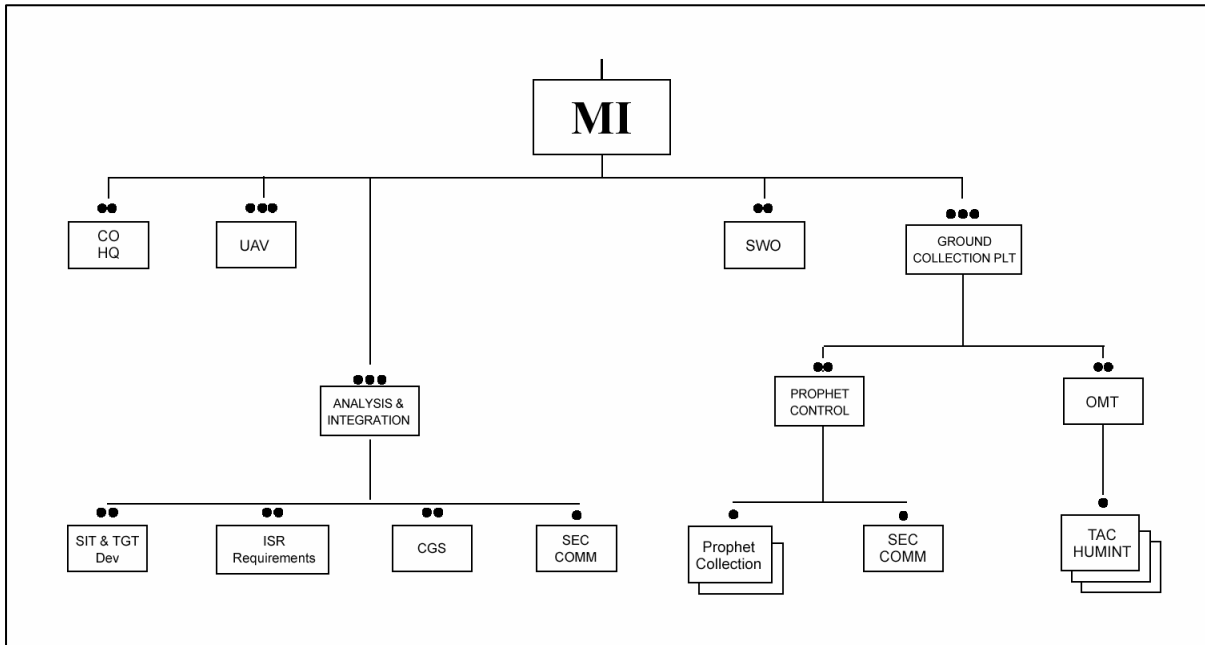


Figure 4-10. The MI Company

COLLECTION ASSETS AT ECHELONS ABOVE BRIGADE

4-66. Digital technologies enable the brigade to receive an ever-increasing amount of intelligence by using intelligence reach PIR and IR. Potential sources of information include:

- Integrated broadcast service (IBS).
- USAF E-3 Sentry airborne warning and control system (AWACS).
- USAF RC-135 Rivet Joint surveillance aircraft.
- USAF U-2 reconnaissance aircraft.
- USAF E-8 Joint surveillance target attack radar system (JSTARS).
- AN/TRQ-152 Trackwolf signal intercept.
- Guardrail common sensor signal intercept.
- AN/TSQ-114 Trailblazer signal intercept.
- AN/ALQ-151(V)2 Quickfix airborne signals intercept.
- National agency databases.
- Theater databases.
- Non-DOD intelligence databases.
- Allied/coalition databases.

- Attack/Recon companies.
- SOF
- LRRS elements

TERRAIN MANAGEMENT

4-67. The HBCT distributes its reconnaissance assets throughout its AO. To prevent fratricide and to synchronize the collection effort and logistic support, the HBCT must organize the battlefield. When assigning boundaries and task organizing subordinate units, the terrain team or HBCT engineer should be included in the decision process. This will help to ensure the boundaries and task organization in conjunction with the terrain compliment rather than hinder the reconnaissance effort. The reconnaissance squadron operates in one of two battlefield organizations with respect to terrain and command relationships. First, it can operate independently inside of its own AO. Second, it can operate independently inside one or more of the battalion AOs. Each technique has advantages and disadvantages for C2 and fratricide reduction and specific planning and coordination requirements that are described in the following paragraphs and should be part of the ISR order.

INDEPENDENT OPERATIONS IN RECONNAISSANCE SQDN/TROOP AO

4-68. The reconnaissance squadron or a troop and attached ISR assets may be given a distinct AO, defined by boundaries. The reconnaissance commander is the land manager for that ground and coordinates all operations inside his boundaries. He has responsibilities to clear indirect fires, deconflict and control movements, and implement control measures to prevent fratricide. Units entering the reconnaissance element's boundary have the requirement to coordinate with the reconnaissance commander. This type of terrain relationship is useful when:

- The squadron/troop is operating at extended distances from the main body of the HBCT.
- The task/purpose of the troop is linked to brigade.
- Example: Area recon to locate enemy reserve and destroy with indirect fires.
- Example: HBCT is conducting an exploitation or pursuit.
- The squadron/troop is responsible for the HBCT's security zone in defensive operations.

INDEPENDENT RECON SQDN/TROOP OPERATIONS IN MANEUVER BATTALION AREA OF OPERATIONS

4-69. The RS may operate in one or more maneuver battalion AOs, but not have a command relationship to those maneuver battalions. The RS commander plans and executes his own operations in support of HBCT directives, but has the requirement to coordinate and deconflict his operations with whichever maneuver battalion commanders own the ground he wishes to operate upon. This relationship is useful when:

- The troop's reconnaissance is linked to brigade tasks, but the AO is too shallow or the terrain is too complex to assign the RS its own AO.
- The HBCT is operating on a noncontiguous battlefield.

TERRAIN MANAGEMENT FOR OTHER ISR ASSETS

4-70. Every ISR asset in the HBCT will have a command relationship assigned similar to the reconnaissance troop. In most cases, assets will be attached to a subordinate command to ensure integration and C2. However, the brigade may keep some assets under brigade control and assign them their own AO or have them operated independently in someone

else's. The BTB is responsible for command oversight of these independent operators, while the asset has the requirement to ensure coordination with the terrain manager of the land he is operating on. Examples of ISR assets operating independent of subordinate units include:

- HBCT retrans section supporting the RS but located in a maneuver battalion sector.
- UAV launch and recovery site.

SECTION VI – INTEGRATING AIR RECONNAISSANCE AND SECURITY OPERATIONS

4-71. Based on mission requirements, the HBCT may receive OPCON, assets from the Attack Reconnaissance Battalion (ARB) or Attack Reconnaissance Squadron (ARS) of the Aviation Brigade to execute reconnaissance and/or security tasks. To ensure effective integration, commanders and staffs must consider basic fundamentals for air-ground integration. These fundamentals provide the framework for enhancing the effectiveness of both air and ground maneuver assets. In all cases, the brigade commander must employ air reconnaissance assets as a maneuver force. This basic premise, when coupled with the fundamentals of air-ground integration, will ensure air reconnaissance and security operations are synchronized with the HBCT operation. See FM 3-20.95, FM 3-04.114, and Appendix A of this manual for additional discussion of air reconnaissance and air security operations.

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Chapter 5

Offensive Operations

Offensive operations aim at destroying or defeating an enemy. Their purpose is to impose US will on the enemy and achieve decisive victory (FM 3-0). A commander may also conduct offensive operations to:

- Disrupt an enemy attack.
- Seize terrain or facilities.
- Deprive the enemy of resources or terrain.
- Deceive or divert the enemy.
- Fix enemy forces.

Offensive operations are the decisive form of battle. The modular heavy brigade combat team (HBCT), with enhanced information, surveillance, and reconnaissance (ISR) capability and command and control (C2), has an increased capability to develop the situation (in and out of contact), rapidly maneuver to a position of advantage, and destroy the enemy on our terms. The fact that the HBCT has two organic Combined Arms Battalions, versus the three typically found in earlier brigades, does however pose potential challenges with respect to constituting reserves and maintaining sustained combat operations. This may necessitate the UEx enabling the lead HBCT with additional combat power to sustain the tempo of the attack (based METT-TC), reducing the size of assigned area of operations (AO), or possibly cycling brigade combat teams (BCTs) to sustain the momentum of the attack.

The UEx and HBCT conduct offensive operations across the spectrum of operations. Figure 5-1 depicts an example of the range of contiguous and non-contiguous environments the UEx and the HBCT may operate in. Figure 5-2 illustrates contiguous and non-contiguous AOs at the HBCT level.

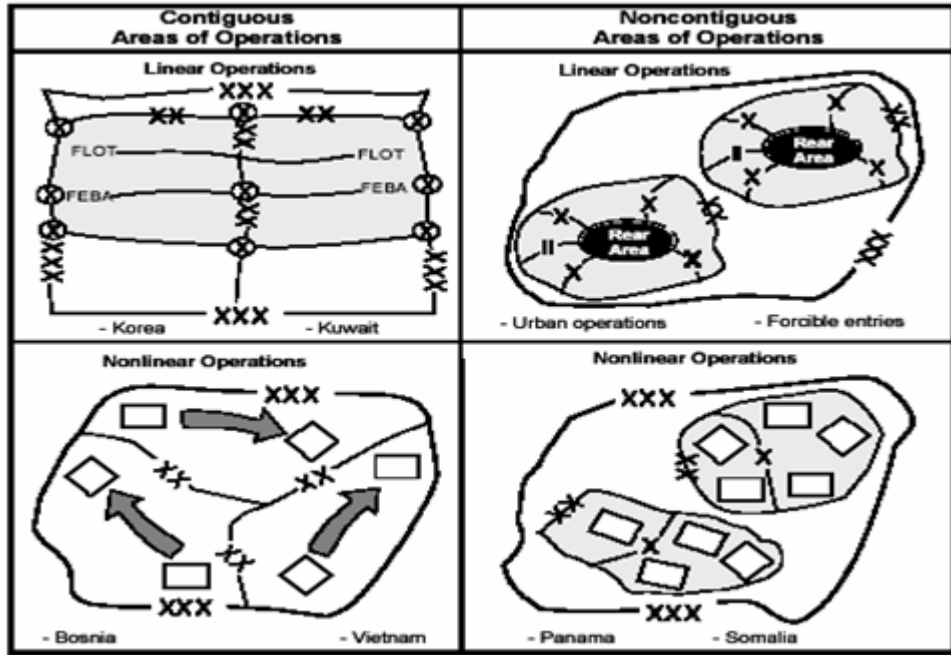


Figure 5-1. UEX Operations in Contiguous and Non-Contiguous AOs

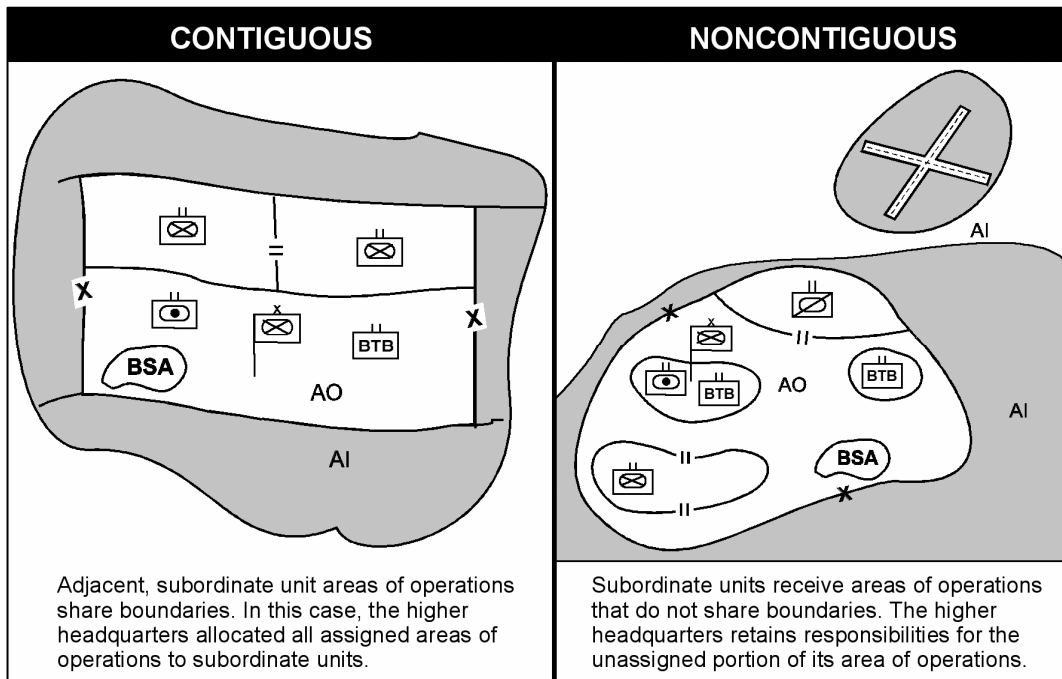


Figure 5-2. The HBCT in Contiguous and Non-Contiguous Operations.

SECTION 1 – FUNDAMENTALS OF OFFENSIVE OPERATIONS

5-1. Offensive operations seek to seize, retain, and exploit the initiative to defeat the enemy decisively. Surprise, concentration, tempo, and audacity characterize effective offensive operations (see Table 5-1). Commanders maneuver their forces to advantageous positions out of contact, exploiting a COP and initiative throughout the HBCT. Commanders execute violently and without hesitation to break the enemy's will or destroy him (FM 3-0).

Table 5-1. Characteristics of offensive operations

- | |
|--|
| <ul style="list-style-type: none"> • Surprise • Concentration • Tempo • Audacity |
|--|

SURPRISE

5-2. In the offense, commanders achieve surprise by unexpectedly attacking the enemy at a time or place he does not expect or in a manner for which he is unprepared. Unpredictability helps gain surprise. The direction, timing, boldness, and force of the attack also help achieve surprise. Surprise delays enemy reactions, confuses his C2, and reduces the coherence of his defense. Commanders can use bad weather, seemingly impassable terrain, feints, demonstrations, psychological operations (PSYOPs), and false communications to lull the enemy into false perceptions. Commanders must then exploit the situation before the enemy realizes what occurred.

CONCENTRATION

5-3. Concentration is the massing of overwhelming effects of combat power to achieve a single purpose. By massing forces rapidly along converging axes, attackers overwhelm enemy forces at decisive points with massed combat power. The attacker makes every effort to deceive the enemy as to his true intentions. After a successful attack, commanders keep their forces concentrated to gain full advantage of their momentum.

TEMPO

5-4. Controlling or altering tempo is necessary to retain the initiative. A faster tempo allows attackers to quickly penetrate barriers and defenses and destroy enemy forces in depth before they can react. Commanders adjust tempo as the tactical situation, logistical necessity, or other opportunities allow. They adjust tempo to ensure synchronization and proper coordination, but not at the expense of losing an opportunity to defeat the enemy. Rapid tempo promotes surprise, contributes to security, and keeps enemy forces off balance. Tempo denies the enemy freedom of action.

AUDACITY

5-5. Audacity is a simple plan of action, boldly executed. Commanders display audacity by developing bold, inventive plans that produce decisive results. Commanders achieve audacity by violent application of combat power. Commanders understand when and where to take risks and do not hesitate as they execute their plan.

PURPOSE-BASED BATTLEFIELD ORGANIZATION WITHIN THE OPERATIONAL FRAMEWORK

5-6. Commanders conduct offensive operations within the operational framework (AO, battlespace, battlefield organization). Battlefield organization allows commanders and staffs to synchronize their forces in time, space, resources, purpose, and action to conduct simultaneous and sequential decisive, shaping, and sustainment operations throughout the depth of their AO.

DECISIVE OPERATIONS

5-7. Decisive offensive operations are attacks that conclusively determine the outcome of major operations, battles, and engagements. Decisive battles or engagements achieve the purpose of the mission of the higher headquarters. Commanders accomplish decisive battles and engagements through close combat that physically destroys the enemy, defeats the will to resist, or seizes, occupies, and holds terrain. Commanders weight the decisive operation by applying additional resources and skillful maneuver. In offensive and defensive operations, decisive points are identifiable terrain, facilities, systems, or formations that confer a major tactical operational or strategic advantage. Because of their importance, the enemy will commit major combat capability to seize, defend, or preserve control of decisive points.

5-8. There is one decisive operation, per phase, per echelon, of an operation. However, the decisive operation may include multiple actions conducted simultaneously throughout the depth of the AO. Commanders weight the decisive operation while economizing on the effort allocated to shaping operations.

5-9. Decisive operations are conducted by massing effects (both lethal and non-lethal), not forces, to achieve overmatch against the enemy. Forces take advantage of their superior situational understanding and agility to quickly achieve decisive results through precision fires, effects, and maneuver without the disadvantages inherent to the concentration of forces and other risks and limitations of linear operations. Decisive operations depend primarily upon the simultaneous, synchronized delivery of devastating precision effects and exploitative maneuver to control terrain, defeat enemy forces and control populations and resources that leave the enemy bereft of their resources and will to resist. Forces will routinely conduct operations that simultaneously attack critical targets throughout the battlespace by fires and rapidly exploitative maneuver. Such actions—at a sustained, unrelenting pace—prevent the enemy from recovering or responding effectively.

SHAPING OPERATIONS

5-10. Shaping operations at any echelon create and preserve conditions for the success of the decisive operation. They support the decisive operation by affecting enemy capabilities and forces, or by influencing enemy decisions. They may occur before, concurrently with, or after the start of the decisive operation. They may involve any combination of forces and occur throughout the AO. Shaping operations include information operations and security operations. Shaping operations include attacks in depth to secure advantages for decisive operations and to protect the force. These attacks deny the enemy freedom of action and disrupt or destroy the coherence and tempo of his operations. Shaping operations in the offense include:

- Shaping attacks designed to achieve one or more of the following:
 - Deceive the enemy.
 - Destroy or fix enemy forces that could interfere with the decisive operation.
 - Control terrain whose occupation by the enemy will hinder the decisive operation.
 - Force the enemy to commit reserves prematurely or into an indecisive area.

- Reconnaissance and security operations
- Passage of lines
- Breaching operations
- Operations by reserve forces before their commitment
- Offensive information operations

SUSTAINING OPERATIONS

5-11. Sustaining operations in the offense ensure freedom of maneuver and maintain momentum. Sustaining operations are inseparable from decisive and shaping operations, although they are not themselves decisive or shaping. Failure to sustain normally results in mission failure. Sustaining operations determine how fast HBCTs can exploit success. Combat service support (CSS) unit locations need not be contiguous with those of their supported forces. However, if commanders separate attacking forces from logistical bases, the commander should allocate forces to provide security for CSS units operating with extended lines of communication (LOCs).

CONTACT CONTINUUM

5-12. The enhanced ISR capabilities of the HBCT enable it to change the traditional approach for making contact with and defeating the enemy. Traditionally, the mounted BCTs made contact with their lead elements and developed the situation in contact. Maneuver battalions became decisively engaged to allow the remainder of the BCT to maneuver against the enemy's assailable flank. This method of operations was based on our ability to overwhelm the enemy with firepower and maneuver. However, with the increase in ISR capabilities (such as unmanned aerial vehicles (UAVs), signal intelligence (SIGINT), human intelligence (HUMINT), and other organic and external Joint assets) coupled with the lethality and precision in HBCTs, a new contact paradigm is available. HBCTs make and maintain ISR contact with enemy forces. The main body then develops SU out of contact, and maneuvers to initiate contact on the HBCT's terms (see Table 5-2). The HBCT's effects can then be massed at the desired decisive point through maneuver, while avoiding significant chance contact. However, commanders and staffs must still organize and be prepared for chance contact, especially when terrain and weather conditions degrade the use of ISR assets.

Table 5-2. Sequence of Contact Actions

- | |
|---|
| <ul style="list-style-type: none">● Make ISR contact with enemy forces● Develop SU out of contact● Maneuver out of contact● Make contact on the HBCT's terms |
|---|

DEVELOPING OFFENSIVE PLANS

5-13. During the MDMP, the commander considers the factors of METT-TC when developing his concept for an offensive mission. He determines the end state in terms of the HBCT's relationship to the enemy, terrain, and time and then visualizes how he wants the battle to develop to meet his end state. He also identifies additional requirements and/or forces to be provided by the UEx. During his visualization, the commander should identify events, an action, or a series of actions he considers decisive that leads to the end state. These should be times and locations where enemy weakness allows maximum combat power to be applied, leading to mission accomplishment. In his planning guidance the commander should explain what actions he considers decisive or critical, what effects he sees them having on the enemy, and how these effects will lead to mission accomplishment. He states CS and CSS priorities that are critical in supporting his vision. The commander also states or approves his critical IRs that aid him with making decisions. The ISR plan, as discussed in Chapter 4, is then developed and executed to gain the commander and staff information needed to assist in developing courses of action (COAs).

5-14. HBCTs often transition from one type of offensive operation to another with minimal planning time available. Therefore, the commander and staff must anticipate battlefield events, continually plan, and synchronize every available asset to maximize the potential for mission success. This section addresses common considerations for all offensive missions.

5-15. Offensive operations generally consist of the following sequential events:

- ISR operations (discussed in Chapter 4)
- Approach to the objective
- Actions on the objective
- Follow-on missions

APPROACH TO THE OBJECTIVE

5-16. The commander and staff plan the approach to the objective to ensure security, speed, and flexibility. Reconnaissance forces provide or confirm avenues of approach as part of their ISR operations as discussed in Chapter 4. In digital HBCTs, the commander leverages his ISR assets to build a COP that enhances security en route to the objective. This provides the commander the flexibility to determine the best COA that supports the HBCT's maneuver plan. The commander and staff select formations that best support actions on the objective. The HBCT, as required, employs forces (both manned and unmanned) in security missions to provide protection and ensure a secure approach to the objective. The commander employs those techniques that avoid the enemy's strength when possible and conceals the HBCT's true intentions. He uses deception to deceive the enemy as to the location of the main effort, uses surprise to take advantage of his initiative in determining the time and place of his attack, and uses indirect approaches when available to strike the enemy from a flank or the rear.

ACTIONS ON THE OBJECTIVE

5-17. During an offensive operation, the HBCT's objective may be terrain or force oriented. Terrain oriented objectives require the HBCT to seize and retain a designated area. However, gaining a terrain-oriented objective often requires fighting through enemy forces. If the objective is an enemy force, an objective area may be assigned for orientation but the HBCT's effort is focused on the enemy's actual location. The enemy may be a stationary or moving force. Actions on the objective start when the HBCT begins shaping the objective. This normally occurs with lethal and non-lethal preparatory fires while the HBCT is still approaching the objective and ends with the decisive operation. The HBCT reorganizes and consolidates as required by the situation and mission.

FOLLOW-ON MISSIONS

5-18. The HBCT executes follow-on missions as directed by the higher commander. The most likely mission is to continue the attack. Other missions may include supporting a passage of lines for a follow-on force, defending, or conducting an exploitation or pursuit. The HBCT develops sequels for follow-on missions, to include ISR requirements, based on the higher headquarters' plan, higher commander's intent, and the anticipated situation. The commander's mission analysis is critical to ensure he has the combat assets for mission success. It is imperative he request augmentation from the UEx as required.

COA DEVELOPMENT

5-19. The mission analysis, commander's intent, and commander's guidance provides the basis for development of the ISR plan and offensive COAs. The commander and staff determine the decisive operation that will accomplish the mission and then determine shaping operations needed to create the conditions for the decisive effort to succeed. The staff focuses on synchronizing all actions and efforts to mass combat power at decisive locations and times to achieve the commander's intent. Reverse planning is the best method for developing the plan. It serves to focus the planning and synchronization at critical points first. During COA development, the commander will conduct a risk assessment and determine factors that mitigate unnecessary risk. It is imperative that during mission analysis the HBCT analyze the relative combat power of both friendly and enemy forces to validate that adequate combat effects are available to support maneuver and mass effects.

5-20. COAs for offensive plans are developed in accordance with the planning process outlined in FM 5-0 (FM 101-5).

TECHNIQUE FOR DEVELOPING OFFENSIVE COURSES OF ACTIONS

5-21. The considerations discussed in the following paragraphs apply to all types of offensive operations. The restated mission, commander's intent/guidance, mission analysis products (including IPB), and information gained through ISR provide focus for the development of the offensive COA. The commander and staff use the following process to develop a COA:

- Identify available forces.
- Analyze relative combat power.
- Generate options.
- Array initial forces
- Develop the scheme of maneuver.
- Assign headquarters.
- Prepare COA statements and sketches.

5-22. *Analyze Relative Combat Power.* The commander and staff determine and analyze the friendly and enemy combat power to gain insight on capabilities, limitations, and

weaknesses associated with both forces. ABCS tools provide continuously updated information to the commander and his staff concerning the enemy, terrain, battlefield conditions, and friendly forces. The commander and staff consider the elements of combat power (maneuver, firepower, protection, leadership, and information) as well as the effects of other potential combat multipliers such as obstacles and logistical capabilities. Analysis of relative combat power is one means of avoiding or degrading enemy strengths, and capitalizing on HBCT capabilities to achieve overmatch at the decisive point.

5-23. *Generate Options.* The commander and staff consider the forms of maneuver (see Forms of Maneuver) as the basis for developing COAs. The following guidelines aid this step:

- Understand the critical aspects of the situation—METT-TC.
- Determine the desired end state of the mission in terms of the HBCT's relation to the enemy, terrain, and time. The end state should best posture the HBCT to retain the initiative for future operations (see Figure 5-3).
- Determine the decisive events, action, or series of actions that result in achieving the end state, if not already determined by the commander.
- Based on the factors of METT-TC, determine the form(s) of maneuver that effectively achieves the end state. More than one form of maneuver may be incorporated in a COA.
- Visualize the flow of the battle from the end state and consider the key tasks and associated tactical requirements such as assault, breach, fix, or a passage of lines that must be accomplished to support the concept. More importantly, the purpose of the operation is used to determine what tasks will produce the desired results. This visualization should identify the main effort (and when it shifts), required shaping efforts, key tactical tasks and purposes required by each effort, and the sequence of actions required to complete the mission (see Figure 5-4).

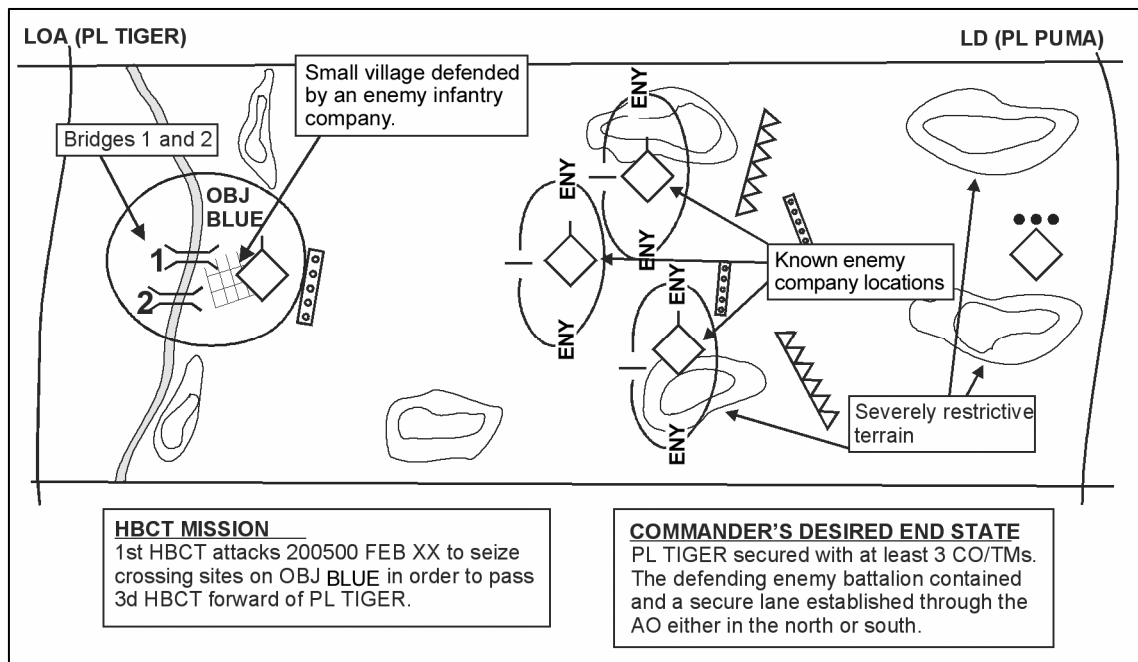


Figure 5-3. Commander's desired end state

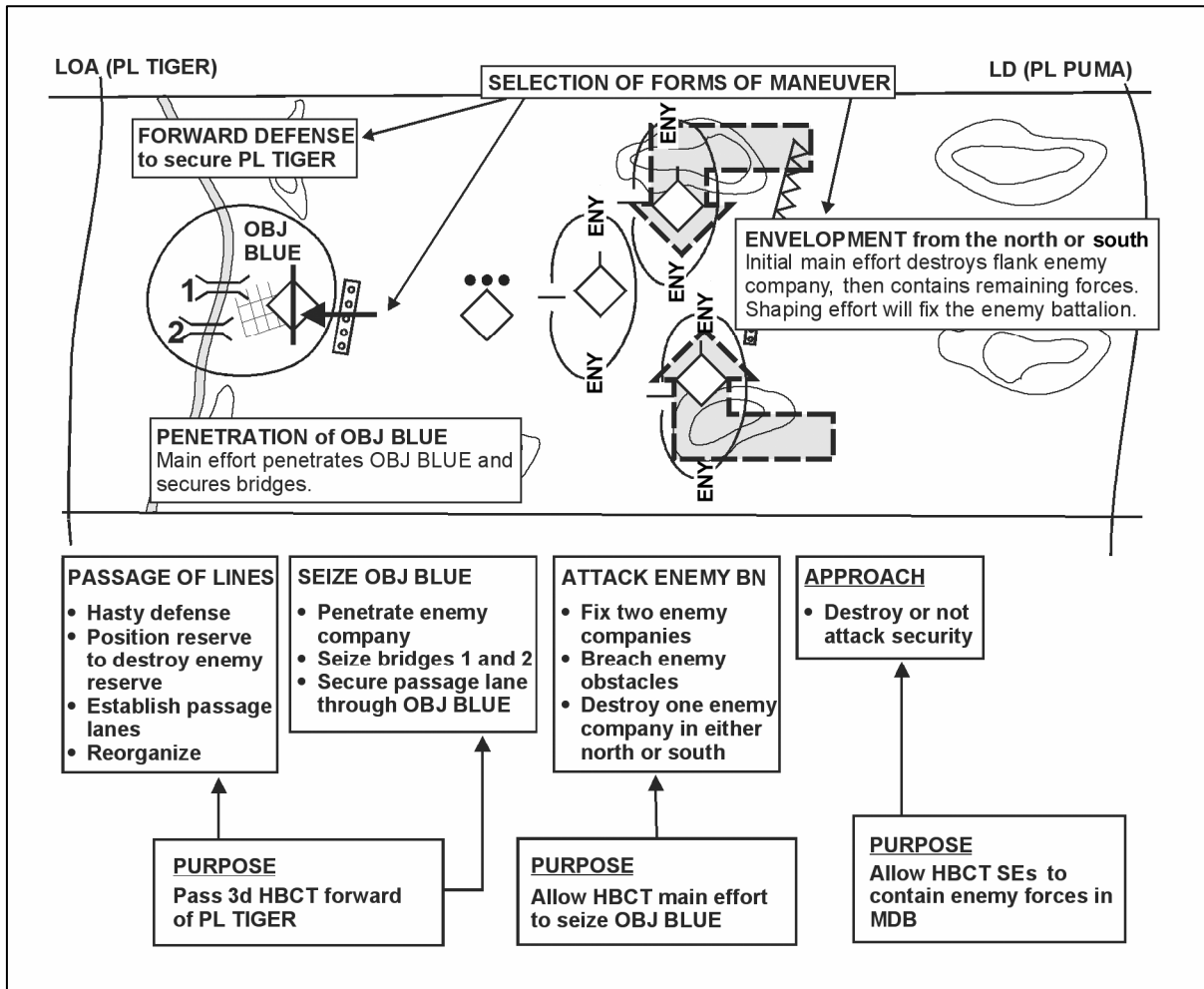


Figure 5-4. Key tasks and tactical requirements

5-24. *Array Initial Forces.* The commander and staff array forces by backward planning from the end state to initiation of the operation (see Figure 5-5). The following steps guide the process:

- Based on the generated option determine:
 - The purpose of each effort
 - Task(s) required by each effort to accomplish its purpose
 - Essential fire and effects tasks (EFET)
 - Obstacle effects
 - Timing and sequence of actions
- Consider the requirements for reconnaissance, security, mobility, and reserve. Begin in planning to address the challenges associated with creating a reserve versus a positional reserve based on the HBCT having only eight maneuver companies.
- Determine the number and type of forces required by each effort to accomplish its tasks (required combat power). Where historical force ratios were once used to determine the required combat power, commanders and staffs have to factor in the capabilities of the HBCT compared to the enemy to determine the force ratios that

will be needed. Making ISR contact first, developing the situation out of contact, and making contact on its own terms, the HBCT may be able to attack at force ratios of 1:1.

5-25. Allocate combat power to each operation based on purpose and assigned tasks, anticipated enemy situation, terrain, and the commander's stated level of risk. Combat power is allocated starting with the main effort and continuing through shaping efforts. Additional combat power not needed is either weighted to the main effort or kept in reserve. This analysis is critical as the HBCT has only two maneuver battalions and consideration must be given to any constraints this presents during planning. General guidelines include:

- Array company-size maneuver units. In some cases, the HBCT may need to consider the allocation of maneuver platoons. Array CS and CSS appropriate to support the mission.
- Allocate the type forces required by each operation that maximizes the capabilities of each type force and the weapon systems available.
- Account for the impact of intangibles such as surprise, deception, morale, training, and leadership.
- Allocate the minimum combat power necessary for shaping efforts.
- Weight the main effort with sufficient combat power to ensure it is capable of achieving overwhelming effects against the enemy upon commitment.
- Deal with shortfalls in combat power by modifying the COA, changing task organization by phase of the operation, use of economy of force elsewhere on the battlefield, or increasing the use of combat multipliers.
- Consider the anticipated contribution of Joint effects with the greater intelligence capability and situational understanding of the HBCT elements.

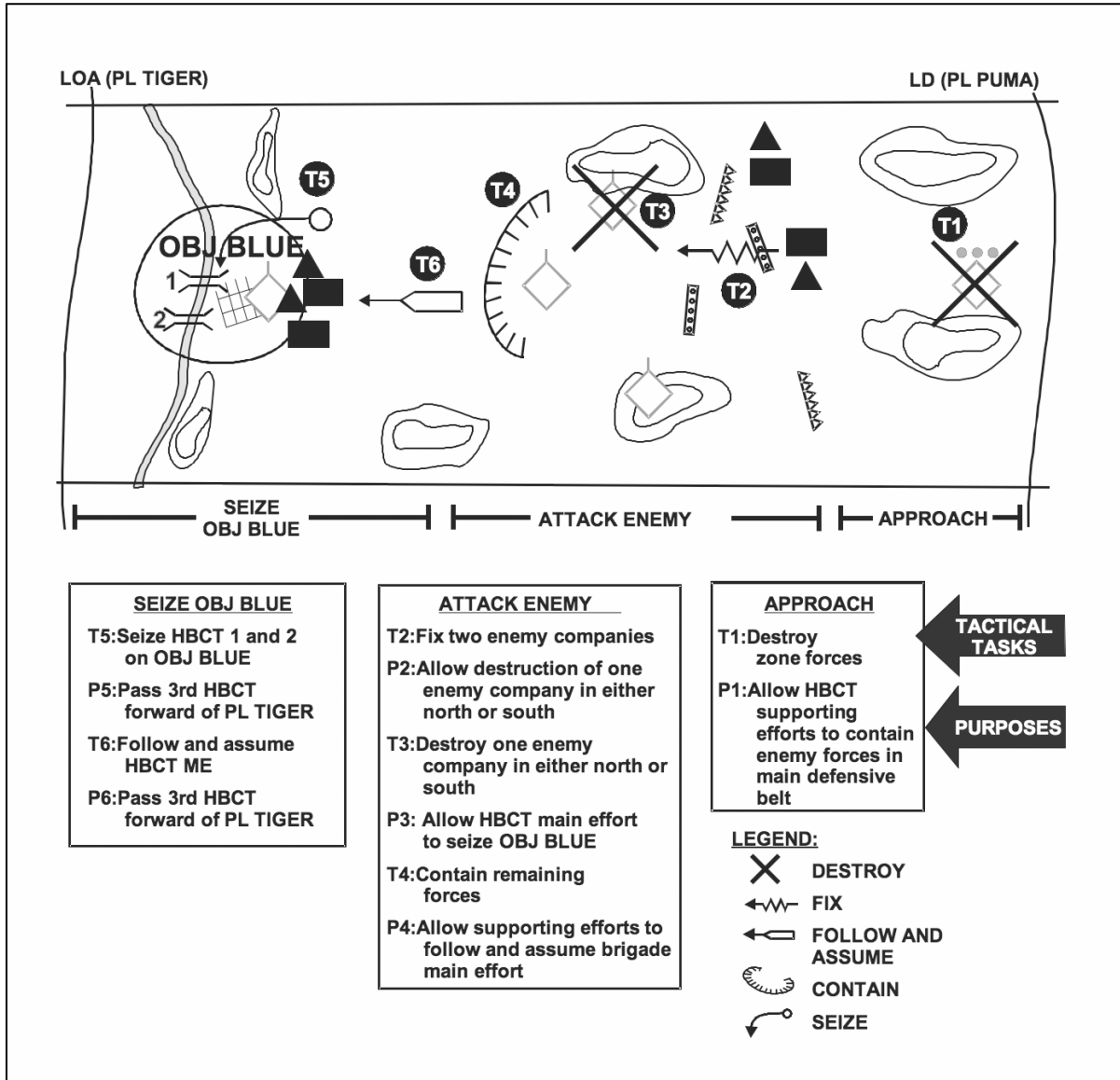


Figure 5-5. Array initial forces

5-26. *Develop the Scheme of Maneuver.* The commander and staff develop the scheme of maneuver by refining the initial array of forces to coordinate the operation and show the relationship of friendly forces to one another, the enemy, and the terrain (see Figure 5-6). Key steps include:

- Establish control measures (graphic and procedural).
- Establish A2C2 control measures.
- Assign command and support relationships for CS and CSS units.
- Ensure all efforts and resources are focused to support the main effort(s). Ensure fire support is sufficient to set conditions for success by the maneuver forces.
- Ensure synchronization of maneuver, fires, and other operating systems.
- Define the concept of fires.
- Identify forces for rear operations.

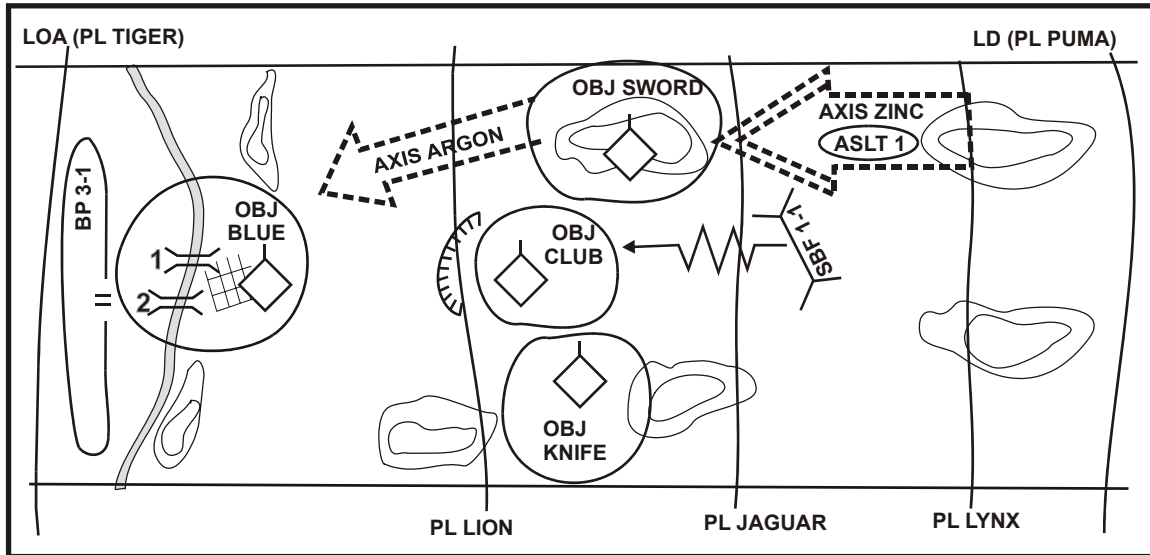


Figure 5-6 Scheme of maneuver

5-27. The scheme of maneuver is the central expression of the commander's concept of operation. The scheme of maneuver:

- Assigns responsibilities for AOs and assigns objectives along with positions and immediate objectives if used.
- Designates the main effort, along with its task(s) and purpose, by phase or critical event of the operation as appropriate.
- Designates supporting efforts, along with their task(s) and purpose, linked to how they support the main effort.
- Designates the reserve and its planning priorities.
- Defines reconnaissance and security operations.
- Outlines the movement of forces including formations, positions, orientation, and axis of advance when appropriate.
- Describes the concept of fires.
- Establishes the priority of support for CS and CSS units.
- Identifies the maneuver options that may develop during execution.

5-28. *Assign Headquarters.* During this step, battalion headquarters and other C2 measures are applied to specific units. This assignment should consider the types of units to be assigned to a headquarters and its span of control. Planners should not exceed the allocated headquarters' span of control. A maneuver battalion headquarters, although normally operating with four maneuver companies, is designed to control between two and five maneuver companies. Task organization takes into account the entire battlefield framework and special C2 arrangements for operations that have special requirements such as passages of lines, breaching, and river crossings.

5-29. *Prepare COA Statements and Sketches.* The staff develops a COA statement and sketch for each completed COA (see Figure 5-7 and Table 5-3). All COAs must meet the criteria of suitability, feasibility, acceptability, distinguishability, and completeness. A good COA should be capable of defeating all feasible enemy COAs. The staff must quickly test each COA for these qualities prior to COA analysis. Also, all supporting plans such as fire support, air defense, and engineer must be developed prior to COA analysis.

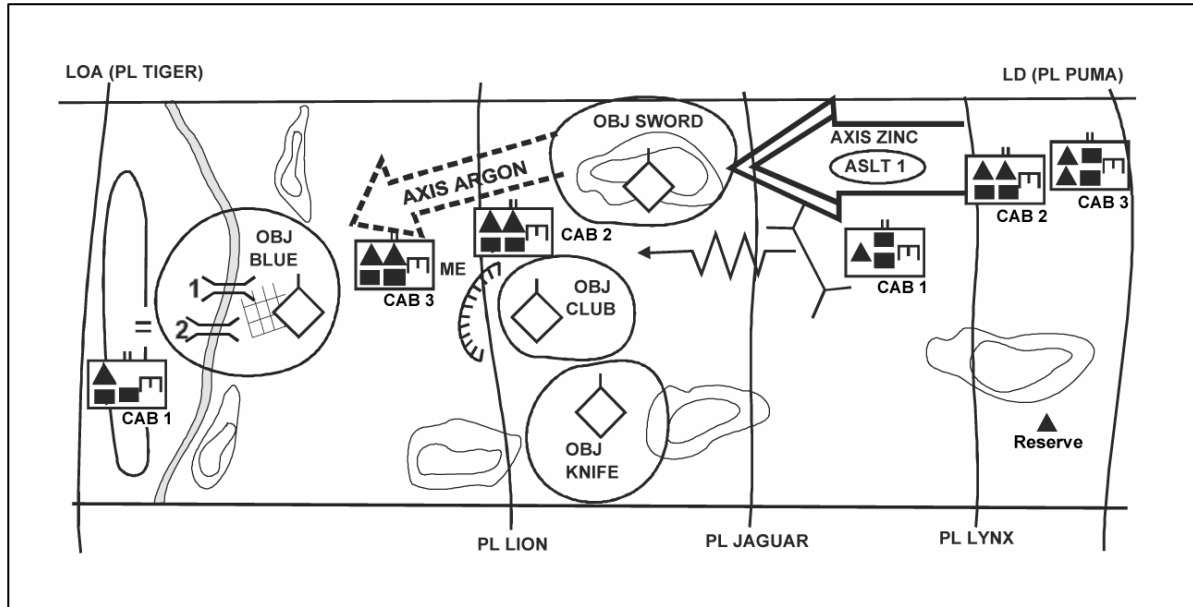


Figure 5-7. Course of action sketch

Table 5-3. Course of action statement

<p>APPROACH (PL PUMA TO PL LYNX)</p> <p>1st HBCT attacks in column formation with CAB 1 (advance guard) followed by CAB 2 then CAB 3 (Attached). Fires: Fires will destroy five enemy vehicles on OBJ SWORD.</p> <p>ATTACK AGAINST ENEMY BATTALION (PL LYNX TO PL LION)</p> <p>Northern Envelopment: CAB 1, conducting shaping operation, occupies SBF 1-1 and fixes defending enemy companies on OBJ CLUB and KNIFE to prevent enemy repositioning against CAB 2. CAB 2, initial main effort, destroys enemy forces on OBJ SWORD then contains remaining enemy forces within OBJ CLUB and OBJ KNIFE to allow the HBCT to continue its attack to OBJ BLUE. CAB 3 occupies ASSAULT POSITION 1 and on order attacks along AXIS ARGON to OBJ BLUE.</p> <p>Fires: As CAB 1 (priority of fires) crosses PL LYNX fires limit the northern and center enemy companies' ability to observe and engage the CAB 1's occupation of SBF 1-1. Then fires limit the northern enemy company's ability to observe and engage CAB 2's breaching effort and assault (CAB 2 becomes priority of fires upon commitment).</p> <p>SEIZURE OF OBJ BLUE (PL LION to PL TIGER)</p> <p>CAB 3, main effort, penetrates the village and enemy forces on OBJ BLUE then seizes bridges #1 and #2 to establish a secure passage lane. CAB 1 follows CAB 3. Once the bridges are secured, CAB 1 secures PL TIGER to protect the forward passage of 3d HBCT. Fires: Fires limit the enemy forces' (on OBJ BLUE) ability to observe and engage CAB 3's penetration of OBJ BLUE. Once PL TIGER is secured, fires delay any enemy counterattacks to protect 3d HBCT's passage of lines.</p>

5-30. *Flexibility.* While the commander and staff develop the plan, intelligence about the enemy is updated and confirmed. The commander must develop a flexible plan that allows

for continual adjustment as intelligence is gained about the enemy. The commander makes final decisions for the execution of the scheme of maneuver based on his ISR effort, the COP, and the development of the situation. All leaders in the HBCT must recognize that the scheme of maneuver represents a base plan from which the commander makes adjustments to during execution. Unexpected enemy actions, actual effects of the terrain, unforeseen opportunities, and other developments in the situation cause the commander to modify the plan throughout the operation. The use of SU and the COP, maneuver options, assigning on-order or be-prepared missions to subordinates, employing reconnaissance pull, and relying on maneuver SOPs provides the HBCT this level of flexibility. Flexibility is built into plans by :

- Simple base plans and an understanding of the commander's intent.
- Understanding of multiple enemy capabilities.
- Complete analysis of the terrain and the enemy.
- Multiple observers throughout the depth of the AO.
- Assigning observers multiple responsibilities.
- Refocusing observers based on a changing plan.
- On order graphic control measures.
- Redundant communications network that supports the entire operation.
- Planning for repositioning of uncommitted forces.
- Planning for repositioning to compensate for attrited friendly forces.
- Redundant critical combat multipliers positioned in depth.
- Ability to shift resources based on clear decision points (DPs).
- Allocating a reserve that can exploit multiple contingencies and achieve a decision.

5-31. Additionally, seizing the initiative from the enemy is essential in offensive operations. Initiative implies throwing the enemy off balance with powerful, unexpected strikes. Initiative implies never allowing the enemy to recover from the initial shock of an attack. Commanders continually seek vulnerable spots and shift their decisive operation when opportunities present themselves. Retaining the initiative requires planning beyond the initial operation and anticipating events well in advance. Factors that enable the commander to determine the enemy's intent and seize the initiative are:

- Continually see the enemy.
- Making contact on your own terms or with smallest possible force.
- Do not let enemy mass his forces.
- Maintaining tempo and speed.
- Reducing the enemy's options.
- Find and fix the enemy's reserves.
- Create weakness and exploit to destroy.
- Gaining information superiority.

BATTLEFIELD OPERATING SYSTEM INTEGRATION INTO OFFENSIVE PLANNING

5-32. The HBCT XO and S3, in accordance with the commander's guidance, are responsible for integrating and synchronizing the BOS into all planning. The following section describes the information staff members should consider and provide when developing offensive plans.

INTELLIGENCE

5-33. Given the significant capabilities of its ISR assets, the HBCT and its higher echelon headquarters must develop their reconnaissance and surveillance plans in coordination. IPB

is developed for both the AO and the AI. It is used in all operations. IPB is a continuous process that must be constantly re-evaluated as the situation develops and new information becomes available. This requires the UEx G2 to provide all intelligence products to the HBCT S2. The increased capabilities of the HBCT in intelligence acquisition and rapid precision fires and effects dictate that ISR assets be tightly integrated into a single operation to facilitate mission accomplishment. The S2 integrates IPB and other MDMP products into his analysis of all intelligence and information coming into the CP from the Reconnaissance Squadron, other ISR assets and higher echelon intelligence assets and databases. The HBCT S2 must in turn release refinements of those products, and products developed separate from the G2, to subordinate units as soon as they are developed. This is key to successful parallel planning. The ability to collaborate via digital systems and share databases will make the planning process more effective and as the HBCT staff will be alerted to upcoming missions and changes and pass all intelligence products as soon as they become available.

5-34. Under most circumstances the UEx G2 should have most of the intelligence products near completion prior to the orders brief. The IPB process is the commander's responsibility and the responsibility of each staff officer. Other staff officers must assist the S2 in developing SITTEMPs within their own area of expertise. The S2 must have the initial IPB done to facilitate early deployment of reconnaissance assets. HBCTs should deploy reconnaissance assets as soon as possible to facilitate information collection that may result in making adjustments to the initial plan.

5-35. IPB consists of four steps that are performed each time IPB is conducted:

- Define the battlefield environment.
- Describe the battlefield effects.
- Evaluate the threat.
- Determine threat COAs.

5-36. IPB integrates enemy doctrine and situation with battlefield effects (weather and terrain) as they relate to the mission and to the specific battlefield environment. It provides a basis for determining and evaluating enemy capabilities, vulnerabilities, and probable COAs. Terrain and weather analysis and threat evaluation may be performed simultaneously or in sequence. Determining the threat COAs is performed last by integrating weather, terrain, enemy, and friendly forces. Threat integration determines their combined effects on friendly combat operations. The IPB process against a non-conventional enemy requires adapting the process. Chapter 4, ISR, provides an example of some techniques (pattern analysis, link diagrams, etc) that can assist in stability operations or operations in very complex terrain such as urban areas.

5-37. IPB production is labor intensive. To the extent possible, the HBCT S2 should build an extensive database for each potential area in which a unit will operate. Accomplishing this will require leveraging the information and capabilities resident in the UEx, Regional Combatant Commander (RCC), or Joint/National databases and products. Once hostilities begin and current data becomes available, the intelligence estimate becomes dynamic, changing as ISR results and the situation changes on the battlefield.

5-38. The BCT S2 defines the battlefield environment. IPB completed before an operation shows gaps in the intelligence database, establishes the limits of the area of interest (AI), and identifies characteristics of the battlefield that will affect both the threat and friendly forces. The HBCT S2 should work toward satisfying intelligence requirements before the operation begins. Remaining gaps in information frequently become PIRs.

5-39. IPB provides the basis for a dynamic collection plan and a guide for the effective employment of ISR resources. Situation development takes the combat information flowing from the subordinate units, and intelligence reported from higher, and improves and refines the products from the IPB process. The analysis of this information will answer the

commander's priority intelligence requirements (PIR). Reconnaissance and surveillance is a continuous process. With increased ISR assets available to the HBCT, commanders must give consideration to their mission, duration, rest, resupply, and subsequent mission requirements. When the HBCT does not have adequate organic resources to achieve or sustain the required reconnaissance and surveillance effort, it requests integration of other ISR assets from the UEx, JTF or other higher echelons for coverage.

5-40. The HBCT S2 provides the commander with timely and accurate enemy information. The S2 develops the plan for providing this information by focusing the IPB on a detailed analysis of the following:

- The terrain, especially observation and fields of fire, avenues of approach, key terrain, obstacles and movement, and cover and concealment (OAKOC).
- The enemy's composition, strength, and disposition.
- Location of reserves and other forces within supporting distance.
- The enemy's rate of movement or preparation.
- Options available to the enemy.
- The enemy's expected actions on contact.

5-41. The result of IPB provides the basis for a dynamic collection plan and a guide for the effective employment of ISR resources. It provides the commander and planners with likely times and locations for contact and expected actions. Situation development takes the combat information flowing from the subordinate units, and intelligence reported from higher and improves and refines the products from the IPB process. From this analysis, the commander and staff begin to develop PIR (see Chapter 4).

5-42. The PIR focuses primarily on aiding the commander in deciding on how, when, and if he should commit his decisive force. Because identification of the enemy COA is key to these decisions, PIR attempts to determine which option the enemy has chosen.

5-43. Developing threat COAs is accomplished by:

- Identifying the threat's likely objectives and desired end states.
- Identifying the full set of COAs available to the threat.
- Determining the most likely enemy COA as well as the most dangerous.
- Evaluating and prioritizing each COA.
- Developing each COA in the amount of detail time allows.
- Identifying initial collection requirements.

5-44. The desired end state of developing threat COAs is to replicate the set of COAs that the threat commander and staff are considering and identify those areas and activities that, when observed, will discern which COA the threat commander has chosen. ISR assets are then allocated to answer the PIR that confirms the threat COA (see Chapter 4). Offensive plans, in concert with the contact continuum, are based on the contact made by ISR assets allowing the planned movement of the HBCT's combat power to be maneuvered out of contact to a decisive position of advantage.

FIRES AND EFFECTS

5-45. Effective integration of fires and effects (lethal indirect and direct fire systems and non-lethal effects) directly supports the HBCT's maneuver by achieving the commander's desired effects on enemy forces. At HBCT level, the commander and staff must integrate fires and maneuver to ensure responsive fires instead of reactive fires. The fires and effects cell obtains guidance from the commander regarding effects desired in time, space, and purpose within the AO. It then plans, coordinates and achieves the desired effects utilizing organic and attached assets. Given their organic fires battalion, they are given significantly

more planning and execution versatility and agility. The HBCT is vulnerable to enemy fires and can execute counter-fire tasks. However, UEx fires and effects plans must prioritize and suppress those systems that threaten HBCT during its employment for an attack as well as during execution of offensive operations. The HBCT may receive fires and effects augmentation from the UEx. This may be in the form of reinforcing artillery (cannon and/or missile), addition target acquisition capabilities, or a higher priority of effects (to include Joint effects), especially for proactive counter-fire or to support HBCT offensive operations. Assuring linkages to plan and employ joint fires and information operations capabilities will enhance the HBCT commander's ability to shape the battlespace. Non-lethal effects include IO, PSYOPs, civil affairs (CA), computer network attack/defense and legal support of civil-military operations. Information operations include operational security (OPSEC), electronic warfare (EW), PSYOP, military deception, and possibly the destruction of infrastructure. The guidance given to the effects coordinator (ECOORD) is in the form of EFETs.

5-46. An EFET is defined as an application of fires and effects, lethal or nonlethal, required to support a combined arms COA. Failure to achieve an EFET may require the commander to alter his plan. A complete EFET consists of a task, purpose, method, end-state and assessment. The task is the action (what) that is desired to be applied against the target (i.e., suppress and obscure the southern motorized rifle company). The purpose (why) is the combined arms outcome desired as a result of applying the effect (i.e., enable the breach force to reduce the obstacle and establish far side security). The method consists of acquisition/tracking, delivery of effects (lethal/nonlethal) and restrictions. Assessment is the determination if the desired effect was created and the purpose of the attack was achieved. Achievement of the purpose equals end state for each individual EFET. The concept of fires portion of the OPORD is the logical sequence of EFETs that when integrated with the scheme of maneuver will accomplish the mission and achieve the commander's intent. It allocates in broad terms the lethal and nonlethal effects assets needed to achieve the EFETs. The concept of fires is the basis of the fires paragraph. Tasks are usually termed as follows:

- Disrupt means to preclude efficient interaction of enemy combat or CS systems. More simply, it means to not let an enemy formation perform a specific function that it is supposed to do (example: disrupt the AT battery long-range fires against the task force (TF) flank companies).
- Delay means to alter the time of arrival of specific enemy formations or capabilities. It focuses on not letting the enemy function when it wants or needs to (example: delay the ability of the reserve to counterattack).
- Limit means to reduce an enemy's options or COAs. It normally focuses on not letting the enemy function where he wants to (example: limit the ability of the enemy air assault company to establish a landing zone (LZ) in the high ground to our west).
- Destroy must be quantified by the commander and validated by the FSO as an attainable objective.

5-47. Targeting is a command responsibility that requires participation of the HBCT staff. Locating, identifying, classifying, tracking, and attacking targets and then conducting battle damage assessment (BDA) are all part of a HBCT effort to destroy high payoff targets (HPTs) and other enemy elements. Successful targeting requires that commanders and their staffs possess knowledge of the capabilities and limitations of organic and supporting target acquisition and attack systems; the ability to synchronize battlefield effects both horizontally (within the HBCT CPs) and vertically with higher and lower echelons. The targeting effort is organized using staff members to form an informal targeting team. Targeting is an inherent part of the wargame process and the initial targeting plan will emerge as a result of it. Follow on targeting meetings should occur as a part of the BCT's ongoing abbreviated MDMP.

5-48. The decide-detect-deliver-assess targeting process defined in FM 3-60 (FM 6-20-10) is essential to effect fires and effects coordination.

5-49. The targeting terms are as follows:

- *Targeting*. A process to select, detect, and prioritize targets, match appropriate action (lethal/non-lethal), and assess the resulting effects based on the commander's guidance and intent. The objective is to attack the right target at the right time with the most appropriate delivery system, creating the desired effect to achieve a specified purpose while minimizing negative collateral effects.
- *Time Sensitive Target (TST)*. A target requiring an immediate response because it poses (or will pose) an immediate danger to friendly forces or is a highly lucrative, fleeting target of opportunity.
- *High Value Target (HVT)*. An asset the threat commander needs for the successful completion of his mission.
- *High Payoff Target (HPT)*. An asset whose loss to the threat will contribute to the success of the friendly COA.

AIR DEFENSE ARTILLERY

5-50. Air defense provides protection to the HBCT ensuring its security against air and missile threats as it maneuvers. All members of the combined arms team perform both passive and active air defense measures; however, air and missile defense (AMD) units execute the bulk of air defense tasks. The HBCT has no organic ADA assets and must be augmented by the UEx based on the enemy air threat. ADA employment is governed by five basic principles—mass, mix, mobility, maneuverability and integration. The S2 and HBCT air defense coordination officer (ADAM Cell) determine air avenues of approach and air attack threats during IPB. The air and missile defense officer (AMDO) recommends initial allocation of ADA assets based on the commander's guidance, scheme of maneuver, and priorities of protection. Additionally, the high-to-medium-altitude air defense (HIMAD) coverage provided by higher echelons is considered in the concept of the operation. Priority is normally given to those elements that are at greatest risk of attack because of criticality, vulnerability, recuperability, and threat. Commanders generally weight air defense coverage toward their decisive operation and establish a protective corridor over the terrain traversed by the decisive force. Weapons are positioned considering the following guidelines:

- Balanced fires
- Weighted coverage
- Early engagement
- Defense in depth
- Mutual support
- Overlapping fires

5-51. Threat evaluation for air operations consist of a detailed study of enemy air capabilities, organization, and doctrine. The following questions are a guide in establishing threat information:

- What are the tactical objectives of the enemy's air operations?
- Which objectives may be targeted for destruction or suppression?
- Do friendly air defense assets need to be destroyed or suppressed for the enemy plan to work?
- What is the enemy's air order of battle and how are they organized?
- How will UAVs be used (reconnaissance, targeting, or BDA)?
- Will the enemy use airborne, air assault, or special operations forces (SOF) in conjunction with an air or ground attack (spoiling or counterattack)?

- Where are missile and UAV launching points? What are the range and endurance of these systems?

5-52. From this information, threat air avenues of approach, possible landing zones (LZs) and drop zones (DZs), and target areas or installations can be determined and neutralized in the offensive plan.

MOBILITY/COUNTERMOBILITY/SURVIVABILITY

5-53. The mobility/counter-mobility/survivability BOS has three basic purposes: it preserves the freedom of maneuver of friendly forces, obstructs the maneuver of the enemy in areas where fire and movement can destroy him, and it enhances the survivability of friendly forces. The offensive plan provides the desired balance between these three basic purposes and assigns support priorities between subordinate units. Priority of support is normally concentrated on the unit or units conducting the decisive operation rather than distributed evenly throughout the force. Support will focus on maintaining the mobility of the force conducting the decisive force while ensuring the survivability of the C2 system. The HBCT maneuver battalions have an organic engineer company that allows effective integration into maneuver battalion operations. However, the engineer company has limited capability and must be augmented by the HBCT (via the UEx maneuver enhancement brigade) for a particular mission based on METT-TC analysis, or the HBCT will task organize internally with available organic engineer assets to best support the mission.

5-54. During offensive operations, mobility is normally the priority of engineer effort. The commander requires the capability to move, exploit, and pursue the enemy throughout the AO. Mobility is planned not only at obstacles, but also throughout the width and depth of the terrain in the HBCT's AO. As obstacles are identified, breach plans are developed using reverse planning (see FM 3-34.2 [FM 90-13-1]):

- Reverse planning begins with actions on the objective.
- Actions on the objective drive the size and composition of the assault force.
- The size of the assault force determines the number and location of lanes to be created.
- Lane requirements and the type of obstacle drive the amount and type of mobility assets task organized to the breach force.
- The ability of the enemy to interfere with the reduction of the obstacle determines the size and composition of the security element in the breach force.
- The ability of the enemy to mass fires on the point of breach determines the amount of suppression required and the size and composition of the support force.

5-55. The HBCT is responsible for resourcing the unit conducting the breaching operation beyond its available organic resources with additional or special assets not normally task organized to that unit. The HBCT also plans for the following:

- Fixing enemy forces to prevent them from repositioning and interfering in the breaching operation.
- Using scatterable mines, deep fires, or close air support (CAS) to isolate the far side objectives and prevent a successful enemy counterattack.
- Planning a forward passage of lines by follow on forces through the unit conducting the breaching operation. This includes a plan to maintain and upgrade lanes through the obstacle and to create additional lanes, if necessary, for the passage of follow on forces.
- Providing criteria to transition to its own breaching operation (HBCT versus MB).

5-56. The HBCT planner uses the resources available to the engineers in developing the offensive plan, specifically terrabase products. Terrabase products are produced by the

engineer section to assist staff members in their respective area of emphasis. Visible area plots from each of the templated enemy locations outlines enemy engagement areas. Additionally, by combining terrabase overlays, the enemy's ability to mass fires is more easily understood. It also helps select effective support by fire (SBF) positions, obscurant locations, and direct fire planning. Visible area plots from developed named areas of interest (NAIs) can be used to provide positioning guidance for reconnaissance and security forces. An oblique view of the AO also helps the commander better visualize the terrain. A perspective view of intervisibility (IV) lines in the AO allows him to visualize how the HBCT can best use the terrain to maneuver during the offensive operation.

5-57. Countermobility operations are vital to help isolate the battlefield and protect the attacking force from enemy counterattack. Obstacles provide security as the fight progresses into the depth of the enemy's defenses. Obstacles also assist in reducing the amount of forces required to secure an area.

5-58. Offensive plans must stress rapid emplacement and flexibility. Engineer support must keep pace with the advance of maneuver forces and be prepared to emplace obstacles alongside advancing units. The commander and staff consider likely enemy reactions, then plans how to block enemy avenues of approach or withdrawal with obstacles. Additional considerations include the following:

- Use of obstacles to contain bypassed enemy elements and preventing withdrawal.
- What obstacles should be used when the enemy counterattack is identified?
- The speed and interdiction capabilities of obstacles available.

5-59. Aircraft and artillery delivered mines are preplanned on enemy counterattack routes and delivered in front of or on top of enemy lead elements once they are committed. Rapid cratering devices and surface minefields provide other excellent capabilities.

5-60. Survivability of the HBCT occurs through proactive action and planning. The commander protects his force to deny the enemy the ability to interfere with or respond to HBCT operations. Maintaining a high operational tempo is a technique used in survivability. Others include the following:

- Conducting area security operations.
- Executing deception operations.
- Conducting defensive information operations.
- Employing OPSEC procedures.
- Constructing survivability positions for non-displacing systems and supplies.
- Conducting proactive NBC operations.

5-61. NBC operations include reconnaissance, smoke, and decontamination. The employment of smoke, synchronized with maneuver, obscures the enemy from observing attacking forces or can be used in deception. The NBC reconnaissance platoon is organic to the brigade troops battalion (BTB). It is organized to ensure freedom of maneuver and more importantly, protection of the force by determining routes clear of contamination. Additional capabilities, such as chemical decontamination, are available from the maneuver enhancement brigade of the UEx. If the decontamination platoon of the chemical company of the maneuver enhancement brigade is placed in support of the HBCT, it normally operates from predetermined locations for decontamination operations. The decontamination platoon moves forward to establish decon sites to support offensive operations. Before movement, the chemical company establishes an initial decon site near the line of departure/line of contact (LD/LC). Maneuver elements use this site if they require chemical decon immediately after crossing the LD/LC.

SUSTAINMENT

5-62. Sustainment planners must anticipate and understand support requirements of a tactical plan or COA. The S1, S4, Medical planners, other staff officers central to sustainment (the BAE for air movement of supplies, etc) and the BSB commander and operations officer, analyze all COAs and modifications to current plans. He assesses their sustainment feasibility, identifies support requirements, and determines requirements for synchronization. The S1 and S4, like the commander, must visualize how the battle will unfold to determine critical requirements for each sustainment function. They logically consider the requirements for each sustainment function during the operational phases of before (prior to commitment), during (commitment to battle), and after (future missions). They analyze each COA/plan and consider the following:

- Type and duration of the operation.
- Task organization, tasks, and sustainment requirements of subordinate forces.
- Ramifications of tactical operations such as river crossings, tactical pauses, long movements, preparatory fires, or defenses.
- Need for special equipment, supplies, or services.
- Requirements to separate, disassembly, configure, uncrate, or trans-load supplies above normal requirements.
- Requirements for reconstitution.
- Required varieties and quantities of all classes of supplies, especially Class III (fuel), V, and IX.
- Requirements for support of reconnaissance forces, security operations, or deception efforts.
- Need for Class IV/V barrier material.
- Positioning of combat trains and other supporting logistics elements.
- Means of transporting and distributing supplies by ground and air assets

5-63. Anticipate increased consumption of Class III, Class V, and Class IX due to substantial maneuver. Though ammunition expenditures may not be as high as with a defense, responsive resupply is essential. Offensive operations place a heavy requirement on the HBCT's transportation assets. Offensive operations also increase equipment maintenance requirements. The staff must also consider plans for processing EPWs. The capacity to forward store additional loads of Class III and V is enhanced via the Forward Support companies and the brigade support battalion (BSB).

5-64. Ensure all units are topped off on fuel and are carrying their basic load of petroleum, oil, and lubricants (POL) package products prior to execution. It is critical to understand the consumption of Class III by heavy units. Ensure all forward stocks are built up and the Class III point is prepared to move forward rapidly and set up tactical refueling points. Plan refueling operations based on the consumption estimates for each maneuver battalion and unit.

5-65. Planners anticipate the requirement to build situational obstacles and for follow-on defensive missions. Coordination with the BSB is conducted to ensure Class IV materials are pushed forward at the appropriate time and location.

5-66. Ensure subordinate units are fully resupplied with Class V prior to the operation, and plan for resupply during the operation. The BSB must ensure ammunition transfer point (ATP) elements are as far forward as tactically feasible. This reduces the distance that support platoons must travel for resupply. The S4 and support operations officer plan for ammunition resupply to arrive at designated ATPs during tactical pauses. ATPs are located as far forward as possible and use throughput distribution whenever feasible. Additionally, unit forces should carry additional stockages of critical ammunition. Ensure resupply of

special Class V requirements, especially if the HBCT is augmented with UEx or UEy units such as AD (Stinger, etc) and engineers (MICLIC, etc). When practical, consider pre-positioning artillery ammunition at initial firing positions to prevent firing batteries from using their basic loads during preparatory fires.

5-67. Heavy combat forces conducting offensive operations place heavy demands upon Class IX and maintenance support operations. Ensuring rapid repair and return of non-mission capable equipment to support the operation is vital to maintaining combat power. The commander establishes his maintenance priorities based on what systems and units are critical to the success of the operation. Maintenance procedures must place emphasis on battle damage, assessment, and repair (BDAR). The BSB maintenance company provides limited maintenance back-up teams to ensure support is positioned well forward. Company maintenance support teams (MSTs) of the forward support companies (FSCs) must have the necessary transportation, communications assets, tools, and repair parts. When feasible, consider the use of air transportation to bring critical repair parts forward.

5-68. Planners must anticipate the potential of high casualty rates and long evacuation distances. The brigade support medical company (BSMC) ambulance teams will evacuate patients from maneuver Battalion aid station (BAS) back to the BSMC level medical treatment facility (MTF) located in the BSA. The preferred method of MEDEVAC is by air ambulance, but their use is METT-TC dependent. Pre-positioning BSMC ambulance teams with supported maneuver units (BAS) will reduce ambulance turnaround times. Pre-positioned treatment teams in forward areas will enhance their ability to augment/reinforce supported BAS in a timely manner. Ensure all treatment and ambulance teams have full basic loads of Class VIII supplies before the operations begin. Push prepackaged sets of Class VIII supplies to BAS according to the OPLAN/tactical standing operating procedures (TSOP). Identify and coordinate ambulance exchange points (AXPs) along the axis of advance and on the objective. Ensure the locations of AXPs are identified for all phases of operations in the OPORD and triggers are identified for their displacement to their next locations. Retain the flexibility to shift nonstandard evacuation assets to support mass casualty or CASEVAC as required according to the OPORD/OPLAN and TSOP. Ensure integration of air ambulance support, to include coordination of A2C2 requirements, establishing clear lines of authority to launch a MEDEVAC, and identification of PZs and LZs. Ensure responsive medical support is preplanned to support cross-FLOT extraction of BCT reconnaissance elements by a maneuver or quick reactionary force according to the HBCT OPORD/OPLAN.

5-69. Plan refueling and resupply operations based on anticipated support needs of each subordinate unit. Integrate refueling and resupply operations with the scheme of maneuver to ensure proper timing and to avoid interfering with likely or planned maneuver actions. Plan locations of refueling and resupply operations in covered and concealed locations as far forward as possible. Plan triggers for activating and deactivating collection points and logistics release point (LRP) based on the HBCT's movement and execution. Coordinate the locations, displacements, and routes of CSS assets and units to maintain responsive support. The BSB coordinates with the BCT S4 to use road nets efficiently. Ensure the securing of MSRs is included in the tactical plan. Also, consider using captured enemy supplies and equipment such as POL.

5-70. Ensure adequate security of routes and CSS assets based on the potential threat of undetected enemy forces. Security forces and CSS units rehearse and prepare for enemy contact. Anticipate the need for route clearance and reconnaissance to support the movement of wheeled vehicles based on the terrain and roads available. This is especially critical for CSS traffic moving across previous enemy positions that may contain obstacles and large amounts of unexploded ordnance. Ensure CSS preparations for the mission does not give away tactical plans.

COMMAND AND CONTROL

5-71. To have effective C2 HBCT offensive operations, the communications network must be planned using flexibility and redundancy. The network architecture, whether retrans or digital nodes, must be planned throughout the width and depth of the AO. A common error is to only consider the network for movement to the objective and not beyond the objective. C2 suffers during exploitation or when the objective extends beyond the intended area. Establishing the network architecture is part of the HBCT's shaping effort to ensure the success of the decisive operation. Inherent in planning the network architecture throughout the AO, is ensuring redundancy in the system. This includes primary and alternate means to communicate, FM or digital, during all phases of offensive operations. The responsibility of ensuring the network is capable of supporting the scheme of maneuver rests with the commander, as it is his primary means of C2 for the HBCT.

5-72. CPs are positioned where they can best balance connectivity with higher and lower echelons with security and self-protection. The general positioning of any CP should consider the following:

- Security
- LOS for both communications and UAV operations
- Trafficability of terrain
- Accessibility while avoiding main avenues of approach
- Terrain that permits passive security and signal masking

5-73. CPs are discussed in more detail in Appendix B, Command Post Operations.

5-74. The BTB and BSB CPs, while not HBCT-level CPs, provide additional C2 capabilities to the HBCT. In addition to commanding its organic and attached units, the BTB is responsible for HBCT-level CP security and security (up to Level 2 if allocated the necessary forces) of the HBCT rear area. Accordingly, the BTB C2 capabilities should be part of the planning considerations for offensive operations. The BSB of the HBCT supports the FSCs, but is not responsible for their command and control. The BSB is thus able to focus on execution of HBCT-level logistics planning and execution functions.

ORGANIZATION OF OFFENSIVE OPERATIONS

5-75. BCT commanders assign a shaping force, decisive force, and a sustaining force for combat operations. Within shaping and decisive forces, the HBCT commander designates a main effort and he may designate a reserve.

DECISIVE OPERATIONS AND THE MAIN EFFORT

5-76. In the offense, the commander designates a main effort to conduct the decisive operation. The main effort is normally the unit that has the most important task at that time and whose success will make the most difference in the accomplishment of the mission. The commander commits the main effort at the point where the unit's total combat power can be massed to achieve decisive results. Once designated, the commander ensures all available resources are focused to support the main effort at the decisive point. Enemy actions, minor changes in the situation, or lack of success by other elements cannot be allowed to divert forces from the main effort. If the initial main effort fails or becomes combat ineffective, the commander may designate another force to assume the mission of the main effort. Mission analysis by both the UEx and HBCT is critical to understanding force requirements required for mission success. Force augmentation from the UEx to the HBCT may be critical, or the development of mitigating actions in response to enemy actions is crucial.

5-77. The commander may change the unit designated to conduct the main effort during the course of an operation if the situation changes and the action originally anticipated as

decisive is no longer feasible or relevant. The commander must avoid becoming so committed to the initial main effort that he neglects a greater opportunity elsewhere. The HBCT must maintain the flexibility to rapidly shift the main effort as changes in the situation occur. Communications enhancements and dynamic ISR efforts will facilitate the versatility of the force.

SHAPING FORCE

5-78. Shaping operations directly support the main effort's mission accomplishment. Units conducting shaping operations contain the minimal combat power necessary to accomplish their tasks. Shaping forces normally accomplish one or more of the following:

- Contain, fix, or suppress enemy forces.
- Conduct breaching operations.
- Control terrain that facilitates the main effort.
- Destroy enemy forces that hinder the main effort.
- Deceive the enemy as to the location of the main effort.
- Prevent or delay enemy concentrations against the main effort.
- Penetrate an enemy position to support a decisive attack.
- Conduct security operations.

RESERVE OPERATIONS

5-79. The primary purpose of the HBCT reserve is to provide the additional combat power at the decisive moment and to provide a hedge against uncertainty. The HBCT reserve is sized to mitigate risk and is based on the level of detail known about the enemy. The more vague the situation, such as during a movement to contact, the larger the reserve. Reserves in the offense must exploit success. The commander should not use the reserve to reinforce failure in the hope of reversing a defeat. The commander and staff must look for opportunities to commit the reserve to reach a decisive outcome in the battle. The composition of the reserve is based on the firepower, mobility, and type of forces needed to meet its anticipated mission requirements. However, the commander, when designating a reserve, must take into consideration the impact on the providing unit and their ability to accomplish their assigned tactical tasks. With only two maneuver battalions, the commander may have to rely on UEx augmentation for his reserve (aviation, additional maneuver units, etc.).

5-80. Reserves provide the commander with the flexibility to deal with unforeseen contingencies. They should be committed to the following:

- Exploit success by moving to attack an enemy weakness or vulnerability.
- Maintain momentum by passing through or around units held up by enemy forces.
- Defeat enemy counterattacks.

5-81. The reserve is task organized with CS and CSS assets based on its anticipated support requirements. If the reserve is committed, the HBCT reconstitutes a new reserve as soon as possible.

5-82. A significant challenge when fighting the HBCT is identifying and establishing a suitable reserve force. The challenge arises from the reduction in the number of maneuver battalions in the HBCT from three to two, the requirement to provide security for the high value assets located in the HBCT area, and the expanded space allocated to the HBCT in both the offense and defense. Maneuver battalions with their four company balanced combined arms teams will provide some mitigation to the challenge as they can effectively form a reserve within organic resources based on their METT-TC analysis. This is particularly true if the HBCT cannot form a reserve.

5-83. A reserve is a force that is withheld from action or uncommitted to a specific COA, so as to be available for commitment at the decisive moment. To offset risk due to the reduced number of maneuver battalions, the HBCT commander must first eliminate as much uncertainty as possible. This means gaining information superiority over his enemy. He must capitalize on the capabilities of digitization to apportion his available troops to the tasks required to affect his concept of attack. Solid intelligence can lead him to concentrate his committed units against a specific enemy weak point and allow him to withhold a larger reserve. In other cases, his initial reserve force may be as small as a tank or mechanized infantry company. In this case, the commander and his staff must find opportunities to use other assets such as aviation, fires, obstacles or a redirection of forces after they accomplish their initial tasks or when the enemy's defeat frees them for other tasks. The speed and agility of maneuver companies allow them to be committed, withdrawn, redirected and recommitted during the fight. But, this requires the best information available. Moving units from one location to another requires everyone to know where he is, where the enemy is, and where other friendly units are located. The HBCT will normally begin an offensive operation with a maneuver reserve, and allocate additional forces to the reserve as operations progress. The commander and staff must look for opportunities to use other forces, such as fires, aviation, airmobile Javelin teams, and rapidly emplaced intelligent minefields to assist with the reserve mission. Use of the reserve is shown in Figure 5-8 on page 5-32.

5-84. Based upon METT-TC, the HBCT may not be able to constitute an uncommitted force to serve as a reserve. To mitigate this reduction in combat maneuver battalions, the HBCT may order a subordinate unit to be prepared to commit a unit to deal with situations similar to what a traditional reserve would accomplish. The enhanced C2 capabilities resident throughout the HBCT allows it to reassign or re-task units more effectively than in the past. Additionally, the increased ability of the HBCT to employ organic and supporting lethal and non-lethal effects to react to enemy movement, or exploit opportunities, reduces the risk of not having a dedicated ground maneuver reserve. The commander may also redirect committed elements before or after they have accomplished their initial tasks or when the enemy's defeat frees them for other tasks. SU allows companies, and sometimes battalions, to be committed, withdrawn, redirected and recommitted during the fight. Additionally, the movement of ground forces over the distances expected in the expanded AOs requires time. The time and distance relationship, especially under limited visibility conditions and rough terrain, is a key factor in determining which units can realistically be considered as a possible reserve force.

5-85. During the offense, a reserve, depending on its size and composition, can provide the ability to continue the operation. For example, the commander may augment the ground reserve with aviation and engineer assets plus priority for fire support. This requires close coordination between aviation, fires, and the ground maneuver forces that make up the reserve. Successful commitment of the reserve starts with sound SU on the part of all forces given the reserve mission. This enables the HBCT to maintain continuous pressure on the enemy.

5-86. The reserve ground elements must remain close and responsive to lead forces. This presents a fundamental dilemma for the reserve. If the reserve stays too close, it will be responsive but vulnerable to enemy fires and other countermeasures prior to commitment. If the reserve remains too far back, it will be less vulnerable but unresponsive. The solution is good OPSEC, effective reconnaissance, dispersion, use of terrain that facilitates force protection, and sound SU that allows the reserve to be responsive at the likely point of commitment. This also makes it more difficult for the enemy to locate the HBCT reserve. The reserve is positioned to:

- Permit rapid movement to points of probable employment.
- Support the main effort by destroying or blocking enemy forces.

- Provide protection from hostile observation and fire consistent with its mission requirements.
- Allow rapid commitment to exploit success.
- Continue the attack should the main effort stall or slow.
- Avoid enemy observation and fires.

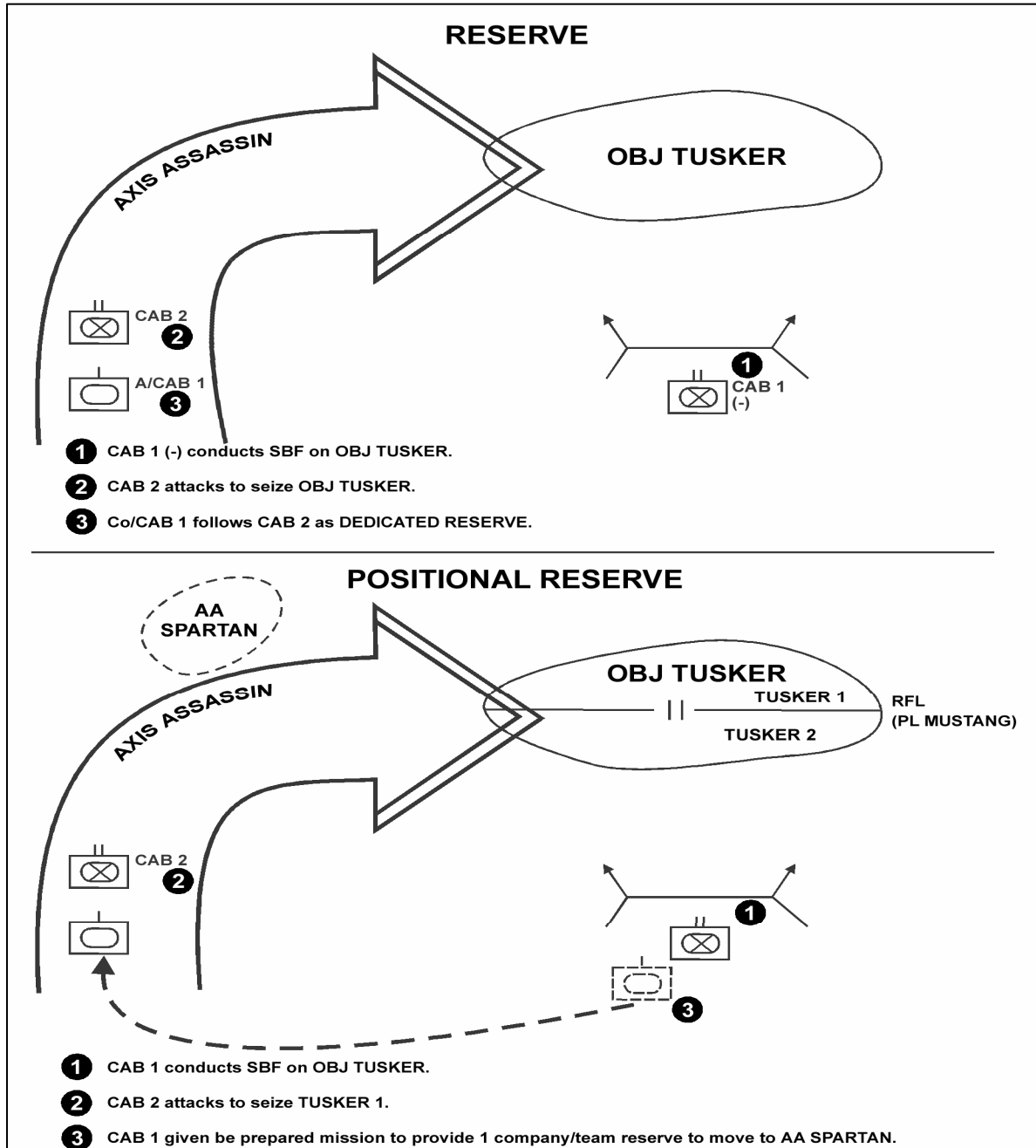


Figure 5-8. Reserve versus BPT Mission to Subordinate Unit

5-87. The commander must consider the location, disposition, and strength of the enemy's reserve when deciding to commit his reserve. As part of the HBCT's attack of the enemy

throughout its battlespace, the HBCT should reduce, or render combat ineffective, the enemy's reserve as part of offensive operations. The commander and staff must continuously consider actions to destroy, neutralize, deceive, or delay enemy reserves to prevent their decisive commitment against the HBCT. If the enemy's reserve is untouched and uncommitted before the HBCT commits its reserve, the HBCT may lack the ability to counter this threat, resulting in the initiative being yielded to the enemy. The S2 must clearly identify the enemy's reserve or other uncommitted forces early and track them continuously. To give the commander the intelligence he needs to properly commit the reserve, the S2 must use all the tools at his disposal, especially UAV and other information gathering assets, both external and internal. He must provide the commander the intelligence that enables the HBCT to attack the enemy reserve early and deep. These actions are in keeping with the HBCT fighting the enemy throughout his battlespace with deep and close fights happening concurrently.

5-88. When an attack is stalled, the reserve force should pass around a flank of the lead elements, if the terrain and enemy situation allow. Coordination to accomplish this is facilitated by the COP available through the digital tools. This reduces the vulnerability and the coordination associated with a passage of lines, widens the area of penetration or attack, eases fire control problems, and confuses the enemy.

5-89. HBCTs may be tasked to execute follow and support or follow and assume tasks. Due to the limited number of Combined Arms Battalions (two) in the HBCT, UEx offensive schemes of maneuver must consider this combat capability limitation given the particular mission and allocate additional combat forces to sustain momentum and exploit success of the initial attack. Based on the enemy situation, the HBCT may not be capable of executing both the attack and support or assume task. In this case, the UEx must consider the use of a second BCT or augment the HBCT with additional maneuver combat power.

Follow and Support

5-90. Follow and support is a task in which a committed force follows and supports the unit conducting the main effort in its mission accomplishment. A follow and support task is assigned to a unit to prevent the main effort from having to commit its combat power away from its primary task. A follow and support force executes one or more of the following tasks:

- Destroys bypassed enemy forces.
- Blocks movement of enemy reinforcements.
- Secures routes or key terrain.
- Clears obstacles or reduce additional obstacle lanes.
- Guards or secure enemy prisoners, key areas, and installations.
- Recover friendly battle losses.
- Controls refugees.
- UEx assumes responsibility for lead HBCT rear area as the HBCT continues the attack.
- During long sustained UEx offensive operations, the HBCT may rotate from a short replenishment halt, through a follow and support mission to resuming offensive operations after bypassing the leading element (BCT) requiring replenishment. The HBCT then performs several essential functions for the leading BCT and force as a whole. By assuming control of and defeating bypassed enemy, it speeds the advance of the leading BCT and facilitates a faster offensive tempo. By securing artillery, CSS elements and other elements supporting the leading BCT, it allows that BCT to concentrate on the enemy and extend its endurance.

Follow and Assume

5-91. Follow and assume is a task in which a committed force follows another force, normally the main effort, and is prepared to assume the mission of the force it is following when that force is fixed, halted, or unable to continue. The follow and assume force maintains contact with the trail elements of the force it is following; is prepared to conduct a forward passage of lines; monitors all combat information and intelligence; and avoids becoming decisively engaged with enemy forces bypassed by the force it is following. When assuming this task, the HBCT assures the sustained OPTEMPO of the UEx operation.

5-92. The commander and staff must anticipate the commitment of the follow and assume force. Graphic control measures such as contact points, routes, and assault positions are used at likely locations where battle handover is anticipated. The commander and staff develop criteria for the commitment of the follow and assume force in terms of enemy resistance, friendly strength, and rate of advance. They use DPs on the decision support template (DST) to aid in deciding when and where to commit the follow and assume force.

5-93. When the commander decides to commit the follow and assume force, the lead force must secure adequate space for the follow and assume force to deploy without enemy interference. The lead force normally seizes defensible terrain or other positions of advantage to suppress or fix enemy forces that may affect the follow and assume force. The follow and assume force commander closely coordinates with the commander of the lead force to ensure continuity of the fight. Commitment of the follow and assume force is similar to the commitment of a reserve, however, commitment of a follow and assume force almost always involves a passage of lines and battle handover. When feasible, it is best for the follow and assume force to pass around the force it is following rather than through it. Crucial actions to support the commitment of the follow and assume force include:

- Disseminate the most current enemy and friendly situation to the follow and assume task force.
- Shift observers and reconnaissance assets as required.
- Use graphic control measures to ensure a rapid passage of lines.
- Allocate terrain for rapid movement while maintaining force protection.
- Issue the FRAGO for commitment of the follow and assume task force.
- Shift priority of support for CS and CSS. Reposition assets and retask organize as required.
- Activate emergency resupply operations as necessary.
- Control routes and movements to prevent congestion.
- Establish direct fire control measures and fire support coordinating measures (FSCM) such as restrictive fire lines (RFL).
 - Provide CS assets in support of follow and support and follow and assume tasks

SECTION II – FORMS OF MANEUVER

5-94. The five forms of offensive maneuver are:

- Envelopment
- Turning movement
- Infiltration
- Penetration
- Frontal attack

5-95. The commander generally selects a form of offensive maneuver as a foundation upon which to build a COA. A single operation may contain several forms of offensive maneuver

such as a frontal attack to clear enemy security forces followed by a penetration to create a gap in enemy defenses. This in turn is followed by an envelopment to destroy a counterattacking enemy force (see FM 3-90 [FM 100-40]).

ENVELOPMENT

5-96. Envelopment is normally the preferred form of offensive maneuver. It seeks to apply strength against weakness. Striking from an unexpected direction forces the enemy to fight along unprepared, lightly defended, or undefended avenues of approach. In envelopment, the bulk of the HBCT's combat power avoids the enemy's front where his forces are most protected, attention is focused, and fires are concentrated. The HBCT uses ISR assets to gain contact, and develops the situation out of contact. The HBCT can then maneuver out of contact and envelop the enemy. Another option is for the HBCT to fix the enemy force with a small force then attack with the preponderance of available combat power into the flank or rear of the enemy force. Envelopments may be conducted against a stationary or moving enemy force. When an enemy assailable flank does not exist, the HBCT creates one through a penetration (see Table 5-4 and Figure 5-9). The double envelopment and encirclement are variations of the envelopment normally conducted by a higher maneuver echelon (UEX). The most critical decision by the commander in planning is the analysis of adequate combat power to execute the envelopment. Given his two maneuver battalions, his assessment of the enemy based on his ISR effort will determine if he requires augmentation from the UEX for a follow and support force or follow and assume force. This augmentation may come in the form of an aviation element or a second HBCT (which will then require UEX C2 for the mission). It is unlikely the HBCT will receive an additional maneuver battalion from another HBCT.

Table 5-4. Envelopment

ENVELOPMENT	
<ul style="list-style-type: none"> • Mission. An envelopment is normally used to— <ul style="list-style-type: none"> – Attack an enemy force with overwhelming combat power from an unexpected direction. – Gain access to the enemy's rear area to destroy the remaining enemy forces from the rear. • Enemy. <ul style="list-style-type: none"> – The enemy force has an assailable or weakly defended flank. – The enemy's disposition allows the isolation and destruction of a small flank unit. – The bulk of the enemy force is subject to being fixed by a smaller friendly force. • Terrain. <ul style="list-style-type: none"> – Indirect approaches exist to the HBCT's objective or around the enemy's forward defense. – Sufficient routes and approaches exist to support the rapid movement of the enveloping force around the enemy's flank. – There is sufficient maneuver space available to gain a flanking position against the enemy force. • Troops. <ul style="list-style-type: none"> – The HBCT has sufficient combat power to fix or block the bulk of the enemy force and mass overwhelming combat power with the enveloping force or has received efficient augmentation assets from the UEX. – The enveloping force has equal or greater mobility than the enemy. • Time. <ul style="list-style-type: none"> – There is time available to locate or create a flank in the enemy's disposition. – The HBCT can mass overwhelming combat power against an enemy flank before he can adjust his defense to counter the envelopment. • Civil Considerations. Non-combatant movements or activities do not interfere with planned maneuver. 	

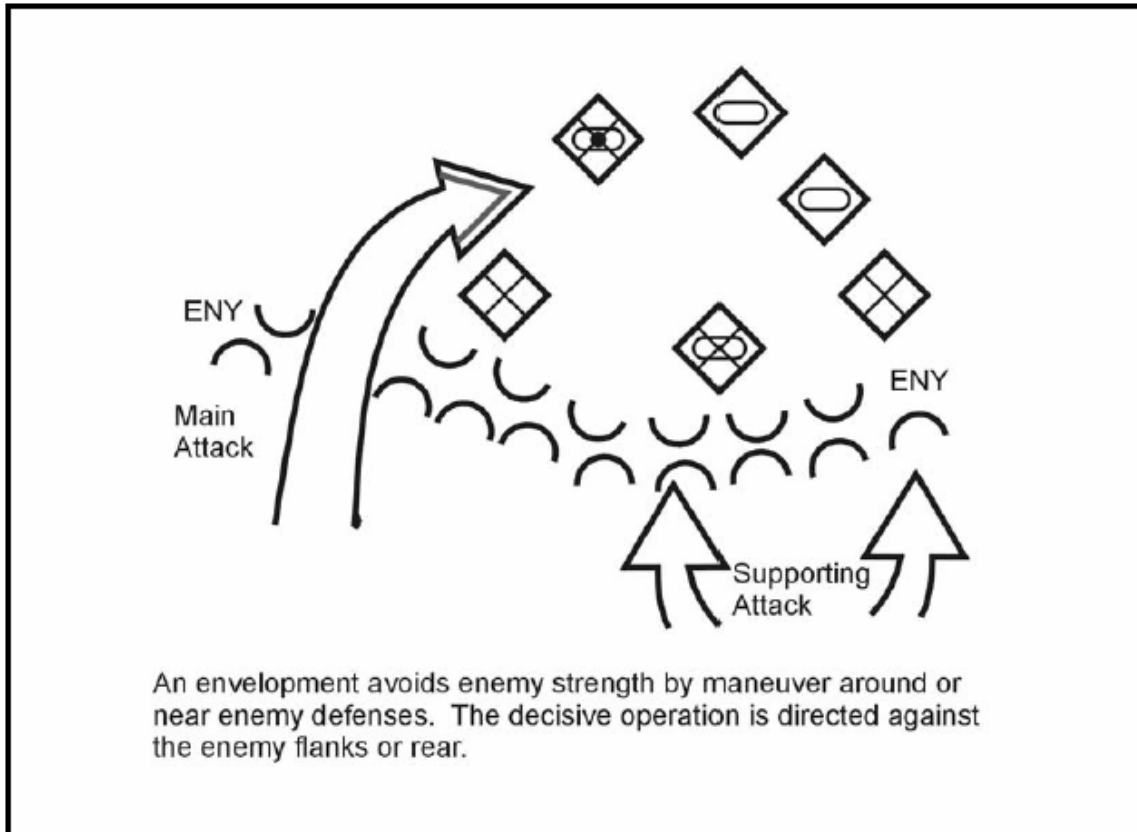


Figure 5-9. Example of an Envelopment against a Stationary Force

TURNING MOVEMENT

5-97. In a turning movement, the HBCT passes around and avoids the enemy's main force, then secures an objective deep in the enemy's rear area along its LOCs, causing the enemy to abandon his prepared defense. This allows the HBCT to fight the repositioning enemy force on terms and conditions that are favorable to the HBCT. The HBCT normally conducts a turning movement as part of a higher echelon (UEX, JTF, etc.) operation. But in some situations, the HBCT itself may conduct a turning movement (see Table 5-5 and Figure 5-10). Again, the critical planning assessment by the commander is his assessment of the enemy (correlation of forces) and the higher commander's intent. In most cases, unless the enemy is a light force, the HBCT will not have enough organic combat power to force the enemy off his objective or to destroy him in detail. Additionally, the commander must be prepared to respond to the enemy reaction. Augmentation from the UEX may be critical and necessary for mission success.

Table 5-5. Turning movement

TURNING MOVEMENT	
•	Mission. A turning movement is normally used to destroy, defeat, or force the withdrawal of a defending enemy force.
•	Enemy. <ul style="list-style-type: none"> – A vital enemy target exists in the enemy's rear area which if destroyed, attacked, or threatened will cause the defending enemy force to move out of its current positions or divert major forces to meet the threat. – A key terrain feature or area in the enemy's rear area exists that if seized or threatened will make the enemy's current position untenable or cause the enemy to divert major forces to meet the threat. – The enemy's disposition presents an undefended or weakly defended approach to this vital objective.
•	Terrain. <ul style="list-style-type: none"> – Sufficient routes and maneuver space exists along the approach to the objective. – Favorable terrain exists for the ensuing meeting engagement.
•	Troops. <ul style="list-style-type: none"> – The turning force must have greater or equal mobility than the enemy force being turned. – The HBCT has the ability to sustain and support the turning force.
•	Civil Considerations. Non-combatant movements or activities do not interfere with planned maneuver.

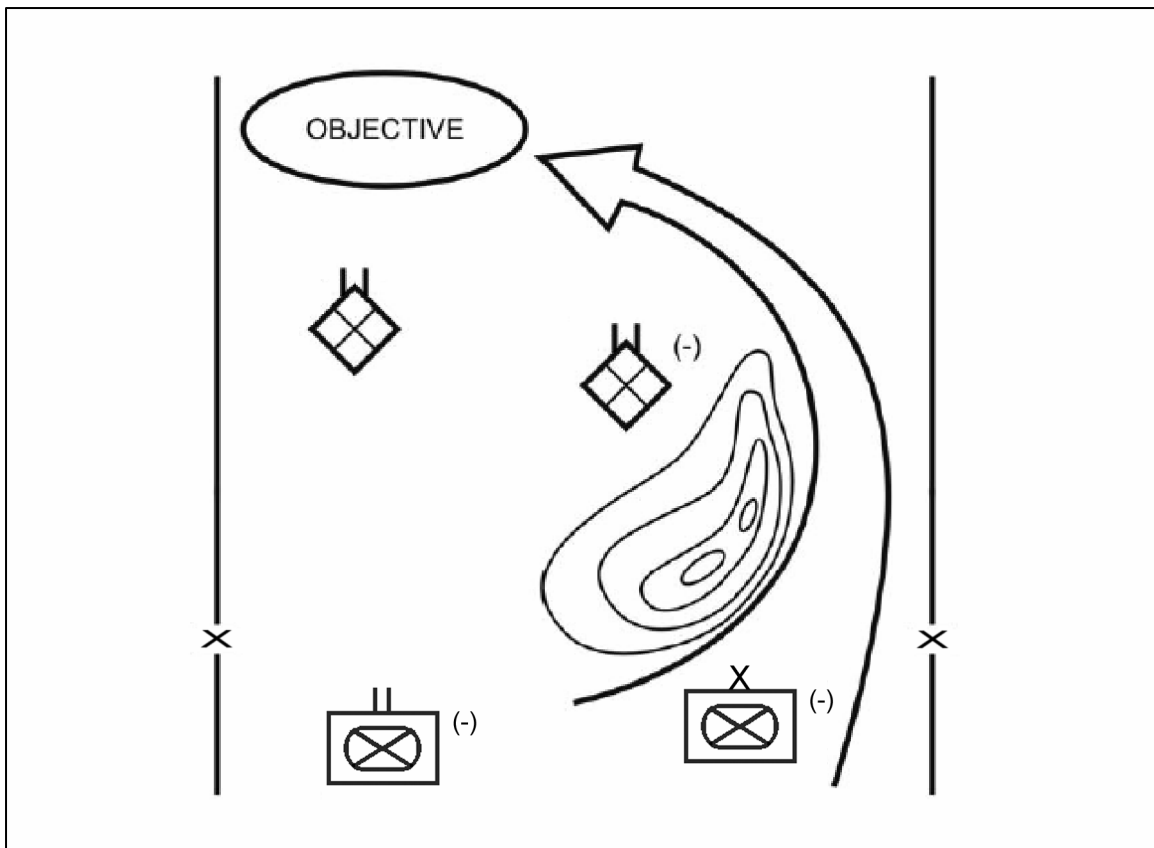


Figure 5-10. Example of a Turning Movement

INFILTRATION

5-98. Infiltration is the covert movement (mounted or dismounted) of all or part of the attacking force through enemy lines to an objective in the enemy's rear (see Table 5-6). It is a form of offensive maneuver normally used with and to support other forms of offensive maneuver. An HBCT cannot expect to infiltrate all its combat elements through an enemy defense. It may be conducted against a light enemy force. Infantry and reconnaissance forces are best suited for infiltration missions with eventual linkup by heavy forces. Tanks and mechanized infantry can conduct deeper infiltration by taking advantage of faulty enemy dispositions, gaps in enemy obstacles, and by diversionary attacks.

5-99. The HBCT normally infiltrates infantry and reconnaissance forces to obtain information, harass the enemy, or support the HBCT's attack by destroying vulnerable enemy targets or seizing key terrain (see Figure 5-11). Movement and assembly of forces by stealth among enemy positions is a slow operation and sequenced. Planning for an infiltration must be detailed and coordinated closely with the overall plan of attack. Deviation from plans to infiltrate is difficult to coordinate once movement of the forces has begun. Linkup plans and plans to extricate the force must also be prepared.

Table 5-6. Infiltration

INFILTRATION	
<ul style="list-style-type: none"> • Mission. An infiltration is normally used as a prelude to an attack using another form of offensive maneuver. An infiltration may be used to— <ul style="list-style-type: none"> – Reconnoiter an enemy position or objective. – Attack enemy targets from an unexpected location. – Gain access to the enemy's rear area to attack enemy forces, conduct reconnaissance, or seize terrain to support a future attack. – Covertly breach enemy obstacles. • Enemy. <ul style="list-style-type: none"> – The enemy defense has gaps or unobserved approaches. – The enemy has limited night vision capability. – The enemy employs limited or lax security measures. • Terrain. Indirect approaches that provide good cover and concealment exist through the enemy's defense to the infiltrating force's objective. • Troops. <ul style="list-style-type: none"> – Adequate combat power can be infiltrated through the enemy's position to accomplish the assigned mission. – The BCT has the capability to provide adequate fire support, logistics, and reinforcement to the infiltrating force. • Time. The infiltrating force has adequate time to prepare, reconnoiter for gaps, infiltrate, assemble, and execute the mission to support the overall attack. • Civil Considerations. Non-combatant movements or activities do not interfere with planned maneuver. 	

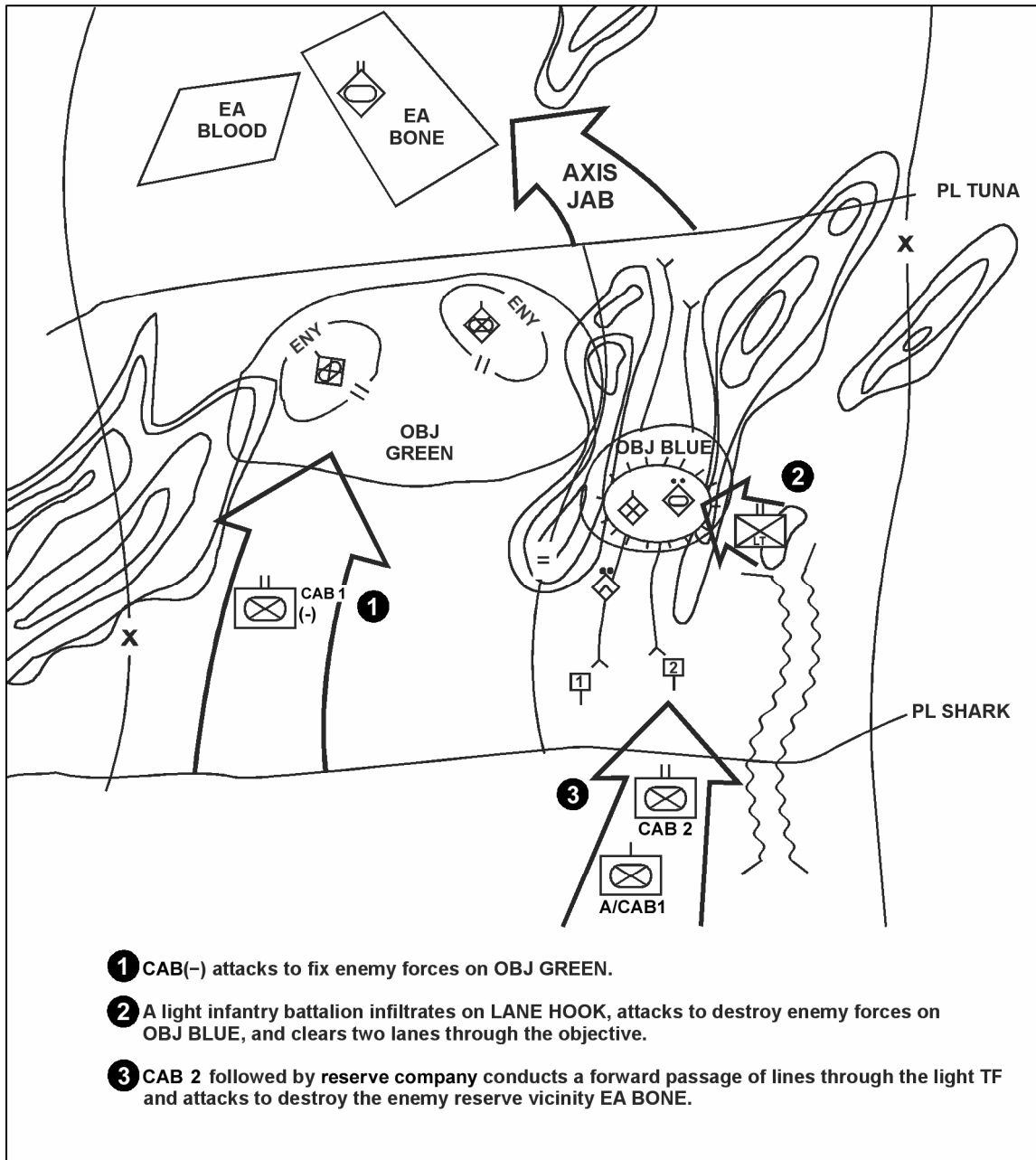


Figure 5-11. Example of an Infiltration Supporting a Heavy Brigade Combat Team Attack

PENETRATION

5-100. The penetration ruptures enemy defenses along a narrow front to create an assailable flank and/or gain access to the enemy's rear (see Table 5-7). The penetration is used when enemy flanks are not assailable, when enemy defenses are overextended, or when time does not permit a more favorable form of offensive maneuver (see Figure 5-12). The key to a successful penetration is the ability to rapidly mass combat effects at the point of penetration while achieving surprise as to the exact location of the penetration. UEx mission

analysis regarding relative combat power and the enemy’s ability to reinforce the attacked force is critical prior to assigning this mission to an HBCT.

Table 5-7. Penetration

PENETRATION	
• Mission.	A penetration is normally used to—
–	Attack through an enemy force to gain an objective located to the enemy’s rear.
–	Gain access to the enemy’s rear area to destroy or force the withdrawal of defending enemy forces.
–	Gain a foothold in the enemy’s defense as part of the higher headquarters’ scheme of maneuver, normally to pass another force through the enemy defense.
• Enemy.	
–	The enemy defense has no assailable flanks.
–	Enemy defenses are overextended or weak areas are detected in his disposition.
–	Enemy disposition allows for the isolation and destruction of a small portion of the enemy force.
• Troops.	Adequate combat power, fires, and mobility assets are available to rupture the enemy defense while fixing adjacent enemy units.
• Time.	
–	The HBCT lacks the time necessary to prepare and execute an envelopment.
–	The HBCT has the means to isolate then penetrate a portion of the enemy defense before the enemy can effectively mass his combat power.
• Civil.	Non-combatant movements or activities do not interfere with planned maneuver.

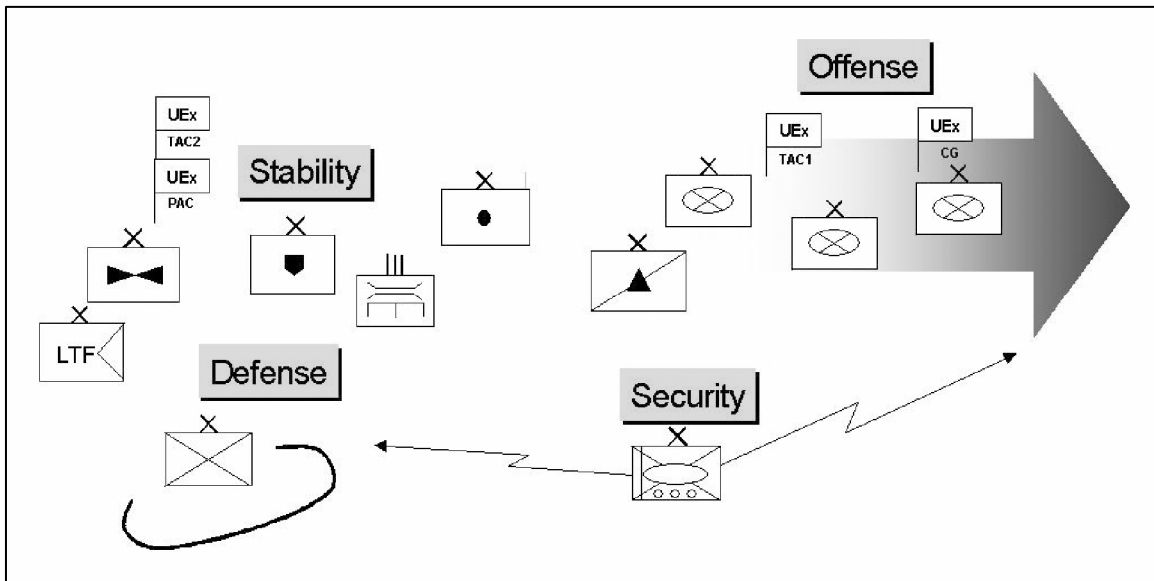


Figure 5-12. Example of a Penetration

FRONTAL ATTACK

5-101. The frontal attack is used to attack the enemy across a wide front and along the most direct approach (see Table 5-8). A frontal attack is used to overrun and destroy a weakened

enemy force or fix an enemy force. The HBCT may conduct a frontal attack against a stationary or moving enemy force if mission analysis (UEX and HBCT) has identified the frontage and analyzed relative combat power. Unless frontal attacks are executed with overwhelming speed and strength against a weaker enemy, they are seldom decisive (see Figure 5-13). Thus the criticality of the mission analysis to ensure the right force is identified to accomplish the attack.

Table 5-8. Frontal Attack

FRONTAL ATTACK

- **Mission.** A frontal attack is normally used to—
 - Destroy, defeat, or force the withdrawal of a weaker enemy force.
 - Clear enemy security forces or remnants from an AO.
 - Conduct a reconnaissance in force.
 - Fix an enemy force.
 - Maintain pressure on a retreating enemy force.
- **Enemy.**
 - The enemy is significantly weaker than the HBCT or overextended.
 - Enemy is dispersed over a wide area.
 - Enemy is unorganized and/or retreating.
- **Terrain.** The terrain limits the HBCT ability to conduct a more preferred choice of offensive maneuver.
- **Troops.** The HBCT has an overwhelming combat power advantage over the enemy force.
- **Time.** The HBCT lacks the time necessary to mount an envelopment or penetration.
- **Civil.** Non-combatant movements or activities do not interfere with planned maneuver.

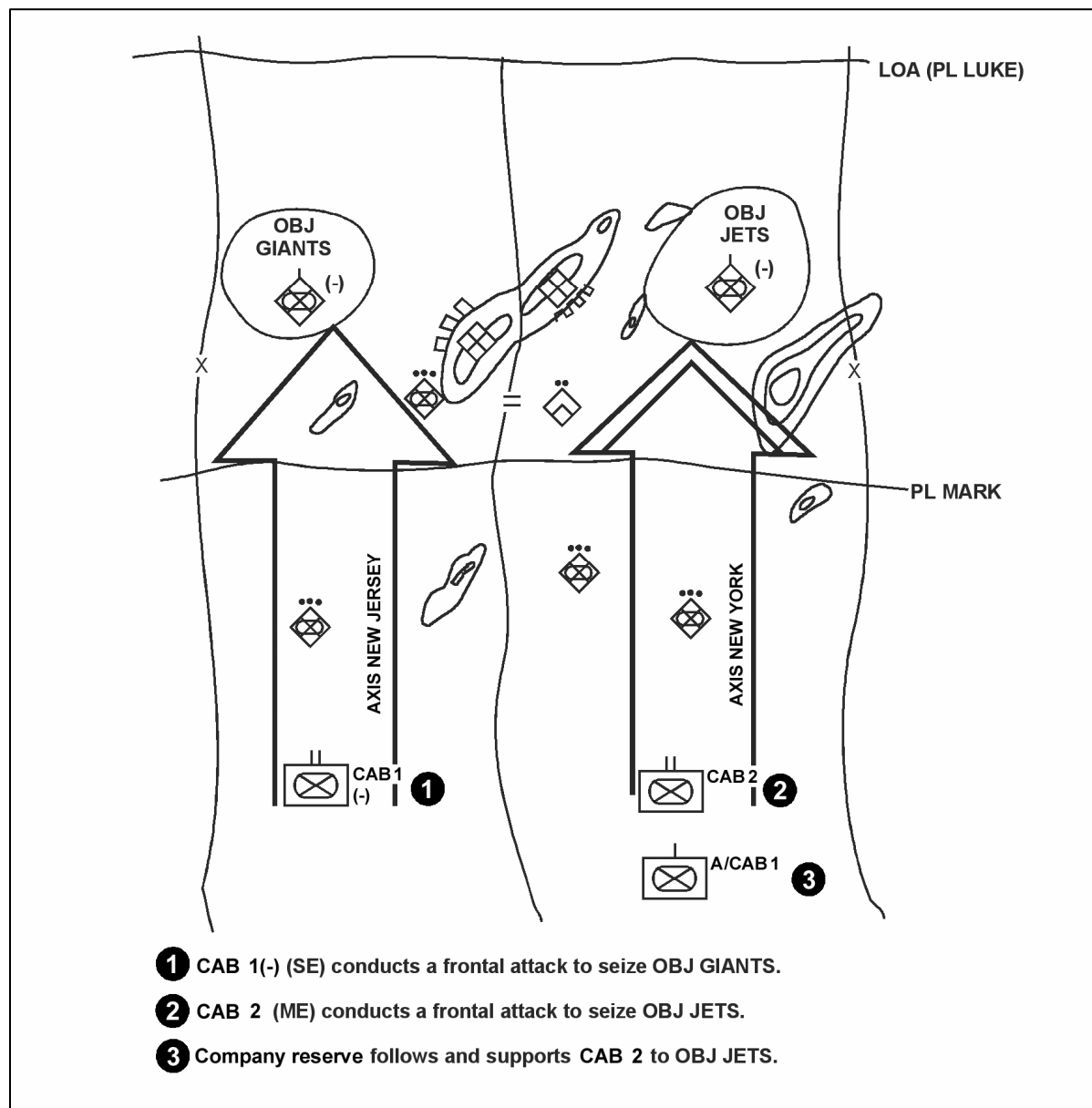


Figure 5-13. Example of a Frontal Attack against a Stationary Enemy Force

SECTION III – UEx OFFENSIVE OPERATIONS

5-102. The HBCT will normally fight as part of a UEx. The HBCT staff must understand the concepts of UEx operations and how the HBCT fights within that context. This section provides a brief overview of UEx offensive operations. The Land Component Commander's (LCC) actions in theater operations aim to defeat the defender in depth by applying overwhelming combat effects to gain the initiative, throw the enemy off balance with initial blows from unexpected directions and follow up rapidly to prevent his recovery. This is best affected by attacks in depth on multiple lines of operation. LCCs cooperate with other component commanders to gain full effect of Joint capabilities in their campaigns and major

operations. While the LCC will normally be a UEy level of responsibility, it may fall to the UEx perform to serve as the LCC and/or the ARFOR (Army Forces Commander).

5-103. Attacking on multiple lines of operation while striking the defender throughout his depth allows the LCC to use destruction, disintegration and dislocation methods in combination over time. Several UEx attacking at high tempo on different lines of operation create surprises and dilemmas for the enemy and develop opportunities for each other as their attacks progress. Their lines of operation may be parallel, convergent, or divergent depending on the plan. Reserve UEx may follow committed UEx to assure continuity of the attack, to secure areas gained in the attack, to fight unconventional or bypassed forces in the wake of the attack, or to conduct stability operations.

5-104. UEx commanders will have freedom of action in their assigned zones or lines of operation. They will typically give their maneuver brigades mission orders then shape and assist the brigade attacks with actions in depth and combat, and combat service support. UEx commanders will also support their maneuver with joint effects to include air power, special operations and actions by maritime component forces. UEx schemes of maneuver will integrate complementary joint capabilities to expand reach and to reinforce the capabilities of the BCTs across expanded AOs. This greatly facilitates relatively independent non-linear operations by the BCTs within contiguous or non-contiguous areas of operation.

- The UEx normally assigns BCTs an AO, together with tactical tasks or tactical effects linked to purpose in the commander's intent. Whenever possible, the intent and concept of operations allows the BCT to accomplish assigned tasks with minimum control from UEx mission orders. The UEx will task organize the BCT by adding and subtracting forces to the OPCON of the BCT. The UEx generally avoids detaching organic forces from the BCTs, instead varying the size of the AO assigned to the BCT or distribution of tactical tasks between BCTs. By exception only will the UEx task organize a maneuver battalion between BCTs. If it does happen, the maneuver battalion is restored to its parent headquarters as quickly as possible.
- The UEx assigns security operations (guard, cover and screen) to BCTs. The BFSB has limited capability to perform screen operations. It is not designed or equipped to conduct cover or guard operations. Within the BCT, the Reconnaissance Squadron may conduct a screen operation, but is not designed to conduct cover or guard operations. The Aviation brigade may conduct a screen as well.
- Within the HBCT AO, the HBCT controls vertical maneuver of company and battalion-sized forces and supporting aviation assets provided by the Aviation brigade. The UEx controls tactical vertical maneuver outside the HBCT AO. When air or ground maneuver occurs in close proximity between BCTs, the UEx imposes appropriate control measures to synchronize the efforts of the subordinate units.

5-105. As the UEx commander directs the attack of up to six BCTs (IBCT, SBCT and/or HBCT), and supporting brigades, over extended distances, he will focus attention on finding, tracking and understanding the enemy; continually adapting or formulating plans to defeat the enemy's forces and capabilities; assisting the attacks of BCTs; reinforcing the main effort; exploiting successes; securing the force; and conducting stability operations. Figure 5-14 depicts an example of the complexity of UEx operations.

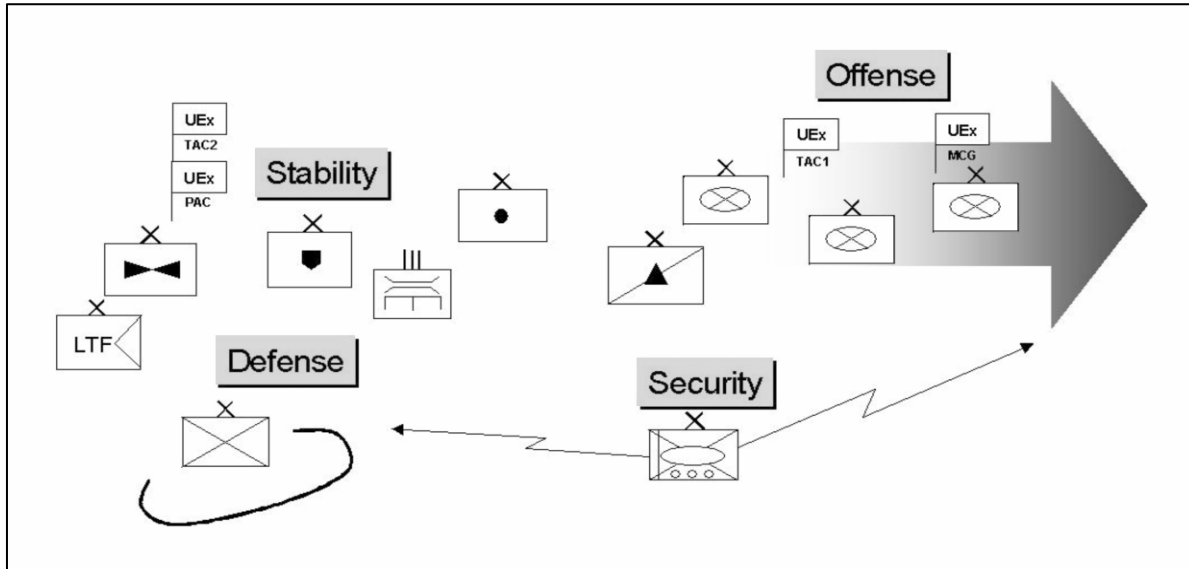


Figure 5-14. UEx Offense along a Line of Operations

5-106. Shaping the conditions for success of the BCTs is an important UEx function. UEx will act to set the terms of battle as much as 150 kilometers ahead of the BCTs. To strike targets beyond their range or in excess of their capabilities, the UEx will obtain support from the UEY or Joint Force Commander.

5-107. Because UEx operating areas are unlikely to be contiguous, their reconnaissance and surveillance efforts must maintain situational awareness over an area of interest considerably larger than their designated areas of operations. UEx may not be responsible for attacking targets outside their AOs, but they must sense and interpret enemy activities and movement in such areas, provide that information to the COP, and be prepared to react if enemy activities threaten their operations.

5-108. The UEx organizes security along the line of operation to the extent necessary for freedom of action. The concept for maintaining security within the UEx area is founded on discipline and information sharing. Depending on the situation, UEx will organize all forces as self-contained and self-protecting march units or will assign the rear area security to a BCT or to a maneuver enhancement brigade. When it is not advantageous, the UEx commander will accept risk in tactically irrelevant areas rather than clearing his whole AO of bypassed enemy elements.

5-109. The UEx sustainment responsibilities differ from those of previous Divisions. The UEx must maintain constant pressure on the enemy while periodically cycling its BCTs through logistical replenishment. This is best done by pushing logistical teams forward to the vicinity of the BCTs that need fuel, ammunition and maintenance and then replacing the BCT to be sustained with a reserve BCT. For example, a UEx with six BCTs may have two BCTs decisively engaged, two engaged in follow and support missions, one just having disengaged for replenishment and one conducting refueling, rearming and maintaining its equipment. A UEx with four BCTs may have two committed forward, one in a follow or follow and support role, and one being replenished. Maintaining the battle rhythm is preferable to periodic operational pauses that relieve pressure on the enemy.

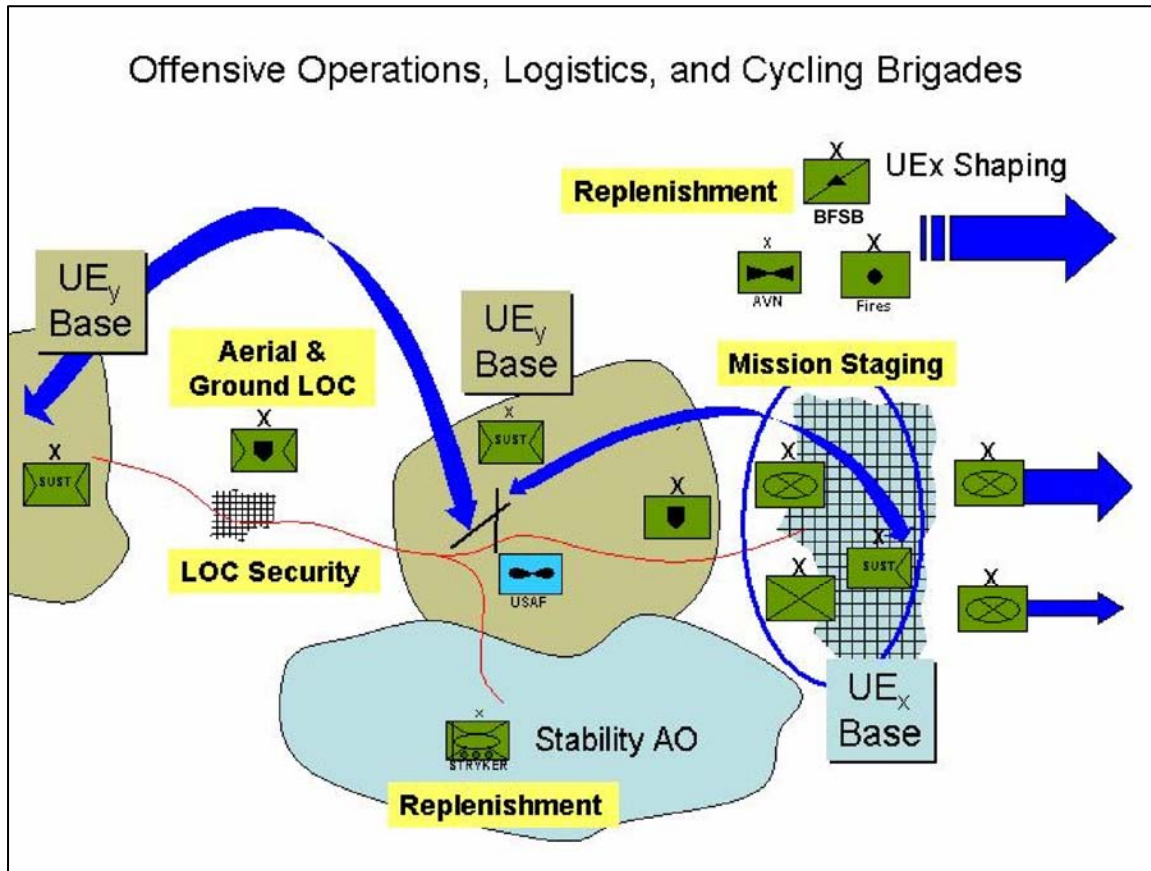


Figure 5-15. UEx Cycling Brigade Combat Teams

5-110. The UEx performs the logistical responsibilities of the former Corps and Division not transferred to the BCTs. The UEx staff plans CSS operations while the sustainment brigades assigned to the UEx execute them. As necessary, the UEx operations will be weighted by assigning its multiple sustainment brigades with sustainment modules and by prioritization or throughput from the theater or CONUS supply source.

5-111. Stability operations may also begin around population centers as operations progress. Some BCTs or maneuver enhancement brigades will be assigned from theater assets to accomplish such tasks or forward progress will slow. The attacking UEx may receive additional BCTs to sustain its combat strength as its attack passes new populated areas.

SECTION IV – ATTACKS

5-112. An attack is a type of offensive operation characterized by coordinated movement supported by fires. As discussed earlier, the objective of an attack may be force or terrain oriented. A terrain-oriented objective requires the HBCT to seize and retain a designated geographical area. A force-oriented objective requires the HBCT to focus its efforts on a designated enemy force. The enemy force may be stationary or moving. After a brief discussion of hasty and deliberate attacks, this section discusses the tactics for conducting the following:

- A force-oriented attack against a stationary enemy force.

- A force-oriented attack against a moving enemy force.
- A terrain-oriented attack.
- It is important to note that whether the HBCT is fighting conventional or unconventional forces, tactical operating concepts remain the same. Destruction of the enemy force is achieved by throwing the enemy off balance with powerful initial blows from unexpected directions and then following up rapidly to prevent his recovery.

HASTY AND DELIBERATE ATTACKS

5-113. Attacks are characterized as hasty or deliberate. A hasty attack is an operation in which a commander directs his immediately available forces, using FRAGOs, to attack with minimal preparation, trading planning and preparation time for speed of execution. A deliberate attack is an operation in which a commander's detailed ISR effort allows him to develop and coordinate detailed plans, including branches and sequels. He task organizes his forces specifically for the operation, conducting extensive rehearsals, to provide a fully synchronized combined arms team.

HASTY

5-114. Hasty attacks maximize agility, surprise, and initiative to maintain the momentum against the enemy. Rapidly attacking before the enemy can act often spells success even when the combat power ratio is not as favorable as desired. Hasty attacks are initiated with minimum preparation and require a heavy reliance on SOPs for success. Hasty attack methods provide "good enough" solution when the enemy achieves surprise and when offensive action cannot be delayed to gain information or change the disposition of forces. Given the enhancement of ISR capability, the HBCT can rapidly transition to mass effects with speed and agility as information is gained during movement. Although planning and preparation time is normally limited for a hasty attack, the HBCT can prepare to execute them by anticipating their occurrence and developing contingency plans. By assigning on-order or be-prepared missions to subordinates the HBCT is better able to transition into hasty attacks. Maintaining unrelenting pressure through hasty attacks keeps the enemy off balance and makes it difficult for him to effectively react. Hasty attacks normally result from a movement to contact, successful defense, or continuation of a previous attack. A hasty attack is used to:

- Exploit a tactical opportunity.
- Maintain the momentum.
- Regain the initiative.
- Prevent the enemy from regaining organization or balance.
- Gain a favorable position that may be lost with time.

5-115. Hasty attacks are most successful when initial contact is made with a small force while the main body retains freedom of action and the ability to shift and generate reserves. The speed with which the unit can rebound from surprise; clarify the picture; and plan, organize and initiate effective action sets the preconditions for hasty attacks.

5-116. As relevant information is obtained, and the chance to surprise subsides, formations adapt to optimize "actions on the objective". To develop the situation without premature decisive engagement, security forces deploy ahead and to the flanks of the main body. Their actions gain time, information and maneuver space that allows the commander to act decisively when the situation clarifies. Within this framework, commanders can vary the distribution of their forces in time and space based on mission, and what they do know about the enemy and the terrain. Risk mitigating formations employ increasingly networked and cross-cued overhead platforms forward and to the flanks of the main body formation to

complement ground maneuver reconnaissance and security elements. Better informed leading reconnaissance elements can clarify unknown details at reduced risk. The main body can be larger and move more rapidly and more securely. Its formation can be better disposed for actions against the objective of the attack.

DELIBERATE

5-117. A deliberate attack is normally conducted against a strong enemy defense. Deliberate attacks normally include high volumes of planned fires, major supporting efforts, and the forward positioning of logistics. Deliberate attacks normally follow a distinct period of preparation used for extensive reconnaissance, detailed planning, task organization of forces, rehearsals, and plan refinement.

5-118. As the HBCT prepares for the attack, the enemy will continue to strengthen his position. The HBCT may disrupt the enemy's defensive preparations through the use of artillery and CAS strikes against exposed HPTs, such as engineers or artillery units, or through the use of raids based on the UEx commander's guidance. Adversaries will cover their defenses with networked surveillance. These provide defenses an enhanced vertical dimension and will make ground and air penetration of defensive zones very difficult. A successful attack on an enemy must begin with operations to incapacitate his strike assets (shaping operations). This will require support from the UEx and potentially UEy. The HBCT will further employ networked reconnaissance assets to locate and destroy specific key components of the enemy's system of defense before and during maneuver. To be effective, the maneuver plan must ensure sensors, strike assets, reconnaissance and communications of the force move as part of the attack formation, maintaining interaction despite rapid movement, enemy counteractions and alterations of the main effort.

5-119. Supporting lethal and suppressive strikes coordinated with non-lethal suppressive effects like jamming incapacitate the enemy's organization and facilitate rapid and decisive exploitation. These strikes concentrate on key organizational functions like fire support and command and control and attempt to prevent coordinated action of the defense. The intent is to physically and systematically isolate elements of the enemy force at the critical times and places for destruction by combined arms action. As the operation progresses, the attacking HBCT shifts its efforts from the enemy force in the initial objectives to the forces in depth until the enemy force is destroyed.

5-120. The maneuvering main effort avoids obvious approaches and maneuvers to exploit the effects of supporting fires immediately. The attacker fixes enemy reserves and other mobile elements with overwatching fires from combat forces, attack helicopters and joint close air support. In essence, the enemy force is fixed in position and destroyed in detail.

5-121. When the HBCT is the main effort, the UEx will reinforce it with fires from at least one higher echelon of command and with the long range fires of follow and support and exploitation forces. The capability to shift the focus of the main effort rapidly and in a sequence optimized for success accelerates the attack and reduces casualties.

5-122. Local and general exploitation is a critical feature of deliberate attacks. Having weighted the main effort to ensure success, the HBCT plan must provide for immediate exploitation to achieve a decisive result. When the HBCT is the main effort of the UEx attack, a following BCT will maneuver to take advantage of that expected success. And the focus of long-range fires and suppression is shifted to create success in the next engagement.

OTHER FORMS OF ATTACKS

5-123. Attacks can be launched with various purposes to achieve different results. These forms of an attack that an HBCT may conduct include:

- Raids

- Feints
- Demonstrations
- Counterattacks
- Spoiling attacks

RAID

5-124. A raid is a deliberate attack that involves the swift, temporary penetration of enemy territory for a specific mission. Raids always end with a planned withdrawal, and are usually small-scale attacks. Raids require detailed intelligence, preparation, and planning. Typical raiding missions are as follows:

- Capture prisoners, installations, or enemy materiel.
- Destroy enemy material or installations.
- Obtain specific information of a hostile unit such as its location, disposition, strength, or operating scheme.
- Deceive or harass enemy forces.
- Liberate captured friendly personnel.

5-125. The HBCT normally assigns raid missions to subordinate forces. The raiding force may vary in size from an infantry platoon to a heavy maneuver battalion. The raiding force may operate within or outside of the HBCT's supporting range. The raiding force moves to its objective by infiltration, air, or a quick violent attack. Once the raid mission is completed, the raiding force quickly withdraws along a different route (see Figure 5-16). Specific planning considerations include the following:

- Conduct detailed reconnaissance and maintain constant surveillance of the raid objective to ensure the enemy situation remains unchanged and within the capability of the raiding force. If outside the range of organic ISR capability, it is essential the HBCT provides gaps in their ISR plan to the UEx or higher echelons for collection and dissemination.
- Position fire support systems to provide immediate responsive fires during the approach, actions on the objective, and withdrawal. Interdiction fires, deception fires, counter-fires, and situational obstacles are delivered to reduce the enemy's ability to react to the raid. Reinforcement of UEx fires and target acquisition assets from UEx assets may be necessary.
- Establish clear abort criteria for the raid. This may include:
 - Loss of personnel, equipment, or support assets.
 - Changes in the enemy situation on the raid objective.
 - Develop contingency plans for contact prior to and after actions on the objective.
 - Plan CASEVAC and raiding force extraction along the entire depth of the operation.

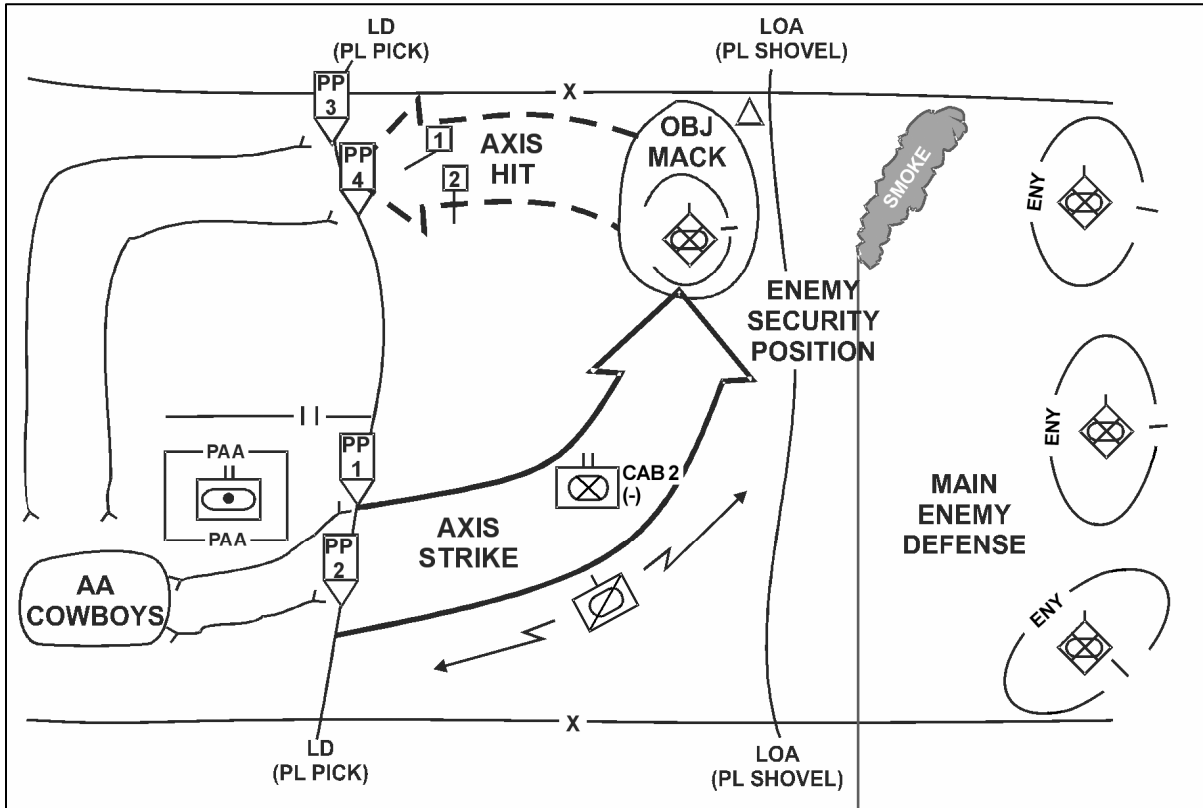


Figure 5-16. Example of a raid

FEINT

5-126. A feint is a form of an attack intended to deceive the enemy, draw attention, and (if possible) combat power away from the main effort. Feints must be of sufficient strength and composition to cause the desired enemy reaction. PSYOP can significantly enhance the effectiveness of a feint. Feints must appear real; therefore, some contact with the enemy is required. The feint is most effective when the following occurs:

- It reinforces the enemy's expectations.
- It appears as a definite threat to the enemy.
- The enemy has a large reserve that has been consistently committed early.
- There are several feasible COAs open to the attacker.

5-127. The purposes of a feint may include the following:

- Force the enemy to employ his reserves away from the main effort or remain in position.
- Attract enemy supporting fires away from the main effort.
- Force the enemy to reveal defensive fires or weaknesses.
- Accustom the enemy to shallow attacks to gain surprise with another attack.

5-128. The HBCT may execute a feint as part of a higher echelon attack plan or may include a feint as part of the HBCT's scheme of maneuver. Planning for a feint mission follows the same sequence as any other attack. Special planning considerations include the following:

- Ensure the feint is resourced to appear as the main effort or as a significant threat to the enemy.
- Establish clear guidance regarding force preservation.
- Ensure adequate means of detecting the desired enemy reaction.
- Designate clear disengagement criteria for the feinting force.
- Assign attainable objectives.
- Issue clear follow-on missions to the feinting force.

DEMONSTRATION

5-129. A demonstration is a form of an attack used for deception. It is made with the intention of deceiving the enemy; however, no contact with enemy forces is made. Demonstrations must be made clearly visible to the enemy without being transparently deceptive in nature. Demonstration forces use fires, movement of maneuver forces, smoke, EW assets, PSYOP, and communication equipment to support the deception plan. Specific planning considerations include the following:

- Establish a LOA for demonstration forces that allows the enemy to see the demonstration without being able to effectively engage him with fires.
- Establish other security measures necessary to prevent engagement by the enemy.
- Employ demonstrations to reinforce the enemy's expectations and contribute to the main effort.
- Develop contingency plans for enemy contact and to avoid becoming decisively engaged by the enemy.
- Issue clear follow-on missions to the demonstration force.
- Establish the means to determine the effectiveness of the demonstration.

COUNTERATTACK

5-130. A counterattack is an attack launched from the defense aimed to defeat an attacking enemy force or regain key terrain, ultimately regaining the initiative. The counterattack is often the deciding action in the defense and becomes the main effort upon commitment. The commander may plan counterattacks as part of the HBCT's defensive plan, or the HBCT may be the counterattack force for the UEx defense (see Chapter 6).

SPOILING ATTACK

5-131. A spoiling attack is an attack launched from the defense to disrupt the enemy's attack preparations. Spoiling attacks are focused on the enemy's critical systems and forces that have the greatest impact on the enemy's ability to mount an attack. Lucrative targets include C2 systems, intelligence assets, fire support, and logistics. Spoiling attacks may be conducted as often as needed to deny adequate attack preparation from the enemy. The HBCT normally conducts a spoiling attack as part of the higher headquarters' operation. Spoiling attacks are planned and executed in the same manner as an attack.

ATTACKS AGAINST A STATIONARY ENEMY FORCE

5-132. The HBCT may attack a stationary enemy force as part of a counterattack, spoiling attack, or as an initial attack against an enemy defense. Attacks against a stationary enemy force may also occur as a result of an exploitation or movement to contact.

PLANNING CONSIDERATIONS

5-133. The focus of planning is to develop a fully synchronized plan that masses all available combat power and effects against the enemy. An aggressive force oriented reconnaissance is necessary to sustain an understanding of the terrain and enemy.

5-134. *Scheme of Maneuver.* During decisive, shaping, or sustaining operations, the HBCT directs its main effort against an objective, ideally an enemy weakness, which causes the collapse of the enemy defense. The HBCT seeks to attack the enemy's flanks, rear, or supporting formations. By doing so, the HBCT sustains the initiative and reduces its own vulnerabilities. The HBCT ISR effort seeks to identify a weak flank, poorly defended avenue of approach, or a small unit lacking mutually support within the enemy defense that the HBCT can exploit to gain a tactical advantage. When attacking a well-prepared enemy defense, the commander normally plans to isolate and then destroy small vulnerable portions of the enemy's defense in sequence. The commander and staff develop the plan using a reverse planning process from actions on the objective to the LD or assembly area. They incorporate plans for exploiting success and opportunities that may develop during execution. Special emphasis is placed on synchronizing maneuver, fires, and support throughout the attack. Consideration is also given to potential enemy reactions.

5-135. The commander and staff must consider the enemy's strength and obstacles to determine when and where breaching operation may be required. The size of the enemy force over-watching the obstacle drives the type of breach the HBCT conducts (HBCT versus maneuver battalion). The staff considers the enemy's ability to mass combat power, reposition his forces, or commit his reserve. The HBCT then develops a scheme of maneuver to isolate the main defense force while massing sufficient combat effects at the selected points of penetration. Massed combat effects are directed against an enemy weakness. The location selected for breaching/penetration depends largely on a weakness in the enemy defense where its covering fires are minimized. If the HBCT cannot find an existing weakness, it creates one by fixing and isolating the majority of the defending enemy force and overwhelming a smaller portion of the defense. The need to generate mass effects strongly influences which echelon can conduct a breaching operation. An augmented maneuver battalion has sufficient combat power to attack an obstacle defended by an enemy company.

5-136. The success of a battalion breach is dependent on the HBCT's ability to isolate a portion of the enemy defense that the lead maneuver battalion has the ability to penetrate. Otherwise, the HBCT must organize for an HBCT level breach. The HBCT organizes subordinate maneuver into a support, breach, and assault force. By organizing for an HBCT-level breach, the HBCT can mass effects and mobility assets needed to successfully penetrate and defeat an enemy battalion. If a battalion or HBCT breach is required, the HBCT will require augmentation in the form of a follow and support element (additional BCT) and/or significant additional effects in order to exploit the penetration and defeat the enemy.

5-137. The reverse breaching planning process is an essential tool in building an effective plan to attack a defending enemy. By starting with actions on the objective and working back to the LD, the staff can allocate combat power, mobility assets, and indirect fires (suppression and smoke) (see Chapter 12 for breach planning).

5-138. BOS. Key BOS considerations are discussed below.

5-139. *Fire Support.* Considerations for the fires and effects support plan include the following:

- Synchronize fires on the objective to suppress, neutralize, and destroy critical enemy forces that most affect the HBCT's closure on the objective.
- Plan suppression and obscuration fires in support of breaching operations.

- Use deception fires to deceive the enemy as to the location of the main effort.
- Plan targets and trigger points to attack repositioning enemy forces and movement of reserves.
- Plan fires beyond the objective to support a hasty attack or defense.
- Plan fires in support of the approach to the objective. These fires engage enemy security forces, destroy bypassed enemy forces, and screen friendly movement.
- Plan fires on the objective to accomplish the HBCT commander's purpose as stated in the EFETs.
- Plan locations of counter-fire radar zones for critical actions such as support forces, breaching efforts, and artillery assets.
- What reinforcing fires or target acquisition assets are required for the mission?

5-140. *Mobility, Counter-mobility, Survivability.* When mission planning dictates augmentation from UEx engineer assets, considerations for the scheme of engineer operations include the following:

- Immediately adjust breach plans and preparations based on the latest obstacle intelligence.
- Mass engineers to support breaching operations based on the enemy's obstacle threat. Resource breaching efforts with at least 50 percent redundancy required to reduce anticipated obstacles.
- Ensure adequate mobility support is task organized well forward during the approach to the objective to support breaching requirements.
- Support assaulting forces with engineers to breach enemy protective obstacles.
- Ensure adequate guides, traffic control, and lane improvements to support movements of follow-on forces and CSS traffic.
- Plan obstacles to establish obstacle control measures to protect friendly flanks and disrupt repositioning of counterattacking enemy forces.

5-141. *Nuclear, Biological, Chemical.* Considerations for NBC support include the following:

- Integrate NBC reconnaissance assets into the HBCT's overall ISR plan. Ensure NBC reconnaissance assets are positioned to quickly detect enemy use of NBC at anticipated times and locations.
- Integrate and synchronize the use of smoke to support critical actions such as breaching or assaults. Ensure artillery and mechanized smoke complements each other.
- Develop decontamination plans based on the commander's priorities and vulnerability analysis.

5-142. *Air Defense Support.* When required to provide air defense coverage, the ADO:

- Ensures adequate air defense of the HBCT during movement to and actions on the objective. The normal priority of protection is the main effort.
- Shifts assets as required by phase of the operation to maintain adequate air defense coverage of critical forces and events.
- Plans for increased air defense coverage of areas where the HBCT is most vulnerable to air attacks such as during breaching operations or movements through restrictive terrain.

5-143. *Sustainment.* Considerations for the sustainment plan include the following:

- Integrate the movement and positioning of sustainment assets with the scheme of maneuver to ensure immediate support of anticipated requirements.

- Ensure adequate support to the reconnaissance effort. Timely resupply and evacuation support of forward reconnaissance assets is well planned and integrated into the reconnaissance plan by the S4.
- Plan immediate support to high-risk operations such as breaching or assaults by the forward positioning of support assets. Be prepared to evacuate large numbers of casualties from the vicinity of the breach site.
- Support a rapid reorganization by timing the arrival of support forward once the HBCT secures the objective. Establish clear priorities of support during reorganization.

PREPARATION

5-144. The commander uses any time available prior to the attack to conduct extensive reconnaissance, pre-combat preparations, and rehearsals while concealing attack preparations from the enemy. The commander and staff refine the plan based on gained intelligence. Often, attacks are executed with limited preparation time requiring close planning and supervision of subordinate preparations.

5-145. *Inspections.* The commander supervises subordinate troop-leading procedures (TLPs) to ensure planning and preparations are on track and consistent with his intent. The commander may inspect subordinate units' order briefs and rehearsals. He focuses his inspections towards the main effort and critical events such as assaults, breaching operations, and passages of lines. The commander also seeks to inspect the planning, coordination, and rehearsals of his reserve force. Since the commander cannot be everywhere at once, he must maximize the use of other key leaders to assist him.

5-146. *Rehearsals.* The commander usually seeks to conduct a rehearsal, although the type and technique may vary based on the time available. During the combined arms rehearsal, the S2 portrays a thinking, uncooperative enemy with emphasis on enemy repositioning, employment of fires, and commitment of reserves. The primary focus of the rehearsal is actions on the objective. Each subordinate commander addresses the conduct of his mission as the rehearsal progresses. They specifically address their maneuver, fires, security operations, use of reconnaissance, and employment of other supporting assets by phase of the operation. The rehearsal places special emphasis on timing of actions and the coordinated maneuver of forces. All subordinate commanders must accurately portray how long it takes to complete assigned tasks, and how much space is required by their force. Direct and indirect fire plans are covered in great detail to include the massing, distribution, shifting, lifting, and control of fires. The commander ensures subordinate plans are coordinated and consistent with his intent. The rehearsal also covers the following:

- Plans to execute follow-on missions or exploit success.
- Likely times and locations for the commitment of the reserve.
- Likely times and locations for the commitment the follow and assume force, if used.
- Execution of the fires and effects support plan (FESP) includes shifting of fires, employment of CAS, adjusting of FSCMs, and positioning of observers.
- Breaching operations.
- Passage of lines.
- Contingency plans for actions against enemy counterattacks, repositioning, commitment of reserves, employment of situational obstacles, or use of NBC capabilities.
- Consolidation and reorganization.
- Execution of branches or sequels assigned by division.

INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE CONSIDERATIONS

5-147. Effective intelligence is a prerequisite for a successful attack. Before mounting an attack, the commander seeks to determine the enemy's strength and disposition. In a hasty attack, the entire intelligence collection, analysis, and dissemination process must rapidly respond to the PIR. The commander must receive an accurate picture of the enemy's defense so he can decide on a COA and act faster than the enemy can react. It is imperative the reconnaissance effort be given adequate time to execute its reconnaissance tasks. It must be allowed to execute its critical task of intelligence/information collection and providing the commander required information to support his analysis and decision-making. The efficient development of the situation out of contact ensures the commander has the best situational understanding of the enemy to develop his concept and intent, and thus ensures he gains and retains the initiative throughout the offensive operation. The ability to leverage information superiority is decisive.

5-148. When preparing for a deliberate attack, the commander and staff develop a well-resourced and coordinated reconnaissance effort that provides a detailed picture of the enemy situation prior to execution of the attack. The commander uses this intelligence to decide on a COA and make refinements to the plan. The ISR effort also provides him continuous updates during the attack so he can adjust execution of the operation based on the enemy's reactions. The reconnaissance must be very aggressive, comprehensive, and integrated. Reconnaissance forces must penetrate the defense to gain the detailed information on enemy locations, avenues open to friendly maneuver, enemy reserve activities, and location of enemy supporting elements. The RS commander is responsible for finding and tracking the enemy throughout the HBCT AO. His function is to confirm or deny the current intelligence estimate and contribute to evolving it to greater certainty. Because he understands the commander's intent and concept, he is aware of the major decisions the commander must make and the elements of the enemy counterpart force that are most significant for the HBCT COA.

5-149. HBCT reconnaissance operations complement the work of other collectors. They give the HBCT commander human eyes on the enemy and the battlespace. HBCT scouts can fight for information to a limited degree, but they can capture enemy soldiers and material; talk to civilians; and confirm road, bridge and infrastructure conditions. The collection effort must be synchronized and unified. Key ISR considerations specific to an attack against a defending enemy force are discussed below.

5-150. Determine the Enemy's Current Array of Forces. The commander's first priority is to determine the enemy's order of battle. The IPB assists the commander in visualizing and anticipating the enemy situation based on the weather and terrain. The S2, assisted by the entire staff, identifies the effects of weather and terrain and how the enemy is likely to fight. The staff determines feasible enemy COAs based the enemy's likely objectives, capabilities, known tactics, and known intelligence. The S2 determines how each enemy COA differs and then recommends the collection of those indicators that may reveal the enemy's selected COA. The ISR effort is focused on identifying indicators required for anticipating the enemy's actual COA. This information is vital for developing and refining plans. Ideally, final decisions as to the execution of the attack are not made until the current array of enemy forces is identified.

5-151. Key areas to identify for a defending enemy force include the following:

- Composition, disposition, and strength of enemy forces along a flank or at an area selected for penetration.
- Composition, strength, and disposition of security forces.
- Location, type, depth, and composition of obstacles. Locations of secure bypasses around obstacles.

- Composition, strength, and disposition of defending combat formations within the enemy's MBA.
- Composition, strength, and location of reserves.
- Location of routes the enemy may use to counterattack or reinforce his defense.
- Location and composition of key combat multipliers such as artillery, engineers, and air defense units.
- Type of enemy fortifications and survivability effort.

5-152. Reconnaissance forces conduct ISR operations to gain information requirements, capture enemy soldiers, and probe enemy positions for weaknesses. As time permits, reconnaissance assets observe the enemy defense from advantageous positions (observation posts [OP]) to locate gaps; identify weapon systems and fighting positions; view rehearsals and positioning; and determine the enemy's security activities and times of decreased readiness. In addition, the commander may direct reconnaissance in force missions, limited objective attacks, and other combat patrols to gain information about the enemy. It is often necessary to task organize combat elements with reconnaissance assets to penetrate enemy security forces.

5-153. The S2 must discern any enemy deception efforts from his actual defensive plan. An enemy often uses phony obstacles, dummy emplacements, and deception positions to confuse an attacker.

5-154. *Anticipate the Enemy's Engagement Areas (EA).* The commander, assisted by the S2, seeks to define the limits of the enemy EAs. This includes where the enemy can mass fires, weapon ranges, direct fire integration of obstacles, ability to shift fires, and mutual support between positions. This analysis requires effective terrain analysis, confirmed locations of enemy weapon systems (by type system), and a good understanding of the enemy's tactics. Reconnaissance forces report locations, orientation, and composition of defending weapon systems and obstacles. The analysis of the enemy's direct fire plan assists the commander in determining when the HBCT must deploy and the feasibility of his scheme of maneuver.

5-155. *Determine Enemy Vulnerabilities.* The ISR effort also seeks to identify enemy vulnerabilities that may include the following:

- Gaps in the enemy's defense.
- Exposed or weak flanks.
- Enemy units that lack mutual support.
- Unobserved or weakly defended avenues of approach to the enemy's flank or rear.
- Cover and concealed routes that allow friendly forces to close on the enemy's defense.
- Weak obstacles or fortifications in an enemy defense, especially along a flank.

5-156. As vulnerabilities are identified, they are exploited by updating or refining PIR to give the commander the information he needs to conduct decisive operations.

5-157. *Support the HBCT's Approach to the Objective.* Reconnaissance forces focus on the enemy's security forces forward of his main defense to locate enemy positions and obstacles along the HBCT's planned routes of advance. They also locate gaps and routes that allow them to infiltrate into the enemy main defensive area or rear area. The ISR effort seeks to locate enemy security forces that may reposition and affect the HBCT's approach to the enemy's main defense. Additionally, reconnaissance forces reconnoiter obstacles, restrictive terrain, and danger areas. A rapid secure advance to the enemy's main defense is dependent on the reconnaissance effort locating enemy security forces and obstacles.

5-158. *Support Actions on the Objective.* ISR assets are positioned to maintain observation of enemy reactions to the HBCT's maneuver on the objective. Reconnaissance assets are

focused on areas that the enemy likely uses to reposition forces, commit reserves, and counterattack. As the engagement on the objective develops, reconnaissance forces report enemy reactions, repositioning, and BDA. Use of the HBCT's target acquisition radars and sensors assist in target acquisition and use of precision-guided munitions. Early identification of enemy reactions is essential for the HBCT's ability to maintain the momentum and initiative during the attack.

EXECUTION

APPROACH TO THE OBJECTIVE

5-159. During the approach the HBCT is prepared to:

- Breach or bypass obstacles.
- React to artillery, chemical strikes, air attack, and EW.
- Transition to different formations based on the terrain and enemy situation.
- Employ forces to screen or guard flanks that may become exposed or threatened during the approach.
- Avoid terrain features that are likely enemy artillery reference points, locations for chemical strikes, or locations for situational obstacles.
- Destroy or force the withdrawal of opposing enemy security forces.
- Minimize the effects of enemy deception.

5-160. When the situation permits, a defending enemy usually establishes a security area around his forces to provide early warning of an attack, deny friendly reconnaissance, and disrupt the friendly force's attack. The strength of the enemy's security area depends on the time available, forces available, and his doctrine. The HBCT must counter the effects of enemy security forces to ensure an unimpeded and concealed approach. Prior to the attack, reconnaissance forces seek to locate enemy security forces. Once enemy security forces are located, the commander has the following options available:

- Immediately destroy them with indirect fires and CAS.
- Destroy them with indirect fires and CAS during the approach to the objective.
- Conduct limited objective attacks prior to execution of the main attack.
- Employ a strong advance guard to destroy or force the withdrawal of enemy security forces during the approach to the objective.

5-161. The HBCT must maintain a steady controlled movement. If the formation becomes too fast and spreads out, it may allow the enemy to defeat the HBCT in a piecemeal manner. If the formation is too slow or becomes too concentrated, it becomes vulnerable to massed enemy fires.

ACTIONS ON THE OBJECTIVE

5-162. The commander maneuvers combat forces and employs fires, situational obstacles, and smoke to create favorable conditions for decisive maneuver against the enemy. The commander commits maneuver forces and fires to isolate, then rupture, a small vulnerable portion of the enemy's defense to gain a flank or create a penetration. The final destruction of the enemy force is achieved through the attack of assaulting forces.

5-163. *Fires.* The HBCT normally employs fires with CAS, FA, and non-lethal capabilities to weaken the enemy's position and condition prior to closure within direct fire range of the enemy force. Initially, preparatory fires focus on the destruction of key enemy forces that most impact on the scheme of maneuver. For example, during an attack to penetrate an enemy defense the initial focus of preparatory fires is to destroy the enemy positions at the selected points of penetration. Preparatory fires may also:

- Weaken or neutralize enemy reserves.
- Emplace artillery delivered scatterable mines to disrupt repositioning or counterattacking enemy forces.
- Deceive the enemy as to the HBCT's actual intentions.
- Destroy enemy security forces.
- Obscure friendly movements and deployment.
- Attrite enemy artillery assets.
- Reduce the will of the enemy to fight.

5-164. As maneuver forces approach the enemy defense, the commander shifts fires and smoke to suppress and obscure the enemy. This allows maneuver forces to rapidly close on the enemy's position. Proper timing and adjustment of fires are critical to a secure closure on the enemy's positions. The commander must monitor the effects of the preparatory fires to determine if adequate conditions exist for commitment of forces. The commander may need to adjust the speed of the HBCT's approach to the objective based on the effects achieved.

5-165. *Shaping Operations.* The commander does everything in his power to limit the options available to the enemy. Fixing the bulk of the enemy forces into given positions or a COA, limits the options available to the enemy and reduces the amount of uncertainty during the battle. The primary goal is to isolate the unit targeted for destruction by preventing the enemy from laterally repositioning and reinforcing it.

5-166. A maneuver battalion designated as a shaping force normally fixes the bulk of the enemy force by attacking an objective(s) that isolates a portion of the enemy's defense. In open terrain, the most common task for the shaping force is to fix the enemy with direct and indirect fires from a support-by-fire position. A tank heavy force is best suited to fix a defending enemy armored force. In more complex terrain, the supporting force may need to seize terrain or destroy key enemy forces in limited objective attacks. Demonstrations, feints, and use of UEx level EW assets may also fix or deceive the enemy. The use of fires, attack aviation, and CAS is also vital in attacking enemy forces and reserves in depth to prevent their decisive commitment against the HBCT.

5-167. Prior to commitment, forces remain outside of the enemy's direct-fire range and avoid exposing themselves to enemy observation. Forces not yet committed use this time to conduct final preparations and make adjustments to their plans. The commander uses assault positions, phase lines (PLs), and/or checkpoints to control the positioning of these forces. The commander continuously assesses the situation and commits forces only when the necessary conditions of enemy suppression, destruction, and obscuration are achieved. The commander's critical decisions are based on when to commit forces to breach, assault, reinforce other efforts, or exploit unexpected opportunities. Timely reporting, cross talk, and accurate assessments by subordinate commanders are paramount.

5-168. . Attacking a well-prepared enemy force normally requires breaching enemy obstacles, which in turn requires significant engineer and effects augmentation from the UEx.

5-169. *Decisive Operations.* The destruction of a defending enemy force normally dictates an assault of the objective. The supporting force shifts direct and indirect fires and repositions as required to support the maneuver of assaulting forces. As the assaulting force is committed, it is updated with critical information about the enemy and friendly situation from both the supporting force and the TAC CP (CP 1). This update includes:

- Updated locations and type of enemy contact on the objective.
- Current locations of reconnaissance forces.
- Locations of lanes and obstacles to include lane marking pattern (initial, intermediate, full) material (if not in unit SOP).

- Recognition signals and guides.
- Specific routes to use for its approach.
- Locations and orientation of fires from friendly forces.
- Additions or modifications of graphic control measures.

5-170. . The assaulting task force(s) rapidly maneuvers to destroy enemy forces and clear assigned objectives. The assaulting force(s) moves along covered and concealed routes to an exposed enemy flank, created penetration, or other position of advantage. Smoke assists concealing the movement of assaulting forces. The assault includes destruction of defending forces, clearance of trenches and fortifications, and breaching of protective obstacles. The assault may involve a single rapid advance across the enemy's position or may involve a series of rapid advances and commitment of forces to obtain the same results. The commander's main focus is maintaining the momentum and security of the assaulting force(s). The ISR effort must continue to report enemy repositioning, BDA, and enemy actions to counter the assault. The HBCT limits enemy repositioning and massing against assaulting forces through intense supporting fires, a rapid assault, quick breaching operations, and effective employment of smoke.

5-171. The reserve is kept ready for immediate employment. The reserve moves within the HBCT's formation to permit rapid commitment to points of probable employment. The reserve may be committed to reinforce the momentum of the attack, block enemy counterattacks, or exploit success.

ATTACKS AGAINST A MOVING ENEMY FORCE

5-172. . The HBCT may attack a moving enemy force during a counterattack, spoiling attack, exploitation, or as a result of a movement to contact.

PLANNING CONSIDERATIONS

5-173. The HBCT normally organizes in the same manner as a movement to contact. Key planning considerations are discussed below.

5-174. *Determine Where to Fight the Enemy.* The commander must determine where to fight the enemy. This decision is based on a clear understanding of the terrain and enemy situation. The commander and staff select the most advantageous location to fight the engagement, and then determine other possible locations the engagement may occur based on a slower or faster than expected enemy advance or the enemy's use of an unlikely avenue of approach. These areas are identified as objectives or engagements areas (EAs). The commander, primarily assisted by the S3 and S2, develops DPs for the commitment of the HBCT to each location based on relative locations and rates of movement of the HBCT and the enemy (see Figure 5-17a and Figure 5-17b). The S2 carefully selects NAIs to identify the enemy's rate and direction of movement to support the commander's decision of where to fight the engagement.

5-175. Digitally equipped units possess the unique ability to rapidly shift from a direction of attack, reorient the attack against a moving force, and mass combat power to fight a dynamic and fluid battle. They achieve this dominance through SU that feeds into a COP that is shared and discussed between the BCT commander and his subordinate task force commanders

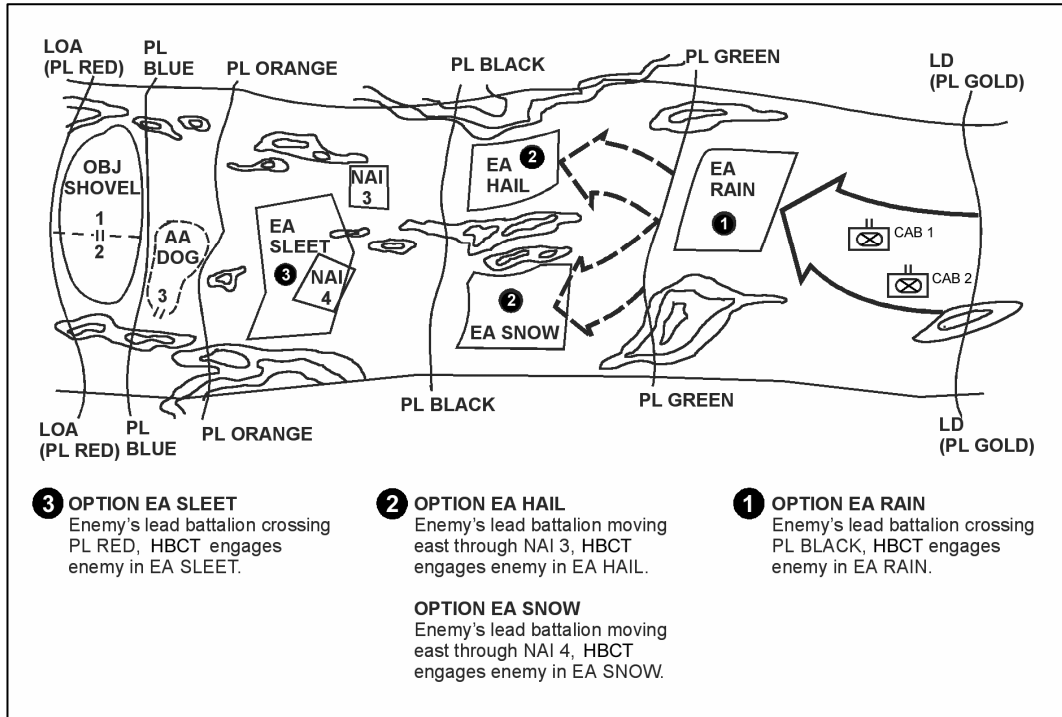


Figure 5-17a. Planning the Attack

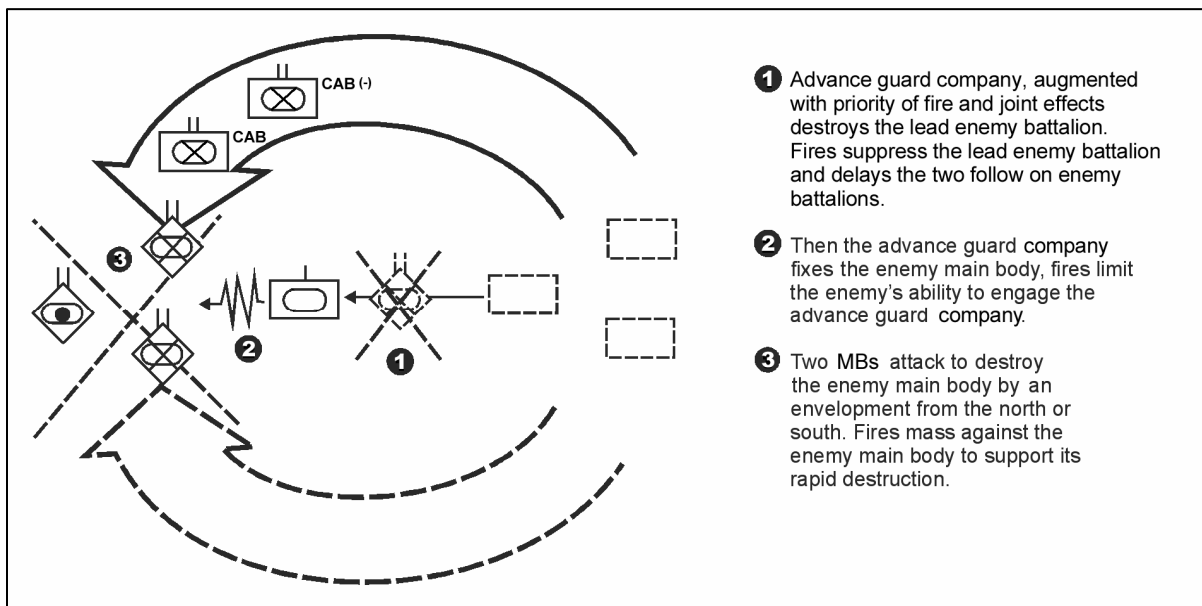


Figure 5-17b. Planning the Attack (Continued)

5-176. *Maximize the Advantages of the Terrain.* The commander attempts to use the terrain to maximize the HBCT's freedom of maneuver and lethality while limiting the freedom of maneuver available to the enemy. He looks for avenues of approach that allow the HBCT to strike the enemy from a flank or the rear. Figure 5-18 shows the HBCT with a second HBCT in follow and support attacking along a flank avenue of approach to destroy an enemy force.

When the terrain or force dispositions do not allow this choice of offensive maneuver, the HBCT normally attacks to fix the enemy force then maneuvers the bulk of its combat power to envelop the enemy from a flank. Figure 5-19 shows a maneuver battalion blocking the enemy's advance while the HBCT's second maneuver battalion followed and supported by a second HBCT in the follow and support role envelop from the flank. In this example, the terrain prevents the enemy's from moving away from the main attack while concealing the movement of the enveloping task forces.

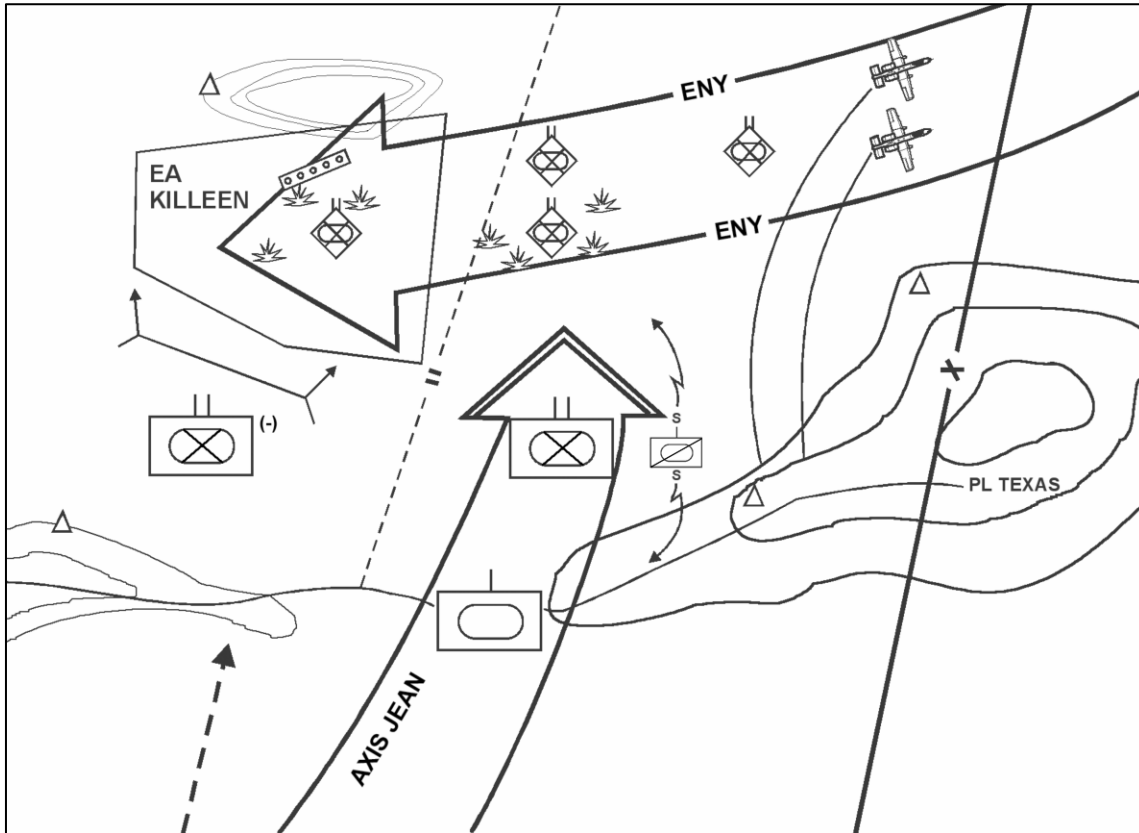


Figure 5-18. Brigade Combat Team Flank Attack

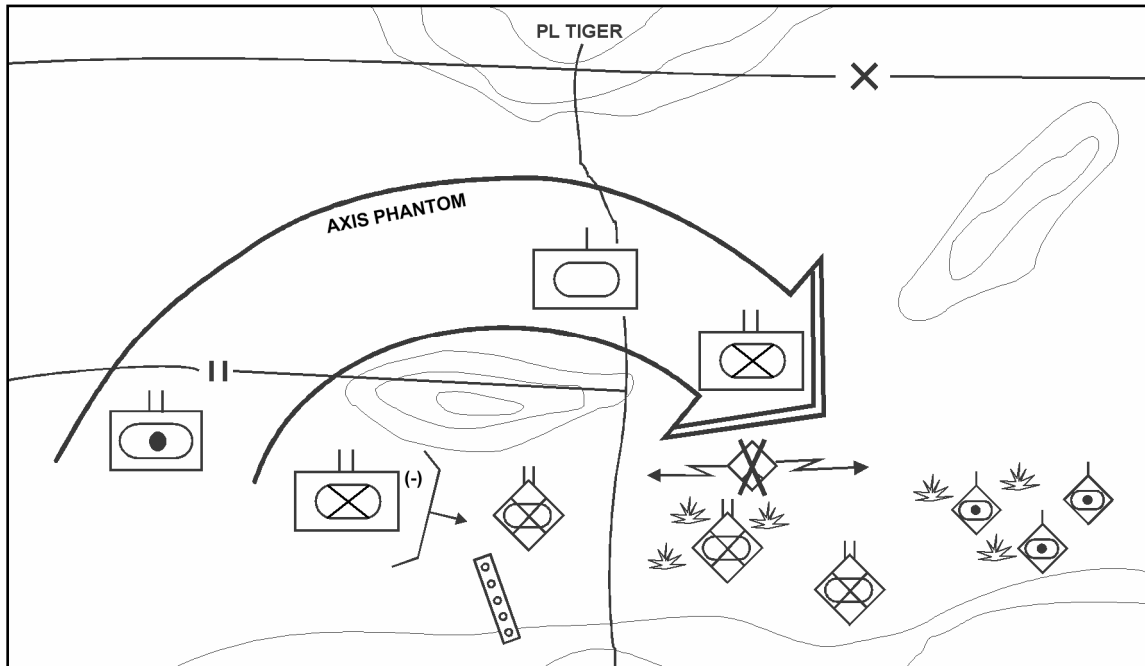


Figure 5-19. Example of Brigade Combat Team Attack against a Moving Enemy Brigade

5-177. *Maintain Flexibility.* Although plans are developed to fight the enemy at the most advantageous location for the HBCT, the commander must retain enough flexibility to effectively attack the enemy regardless of where the engagement develops. The scheme of maneuver must include provisions to fight the enemy at other possible EAs. For simplicity, the commander seeks to keep the scheme of maneuver in each EA as similar as possible.

5-178. In some situations, such as a movement to contact, the HBCT may lack the time or ability to select when and where to fight a moving enemy force. The commander must quickly deploy and maneuver the HBCT to develop the situation and defeat the enemy. The commander orders the HBCT into the attack through the use of a FRAGO based on his current assessment of the situation and physical view of the battlefield.

5-179. *BOS Integration.* Key BOS considerations are discussed below.

5-180. *Fire Support.* Key considerations for the fires and effects support plan include the following:

- Consider the use of fires to effect the enemy's maneuver well forward of the HBCT and destroy HPTs, such as security forces. Carefully plan triggers, observer locations, and targets to maintain flexibility and ensure achievement of required effects prior to contact with the enemy.
- Synchronize the movement and positioning of artillery batteries to support EFETs within each EA and to engage HPTs before the enemy enters the selected EA. Coordinate terrain requirements.
- Retain flexibility to mass fires at the decisive point in any EA that the battle occurs.
- Plan triggers to put targets into effect and cancel them based on the BCTs movement and the commander's decision of where to fight the enemy.

5-181. *Mobility, Counter-mobility, Survivability.* When the mission analysis requires and the UEx provides engineer augmentation, key considerations for the scheme of engineer operations include:

- Task organize engineer forces well forward to support breaching. Normal priority of support is to the lead maneuver battalion.
- Be prepared to reduce or bypass enemy situational obstacles.
- Integrate tactical obstacles with fires to effect the movement of the enemy in support of the commander's intent.
- Plan obstacle belts and situational obstacles to support flank security. Develop and adjust obstacles and triggers for execution based on the HBCT's movement and the enemy situation.

5-182. *Nuclear, Biological, Chemical Support.* NBC assets are employed in a similar manner as an attack against a stationary force. Smoke and NBC reconnaissance assets typically support the main effort.

5-183. *Air Defense Support.* When provided and required for air defense coverage, air defense assets are task organized to provide all-around air defense of the HBCT. The priority of protection is normally the advance guard.

5-184. *Sustainment.* Key considerations for the Sustainment plan include the following:

- Plan and coordinate the locations, displacements, and routes of CSS units to maintain responsive support and avoid interfering with maneuver actions.
- Plan and develop triggers for activating and deactivating collection points and LRP's based on the HBCT's scheme of maneuver.
- Plan MEDEVAC, resupply, and equipment recovery to support anticipated engagements within each EA.

INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE CONSIDERATIONS

5-185. The ISR effort is focused on answering the IRs to support the commander's decisions of where to fight the enemy, when and where to initiate fires, and how best to maneuver the BCT against the enemy. The S2, with battle staff input, develops NAIs to identify enemy actions and decisions that indicate his selected COA. Key considerations for attacking a moving enemy force are discussed below.

5-186. *Understand the Effects of the Terrain.* The commander must understand the effects of terrain on the HBCT and enemy forces. This has the greatest impact on deciding where to fight the enemy. The S2 assisted by the assistant brigade engineer (ABE) conducts a detailed terrain analysis and specifically identifies the following:

- Locations and tactical advantages of key terrain.
- Avenues of approach and mobility corridors for enemy and friendly forces.
- Advantageous locations for the BCT to fight the engagement.
- Danger areas where friendly or enemy forces may become vulnerable. Examples include restrictive terrain, choke points, obstacles, terrain that naturally exposes a flank, or areas dominated by key terrain.
- Likely rates of movement for both forces.
- Effects of weather and terrain.

5-187. *Anticipate the Enemy Situation.* The IPB details how the enemy will likely move and fight. It emphasizes the enemy's likely formation(s), likely routes, and how he will likely attempt to fight the ensuing meeting engagement. The IPB illustrates the enemy's expected rate of movement and how the enemy force is likely to be arrayed based on a detailed terrain

and time/distance analysis. The enemy normally has three general COAs upon contact with the BCT:

- Assume a hasty defense either before or after initial contact to retain control of defensible terrain or limit the advantage of the HBCT's weapons superiority.
- Attack to defeat or penetrate the HBCT.
- Attempt to delay or bypass the HBCT.

5-188. The S2 and staff develop enemy COAs based on the enemy's likely objective, capabilities, strength, and known tactics. They determine those enemy actions that may indicate the enemy's selection of a COA and ensure observers are positioned to detect and report these indicators. The S2 must always portray the enemy's flexibility, likely actions, and available maneuver options. This supports the development of a flexible scheme of maneuver.

5-189. *Gain and Maintain Contact.* The HBCT uses battlefield surveillance assets such as the RS, UAVs, access to JSTARS, and other sensors to track the moving enemy force well ahead of the HBCT and directs ground reconnaissance assets to home in on the enemy. Reconnaissance assets move to advantageous positions to gain observation and report IRs that normally include the following:

- The enemy's rate and direction of movement.
- The enemy's formation, strength, and composition. This includes location of security forces, main body, reserves, and artillery formations.
- Enemy actions and decisions that indicate a future enemy action or intention.
- Location of enemy HPTs.
- Location, type, and activity of key combat multipliers such as artillery, engineers, air defense, and logistics the HBCT commander intends to attack.
- Enemy vulnerabilities such as exposed flanks or force concentrations at obstacles.

5-190. *Support the HBCT's Movement.* Reconnaissance forces move well forward of the HBCT. They reconnoiter obstacles and areas that may slow the HBCT's movement and that could desynchronize the timing and planned location of the attack. They seek to detect obstacles, contaminated areas, enemy security forces, and suitable routes for the HBCT's use.

5-191. *Report Enemy Actions on Contact with the HBCT.* As the engagement develops reconnaissance assets continue to report enemy actions, BDA, and locations. Reconnaissance assets must occupy positions that provide good observation of the engagement and that are survivable throughout the course of the engagement.

EXECUTION

APPROACH TO THE OBJECTIVE

5-192. The HBCT must move with deliberate speed. By quickly gaining contact with the enemy force, the HBCT is able to deploy, mass, and destroy the enemy before he can adequately react. The commander adjusts the speed of the HBCT to ensure it arrives at the designated EA at the proper time in relation to the enemy. Effective reporting and analysis of the enemy's rate and direction of movement is critical to the timing of the attack. The commander seeks to conceal the movement of the HBCT from the enemy to maintain surprise. The HBCT maximizes the use of routes that provide cover and concealment and masks its movement. The HBCT employs a robust reconnaissance and security effort to detect and destroy enemy security forces that may warn the enemy force of friendly actions.

5-193. Positive control of movement formations by all subordinate units is essential to the HBCT's ability to mass against the enemy. If the HBCT's formation becomes too dispersed,

the HBCT loses its ability to quickly mass and is more likely to be committed in a piecemeal fashion. Constant reporting by subordinate units, maintaining SU, and understanding the scheme of maneuver are key to maintaining positive control of the movement.

ACTIONS ON THE OBJECTIVE

5-194. The HBCT creates favorable conditions for decisive action by weakening and disrupting the enemy's formation; destroying his security forces; and fixing the enemy's main body. The final destruction of the enemy is achieved through the attack of the HBCT's main body. If the HBCT is the UEx main effort, it may be waited with additional Joint effects and UEx effects, target acquisition assets and additional reconnaissance and followed by an additional BCT in the follow and support or assume role.

5-195. *Disrupt and Weaken the Enemy's Formation.* The HBCT employs fires to include artillery, CAS, and IEW reinforced with situational obstacles to shape the enemy's movement. These fires disrupt and weaken the enemy to provide time for the HBCT to deploy prior to contact. These initial fires are normally controlled by forward reconnaissance elements, scouts, and enlisted terminal attack controller (ETAC).

5-196. *Defeat Enemy Security Forces.* The enemy will normally employ security forces to protect his main body. The enemy's ability to seize the initiative often rests on his security forces. The HBCT must fight through the enemy's security forces to gain contact with the bulk of the enemy force. The commander normally employs his advance guard to defeat the enemy's security forces so the HBCT's main body can decisively attack the bulk of the enemy force. The HBCT's advance guard attacks the enemy's forward or flank security forces to develop the situation. The commander weights the advance guard with maneuver forces and fires in order to destroy the enemy's security force rapidly and gain contact with the enemy's main body before the enemy can effectively react. Figure 5-20 illustrates the HBCT's advance guard destroying the enemy's lead security force.

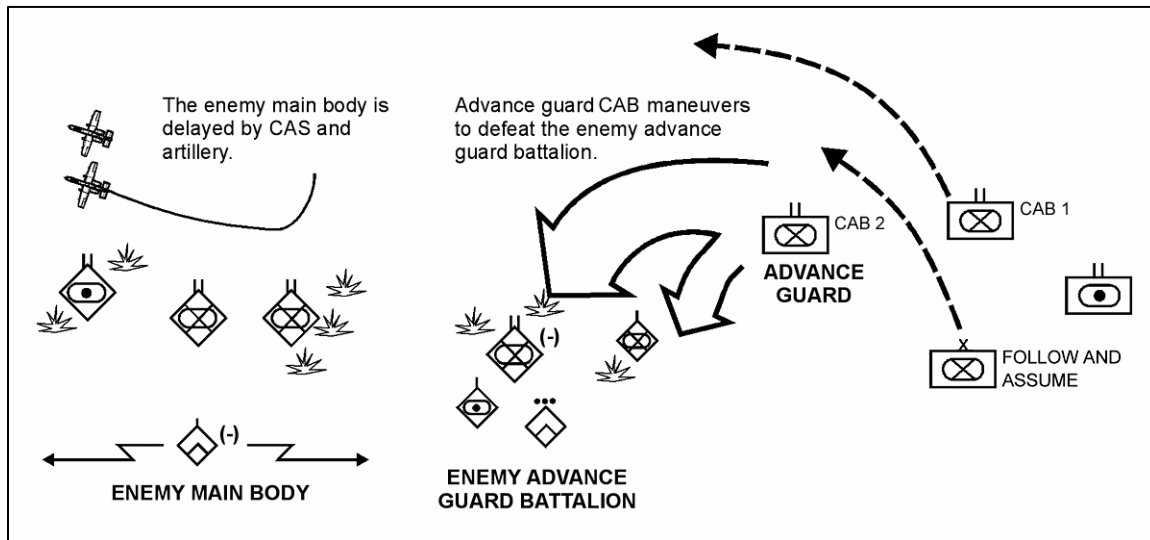


Figure 5-20. Advance Guard Destroys Enemy Security Force

SHAPING OPERATIONS

5-197. *Shaping Operations.* The HBCT normally fixes the enemy main body to create the conditions for the main effort's attack. Often this task is executed by the HBCT's advance guard once it destroys the opposing enemy security force. Fires are employed against the

lead enemy forces to allow the advance guard to deploy and gain contact with the enemy main body. The advance guard commander keeps the HBCT commander informed of the enemy's strength and actions. It is paramount that the commander receives accurate timely reports and analysis of the enemy situation. The commander must determine the enemy main body's strength, disposition, and reactions. The commander uses this information to make final adjustments to the main body's attack (see Figure 5-21).

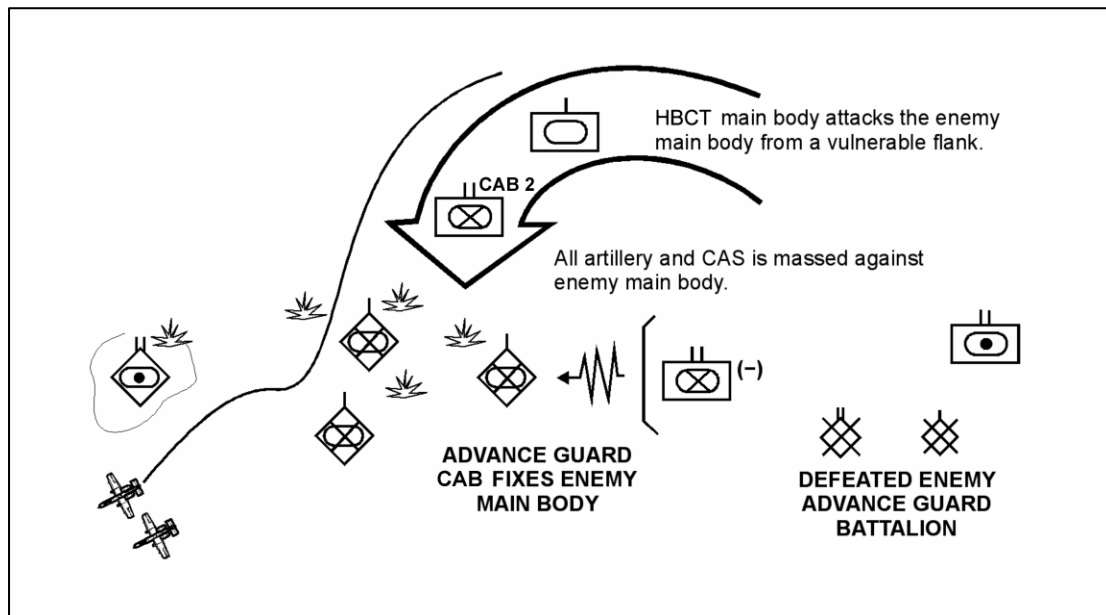


Figure 5-21. Main Body Attack

5-198. *Decisive Operations.* The HBCT maneuvers decisively with the attack of the main body to destroy the enemy force. The HBCT seeks to envelop the enemy formation from an assailable flank where its total combat power can be massed against the enemy to reach a quick decision. Rapid movement and massed fires characterize this attack.

5-199. As the advance guard develops the situation, the commander begins to maneuver the main body to a favorable position for commitment. Fires are shifted to suppress the enemy force that directly opposes the main body's attack. The main body strikes the enemy force with overwhelming strength and speed. As the main body maneuvers against the enemy, the ECOORD adjusts FSCMs to provide continuous support and ensure force protection.

5-200. If the commander determines the enemy force is attempting to bypass or avoid contact with the HBCT, he immediately directs fires to delay and disrupt the enemy's movement away from the HBCT. The commander maneuvers his forces to quickly destroy or penetrate any enemy forces attempting to fix or delay the HBCT and strikes the bulk of the evading enemy force from the flank or rear.

TERRAIN-ORIENTED ATTACKS

5-201. Terrain-oriented attacks require the HBCT to seize and retain control of a designated area to support future operations (see Figure 5-22). The HBCT attacks to seize terrain-oriented objectives for many reasons. Examples may include the following:

- Seize key terrain or structures such as bridges, airfields, or crossing sites to support follow-on operations.

- Seize terrain such as chokepoints or routes to block enemy withdrawals, reinforcements, or movements against the division's main effort.
- Secure an area to allow future operations such as development of a defense or a lodgment area.

5-202. Terrain-oriented attacks are planned and executed in the same manner as discussed previously. The most important distinction in a terrain-oriented attack is the HBCT focuses its efforts on seizure and holding of terrain instead of the total destruction of the enemy. The commander plans and controls the attack to gain control of the terrain as quickly as possible and devotes only necessary actions against the enemy. Success of the mission does not normally entail decisive action against all enemy forces within the AO. The HBCT only attacks those enemy forces that directly affect the seizure of the objective or that may impact on the future operation. Other key planning considerations that differ from force-oriented attacks are discussed below.

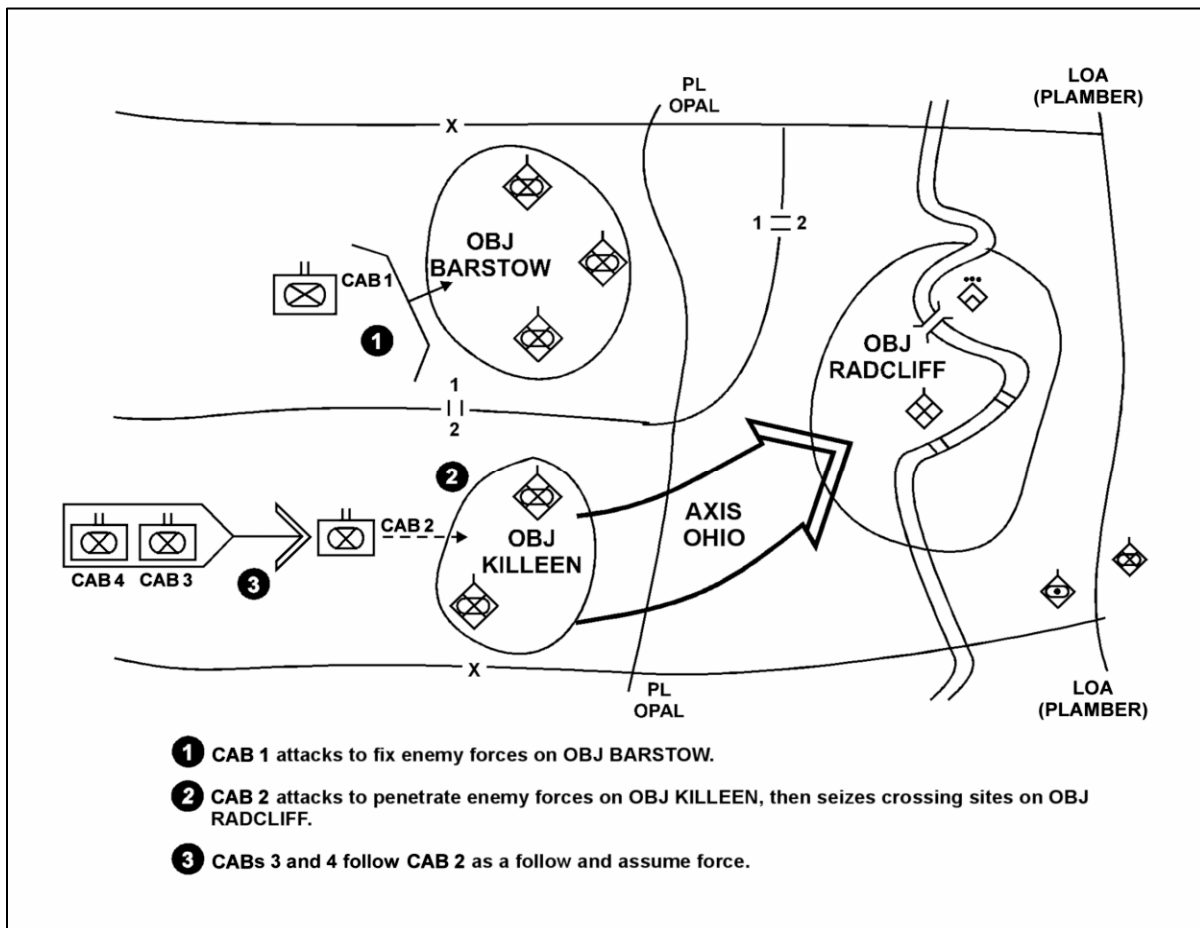


Figure 5-22. Terrain-oriented attack

INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE OPERATIONS

5-203. The ISR effort must identify the enemy situation on the objective and any sizable enemy forces within the AO. In addition, the commander must consider enemy forces within the AI that may react to the HBCT's seizure of the objective. Once enemy forces are located, reconnaissance forces seek to determine the full extent of the enemy's strength and disposition as well as possible bypasses the HBCT may exploit.

5-204. The commander, assisted by the S2, seeks to anticipate the actions of enemy forces within the AO and AI in response to the HBCT's attack. The plan must retain the necessary flexibility to succeed against all likely enemy reactions. As the S2 develops enemy COAs, he must identify those indicators that reveal the enemy's commitment to a future action. He normally considers enemy actions to defend in place, reinforce threatened enemy units, counterattack, delay, or possibly withdraw.

BYPASSED FORCES

5-205. The commander must determine the degree of risk he is willing to accept by leaving or bypassing enemy forces in the AO. This decision is based on the UEx commander's intent and established bypass criteria, the enemy's capabilities, and the commander assessment of the situation. The commander must recognize the potential impacts that bypassed enemy forces may have on the HBCT's sustainment operations and future operations. The commander normally employs economy of force missions to contain, guard, or fix bypassed enemy forces. Once the objective is secured, other forces or fires may be used to destroy bypassed enemy forces or force their surrender. The UEx may assign a BCT a follow and support mission to clear the bypassed enemy if their presence will influence the overall mission and intent.

SEIZURE OF THE OBJECTIVE

5-206. Once the objective is seized, the HBCT defends the area to prevent the enemy from recapturing it. This requires the seizure of all terrain features and areas that dominate the assigned objective (see Figure 5-23). For the commander to ensure that he retains the objective, he must clear the entire objective. Simultaneously, HBCT reconnaissance and security forces are advancing to identify follow-on enemy forces enabling the commander (if necessary) to transition to a movement to contact to complete the destruction of the enemy force.

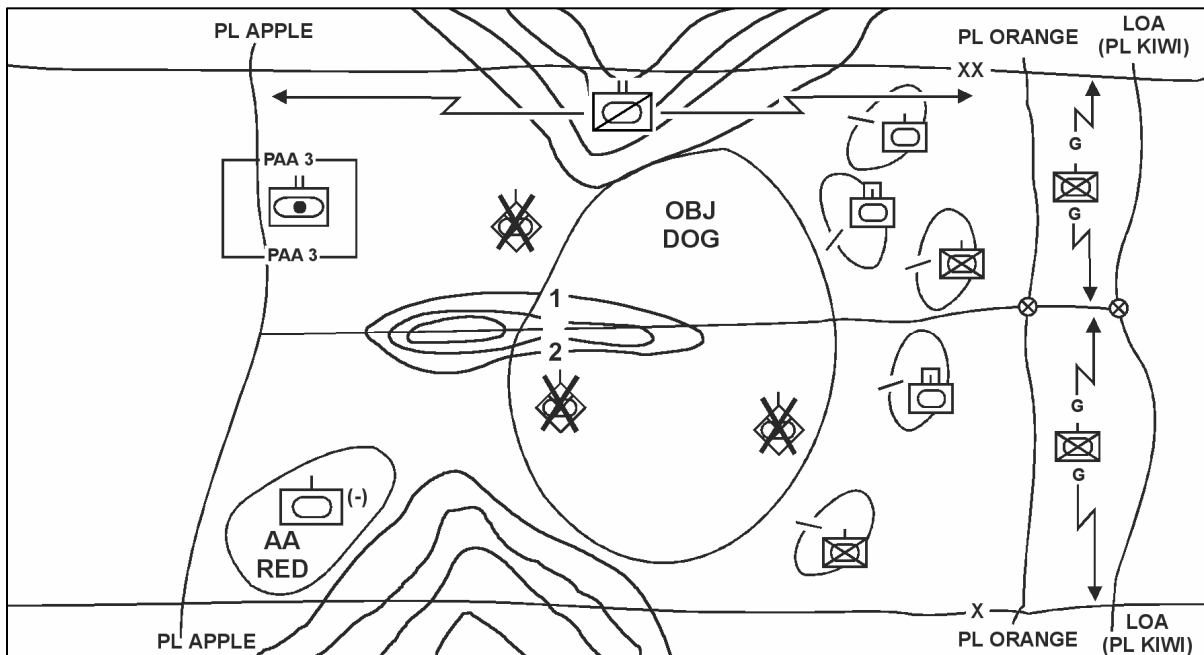


Figure 5-23. Seizure of an Objective

SECTION V – MOVEMENT TO CONTACT

5-207. A movement to contact is a type of offensive operation designed to develop the situation and gain or reestablish contact with the enemy. It is used when the tactical situation is unclear or when contact with the enemy has been lost. The HBCT's ISR operations (and improved organic ISR resources) and access to external information reduce the need to conduct a movement to contact. Better SU allows the commander to determine where the significant enemy forces are located. However, the fact that enemy offensive information operations degrade the accuracy of the friendly COP continues to require the conduct of movements to contact. Search and attack is a movement to contact technique often used in operations against insurgency or unconventional forces in non-contiguous operations. Search and attack operations are more typical of forces with significant infantry capabilities (Stryker Brigade and Infantry Brigade Combat Teams), but conditions of METT-TC may dictate the HBCT employ it in an AO. It is discussed separately at the end of the section on movement to contact.

5-208. The fundamentals of a movement to contact are (FM 3-90):

- Focus all efforts on finding the enemy.
- Make initial contact with ISR assets or with the smallest force possible, consistent with protecting the force.
- Make initial contact with small, mobile, self-contained forces to avoid decisive engagement of the main body on terrain chosen by the enemy.
- Task organize the force and use movement formations to deploy and attack rapidly in any direction.
- Keep forces within supporting distance to facilitate a flexible response.
- Maintain contact regardless of the COA adopted once contact is gained.

5-209. A properly executed movement to contact develops the situation and maintains the commander's freedom of action after contact is gained. The HBCT may conduct a movement to contact as part of a UEx movement to contact, or the HBCT commander may direct a movement to contact anytime during an operation. If serving as part of a UEx movement to contact, the HBCT may fill the roles of security force, flank or rear guards or as the main body. If executing the mission at the HBCT level, the commander must take into consideration what he knows about the enemy, his available forces (particularly given two maneuver battalions), mission requirements (security, advance guard, main body and reserve), the ability to sustain offensive momentum or defend if necessary (actions on contact), terrain available and the maneuver formation.

5-210. A movement to contact ends for the HBCT upon contact with a sizable enemy force that causes the commander to commit his main body, or the seizure of key terrain that offers a tactical or political advantage. Upon contact, the commander has four basic maneuver options:

- Attack.
- Defend.
- Report and bypass.
- Retrograde

5-211. The movement to contact may then resume if the immediate enemy force is defeated and the situation remains unclear. If the HBCT is unable to defeat the enemy, it transitions into a defense, either to repel a superior enemy force, avoid culmination, or to prepare for a more deliberate attack. Based on guidance from the higher commander, the HBCT may report and bypass small enemy units or conduct a retrograde if faced with an overwhelming enemy force. If enemy forces are bypassed, it is imperative to understand who has responsibility for their engagement (UEx follow and support units).

ORGANIZATION OF THE MOVEMENT TO CONTACT

5-212. The HBCT normally organizes into security forces, a main body, and a reserve for movements to contact. Depending upon METT-TC, the HBCT may not have a dedicated reserve, relying instead on the ability to use uncommitted forces or effects, or the availability of UEx forces (e.g., attack aviation, etc). Figure 5-24 depicts an example of an HBCT movement to contact without a reserve.

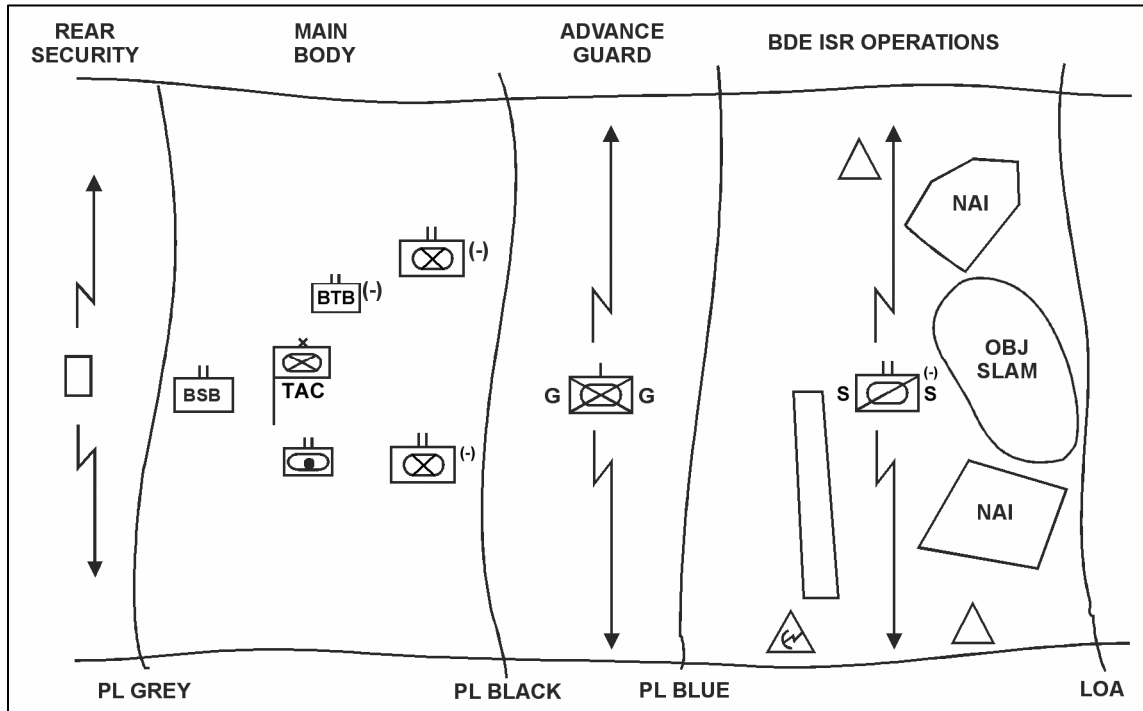


Figure 5-24. Typical Organization for a Movement to Contact

INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE OPERATIONS

5-213. The HBCT develops its ISR plan to ensure all assets are employed to answer the commander's PIR and facilitate his decision-making process. The HBCT ISR plan is focused on enemy or terrain as opposed to the friendly force in a movement to contact. The Reconnaissance Squadron (RS), complemented by the use of Shadow UAVs, access to JSTARS, SIGINT, and other organic and external surveillance assets, are employed to focus their efforts on the ISR plan and serves as a shaping asset for the commander. Successful employment of the RS allows the commander to transition the HBCT from a movement to contact to an attack or defense prior to contact with the enemy. The RS must be far enough in front of the HBCT Advance Guard to provide adequate warning and sufficient space for them to maneuver. They should receive initial priority of fires to assist them in breaking contact with the enemy if compromised and engaged. Maneuver battalion scouts provide early warning and intelligence/information to the maneuver battalion and may have engineers and forward observers (FOs) attached to assist in developing information or to potentially disengage when in contact with the enemy. They must have access to all information provided by the RS.

SECURITY FORCES

5-214. Security forces consist of the Reconnaissance Squadron, advance guard, flank security, and rear security.

5-215. Reconnaissance Squadron. The Reconnaissance Squadron in a HBCT movement to contact is normally employed either in a route or zone reconnaissance role (forward of the advance guard), or conducts screening operations to the front, flanks, or rear of the HBCT. Dependent upon METT-TC, the RS may be employed along one or more axis of advance separate from the intended route of the HBCT main body to deceive the enemy. The RS will not normally be designated as the HBCT advance guard unless provided additional maneuver units and effects capabilities.

5-216. *Advance Guard.* The advance guard is a task organized combined arms unit or detachment that precedes a formation to protect the main body from ground observation or surprise by the enemy. The advance guard develops the situation to protect the deployment of the main body when it is committed. When the HBCT is moving on multiple axes each lead maneuver battalion serves as the HBCT's advance guard. In turn, each lead maneuver battalion forms its own advance guard. The advance guard operates forward of the main body to ensure the main body's uninterrupted advance. It protects the main body from surprise attack and develops the situation to protect the deployment of the main body when it is committed to action. The commander must specify how far forward of the main body the advance guard will move based on the enemy's capabilities and the terrain. When the RS is employed forward of the HBCT advance guard, close coordination of maneuver and effects is required to ensure unity of effort and prevent difficulties in employing effects. Graphics control measures such as phase lines can be used to delineate responsibility for terrain and effects as the movement to contact progresses. The advance guard operates within the supporting range of the main body and artillery. The advance guard must operate forward enough to accomplish its missions ahead of the main body but not so far as to be vulnerable to piecemeal destruction by the enemy. The advance guard provides its own flank and rear security. The critical tasks of the advance guard include:

- Destroy enemy security forces within its capabilities.
- Destroy or repel all enemy reconnaissance forces.
- Prevent enemy ground forces from engaging the main body with direct fires.
- Locate, bypass, or breach obstacles along the main body's axis of advance.
- Execute tactical tasks such as fix, contain, or block against enemy forces to develop the situation for the main body.

5-217. *Flank and Rear Security.* When adjacent units or the RS are not protecting the HBCT's flanks or rear, forces providing a guard or screen secure them. The flank columns of the main body normally provide the flank security elements. The commander must perform a risk analysis to tailor the size of the security forces and the headquarters responsible for them. These forces must be strong enough to defeat anticipated enemy attacks or to delay them long enough for the main body to deploy. An option available to the HBCT commander that was not available to previous commanders is to employ the BTB, with appropriate augmentation, to perform security missions such as rear security. While obviously METT-TC dependent, this option would free the CABs and RS to focus on other tactical tasks.

5-218. Flank and rear security forces operate under the control of their assigned battalion-level headquarters, normally a CAB or the RS. Flank security forces travel on routes parallel to the route of the main body. They move by continuous marching or by bounds (successive or alternate) to occupy key positions along the flanks of the main body. They also maintain contact with the advance guard. The rear security force follows the main body.

MAIN BODY

5-219. The main body contains the bulk of the HBCT's combat power. The main body follows the advance guard and keeps enough distance between itself and the advance guard to maintain flexibility. The combat elements of the main body are prepared to rapidly deploy and attack. The commander designates the formation of the main body to provide security, speed, and flexibility based on the situation. All security forces orient their movements on the main body.

RESERVE

5-220. The commander may designate a portion of the main body as a reserve. Depending on how unclear the situation is, the reserve may constitute approximately one-fourth to one-third of the force. The reserve is positioned to quickly respond to anticipated missions. The reserve can be positional dependent on the forces available. On contact with the enemy, the reserve provides the commander flexibility to react to unforeseen circumstances and allows the unit to quickly resume its movement.

MOVEMENT TO CONTACT PLANNING CONSIDERATIONS

5-221. The plan for a movement to contact is flexible and promotes subordinate initiative. This is accomplished by developing a simple scheme of maneuver, issuing a clear commander's intent, and developing plans to execute likely maneuver options that may occur during execution. Increased emphasis is placed on developing an aggressive and flexible reconnaissance effort that is linked to the commander's PIR; which is normally focused on locating and gathering information about the enemy's strength, disposition, and activities.

5-222. In developing his concept, the commander anticipates where he will likely meet the enemy, and then determines how he intends to develop the situation that leads to an attack under favorable conditions. The commander focuses on determining the HBCT's organization and formation that best retains his freedom of action upon contact and supports his concept against known or anticipated enemy forces. His understanding of the enemy situation coupled with an assessment of relative combat power (enemy and friendly forces available) will determine his maneuver formation (battalions abreast or column). The commander must evaluate the risk and mitigating actions to determine his concept of maneuver.

5-223. The commander and staff develop plans for the maneuver options of attack, report and bypass, defend, and retrograde based on the higher commander's intent and the IPB. They define the conditions in terms of the enemy and friendly strength and disposition that will likely trigger the execution of each maneuver option. They identify likely locations of engagements based on known or suspected enemy locations.

5-224. The HBCT commander gives the advance guard commander guidance in the form of focus, tempo, and engagement criteria (see Chapter 4). The guidance gives the advance guard commander the details necessary to plan and execute his operation. He must recognize the loss of tempo created by fighting every small enemy force encountered with the lead element. The advance guard may attack small enemy forces that it can quickly destroy without losing momentum. Larger or more stubborn enemy forces are best bypassed and destroyed by the main body or follow and support forces (if available).

5-225. Close planning consideration is paid to areas of likely contact, known enemy positions, and areas that are potentially dangerous to the HBCT such as restrictive terrain, obstacles, and urban areas. The staff must carefully plan actions for moving through these danger areas quickly and securely. Techniques may include isolating danger areas with fires and smoke.

SCHEME OF MANEUVER

5-226. The scheme of maneuver covers the HBCT's actions from initiation to occupation of the final objective or LOA. Because the location of the engagement with the enemy is not known, a flexible scheme of maneuver is developed. Flexibility is achieved by incorporating multiple DPs and triggers into the plan based upon where likely engagements are anticipated. The scheme of maneuver specifically addresses the following:

- Actions at known or likely enemy locations.
- Method for moving through and crossing known restrictive terrain, obstacles, urban areas, and other dangerous areas.
- The HBCT's formation and known locations where the formation will change.
- Actions and array of forces at the final objective or LOA.
- DPs and criteria for execution of maneuver options that may develop during execution.
- Commander's intent for fires (EFETs).
- Purpose and employment of mobility and counter-mobility assets.

5-227. In an HBCT movement to contact, the commander must determine his maneuver formation in order to ensure mission success. Given the known and predicted enemy situation and forces available, the commander may decide to maneuver in column or with maneuver battalions abreast.

- *Column.* When using a column formation (battalions in column), the commander organizes his HBCT with an advance guard, main body, and reserve and security elements. The RS mission will not change.
 - The advance guard and reserve missions (if a designated reserve is employed) are tasked to a maneuver battalion commander. The advance guard will be task organized with combat, combat support and surveillance assets to protect the main body and ensure its uninterrupted advance. It will also receive priority of fires initially. The advance guard must be able to develop the situation upon contact with enemy lead elements; destroying reconnaissance ambushes or delaying enemy forces; and marking bypasses for or reducing obstacles. Until the main body is committed, the advance guard is the commander's main effort. All pertinent information is passed via FBCB2 or FM voice.
 - The commander tailors his combat power and effects into the main body (the remaining maneuver battalion). The HBCT's digital enablers allow the main body to key its movement on the advance guard while utilizing terrain and distance for force protection. When the advance guard is committed, the main body provides responsive support.
 - The maneuver battalion providing the advance guard may also provide the HBCT reserve based on the HBCT commander's guidance.
 - Flank and rear security for the main body is provided by elements (usually platoon size) from the main body companies. These elements remain at a distance from the main body, which allows the maneuver battalion time and space to maneuver to either flank. Flank elements operate far enough out to prevent enemy from placing direct or observed fires on the main body. Indirect fires are planned on the major flank approaches to enhance security. Rear security is gained by rapid forward movement which degrades the enemy's ability to react or reposition forces to attack the maneuver battalion.
- *Maneuver Battalions Abreast.* If the HBCT commander determines from his mission analysis and assessment of relative combat power that he can maneuver his force across a broad front and accept risk given his available forces and enemy disposition/composition, he may execute his movement to contact with maneuver

battalions abreast. The role of the RS does not change. In this concept, each maneuver battalion provides its own advance guard, usually a company. Its composition depends on the factors of METT-TC. The advance guard will remain in close coordination with the RS. The maneuver battalion commanders will designate their main body from their organic assets. To mitigate his risk due to the broad front of his combat force, the HBCT commander may request attack aviation augmentation from the UEx to provide additional combat power to the main body or as a reserve. Each MB will provide its own flank and rear security.

5-228. In a movement to contact, the commander can opt not to designate his decisive operation until his forces make contact with the enemy, unless there is a specific reason to designate it. In this case, he retains resources under his direct control to reinforce his decisive operation. He may designate his decisive operation during the initial stages of a movement of contact because of the presence of a key piece of terrain or avenue of approach.

INTEGRATION OF BATTLEFIELD OPERATING SYSTEMS

5-229. Key BOS considerations are discussed below.

5-230. *Fire Support.* Key considerations for the fires and effects support plan include:

- Critical to success is responsive and decentralized fires facilitated by a clear understanding of the EFETs for each phase of the operation. Once contact is made, the HBCT must shift control of all available fires to the observer who is in the best position to control fires against the enemy.
- Plan targets based on known or suspected enemy locations, at danger areas, and to support future operations. Refine targets based on the reconnaissance effort as the operation progresses.
- Maximize the use of priority targets along the axis of advance. Plan triggers to put these targets into effect and cancel them based on the movement of the HBCT.
- Ensure immediate responsive fires support the HBCT's lead element as contact develops by assigning priority of fires to the advance guard or reconnaissance squadron.
- Consider designating an artillery battery to move with or just behind the advance guard to ensure responsive fire support to the advance guard and reconnaissance squadron.
- Position observers effectively and maximize the use of lead maneuver forces to call for fires since they often have the best view of the enemy. All observers must understand the EFETs for each phase of the operation.
- Synchronize the movement and positioning of artillery with the tempo of the HBCT and the fire support requirements. Ensure a maximum number of firing batteries are positioned to support all elements of the HBCT at points of vulnerabilities such as obstacles, canalizing terrain, bridges, or river crossing sites.

5-231. *Mobility, Counter-mobility, Survivability.* When additional engineer assets are provided to meet mission requirements, key considerations for the scheme of engineer operations include:

- Task-organize engineer forces well forward to support potential breaching operations. The advance guard is normally the priority of support and is task organized with additional mobility assets and engineer forces.
- Maximize the use of engineers in support of reconnaissance operations. Engineers assist in conducting obstacle, route, bridge, and ford reconnaissance. Ensure the reconnaissance plan integrates the collection of obstacle and terrain intelligence.

- Maintain the flexibility to mass engineers to breach significant obstacles. The engineer battalion may retain a small mobility reserve of engineers to respond to unexpected mobility requirements.
 - Plan obstacle belts and situational obstacles to support flank security. Develop and adjust obstacle locations and triggers for execution based on the HBCT's movement and the enemy situation. Flank security forces are often task organized with Volcano and other situational obstacle emplacement systems.
 - Develop plans for the hand-off of marked obstacles, lanes, and bypasses.
 - Consider the requirement for route maintenance, clearance, and repair.
 - Plan to transition to a defense.
- 5-232. *Nuclear, Biological, Chemical*. Key considerations for NBC support include:
- Ensure the NBC reconnaissance platoon makes maximum use of standoff detection capabilities. It may be positioned forward with the advance guard.
 - Integrate NBC reconnaissance assets within the HBCT's formation. They are positioned at locations that allow them to quickly detect, identify, report, and mark contamination.
 - Employ hasty smoke to quickly obscure and screen friendly forces from enemy observation.
 - Develop decontamination plans that can support the entire scheme of maneuver.
 - NBC assets are task organized early to ensure they are integrated into the planning process.
- 5-233. *Air Defense*. When provided to provide air defense coverage, key considerations for the air defense plan include:
- ADA assets occupy selected sites along the route of movement and integrate into the formation to provide all-around air defense protection. Normal priorities of protection are the main body and positioned forward with the advance guard.
 - Develops plans to shift and reposition ADA assets based on the HBCT's movement, selected maneuver option, and changes in the enemy air situation.
 - Ensure adequate air defense of forces during movements through chokepoints, breach lanes, bridges, and restrictive terrain.
- 5-234. *Sustainment*. Key considerations for the Sustainment plan include:
- Maneuver battalion FSCs may move with their parent battalions, or may be echeloned. If echeloned, selected elements form a combat trains and move with the maneuver battalion. The remainder of the FCS may move with the BSB. Normally minimum essential assets move in the combat trains to prevent unnecessarily slowing down the advance. Combat trains typically contain Class III and Class V, medical support, and maintenance assets. The BSB moves by echelon behind the main body and occupies hasty positions as required.
 - Integrate refueling and resupply operations with the scheme of maneuver to ensure proper timing of support and to avoid interfering with planned maneuver actions. Plan support from initiation of the operation to the final objective or limit of advance.
 - Ensure the CSS plan is responsive and flexible enough to support all maneuver options.
 - Plan and coordinate the locations, displacements, and routes of CSS assets to maintain responsive support.
 - Ensure adequate security of MSRs and CSS assets based on the potential of undetected enemy forces. All CSS units plan and rehearse for enemy contact. MSRs often become overextended as the operation proceeds.

- Develop plans to support the HBCT with immediate supply of Class IV /V barrier material in support of a hasty defense.

5-235. When developing the force health protection (FHP) plan for the offense, the FHP planner must consider many factors (FM 4-02.55). The forms of maneuver, as well as the threat's capabilities, influence the character of the patient workload and its time and space distribution. The analysis of this workload determines the allocation of FHP resources and the location or relocation of MTFs. FHP for offensive operations must be responsive to several essential characteristics. As operations achieve success, the areas of casualty density move away from the supporting MTF. This causes the routes of medical evacuation (MEDEVAC) to lengthen. Heaviest patient workloads occur during disruption of the threat's main defenses, at terrain or tactical barriers, during the assault on final objectives, and during threat counterattacks. The accurate prediction of these workload points by the FHP planner is essential if MEDEVAC operations are to be successful. As advancing combat formations extend control of the battle area, supporting medical elements have the opportunity to clear the battlefield. This facilitates the acquisition of the wounded and reduces the vital time elapsed between wounding and treatment.

5-236. There are two basic problems confronting the supporting medical units and MEDEVAC elements. First, contact with the supported units must be maintained. Responsibility for the contact follows the normal FHP pattern—higher echelon evacuates from lower echelon. The forward deployed air and ground evacuation resources maintain the contact. Secondly, the mobility of the MTFs supporting the combat formations must be maintained. The requirement for prompt MEDEVAC of patients from forward MTFs requires available ambulances to be echeloned well forward from the outset. MEDEVAC support (both air and ground ambulances) beyond the capabilities of the BSMC is requested through the UEx.

PREPARATION FOR THE MOVEMENT TO CONTACT

5-237. Preparations focus on the conduct of the ensuing meeting engagement. Simple flexible plans that rely on SOPs and that are rehearsed repetitively against various enemy conditions are essential to success.

INSPECTIONS

5-238. The commander inspects subordinate unit preparations to ensure they are consistent with his intent and concept of operations. The commander places emphasis on subordinate plans to move through danger areas, conduct actions on contact, and transition into a maneuver option. The commander ensures each subordinate force understands its assigned mission during the movement and potential maneuver options that may develop during execution.

REHEARSALS

5-239. The HBCT's leadership rehearses the plan against a wide range of likely enemy COAs that cause the HBCT to execute various maneuver options at different times and locations. The goal is to exercise the HBCT's C2 system and subordinate commanders against potential situations that may arise during execution and force decision-making under the anticipated conditions of the battle. This promotes flexibility and agility while reinforcing the commander's intent. The commander seeks to rehearse the operation from initiation to occupation of the final objective or LOA. Often, due to time constraints, the commander prioritizes the maneuver options and enemy COAs to be rehearsed based on the time available. The focus of the rehearsal is locating the enemy, developing the situation, executing a maneuver option, and exploiting success. The rehearsal must consider the

potential of encountering stationary or moving enemy forces (see FM 5-0). Other actions to consider during rehearsals are:

- Actions to cross known restrictive terrain, urban areas, defiles, obstacles, and other danger areas.
- The advance guard makes contact with a small enemy force.
- The advance guard makes contact with a large force beyond its capability to defeat.
- The advance guard makes contact with a persistent chemical agent or significant obstacle.
- A flank security force makes contact with a small force.
- A flank security force makes contact with a large force beyond its capability to defeat.
- Actions to report and bypass an enemy force (based on the bypass criteria for the BCT).
- Transition into potential maneuver options.

INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE CONSIDERATIONS

5-240. The primary focus of the ISR effort is to locate the enemy. The commander states the tempo for ISR operations based on his PIR or CCIRs, enemy capabilities, and need for speed and security. Often, ISR assets like the reconnaissance squadron, must take risk to maintain the tempo of the operation. It is imperative when time and distance permits, that the ISR effort be given adequate time to ensure the efficient development of the situation in order to provide the commander the best information/intelligence (situational understanding) to support his planning and ultimate execution of the mission. Information superiority allows the commander to control and maintain the initiative and the decision cycle over the enemy, even when the enemy picture is vague or limited. Key considerations are discussed below.

LOCATE THE ENEMY

5-241. The reconnaissance squadron, supported by the S2's access to information from higher headquarters' collection effort, seeks to locate the enemy well ahead of the HBCT. This provides the HBCT time to develop plans, select favorable terrain for the engagement, position observers, and deploy prior to contact. The staff focuses the ISR effort by developing PIRs that will confirm or deny the enemy's COA. When enemy forces are detected, ISR assets shift to determine the full extent of the enemy's strength and disposition. Reconnaissance assets gather vital information on the enemy force and attempt to determine the enemy force's vulnerabilities such as an exposed flank.

5-242. If employed forward of the HBCT, the reconnaissance squadron maintains contact with other forces operating forward of the HBCT. They will hand off located enemy positions to the reconnaissance squadron. Then, the reconnaissance squadron or other surveillance assets maintain constant contact with the enemy force to gain relevant information and locate vulnerabilities.

5-243. The advance guard must maintain contact with ISR assets, whether digitally or FM, to coordinate combat actions and develop SU. As ISR assets locate enemy positions, it will share these locations with the advance guard by means of the COP or standard spot reports (SPOTREP). Once the advance guard's scouts gain observation on the enemy, the recon squadron continues to move ahead and observe NAIs deeper in the AO. In some cases, elements of the reconnaissance squadron will maintain contact with the enemy and guide the advance guard's maneuver forces. Regardless of the technique used, these actions should be rehearsed and closely coordinated during execution to prevent fratricide and confusion.

SUPPORT ACTIONS UPON CONTACT

5-244. Once an enemy force is located, it is continuously observed. The recon squadron, scouts, and ETACs assist in controlling indirect fires and CAS against enemy forces. Reconnaissance assets assist friendly forces by guiding them along the best routes to engage the enemy. As contact develops, reconnaissance assets report enemy actions and BDA. The commander also redirects other reconnaissance assets around the engagement to continue to identify potential threats deeper in the AO.

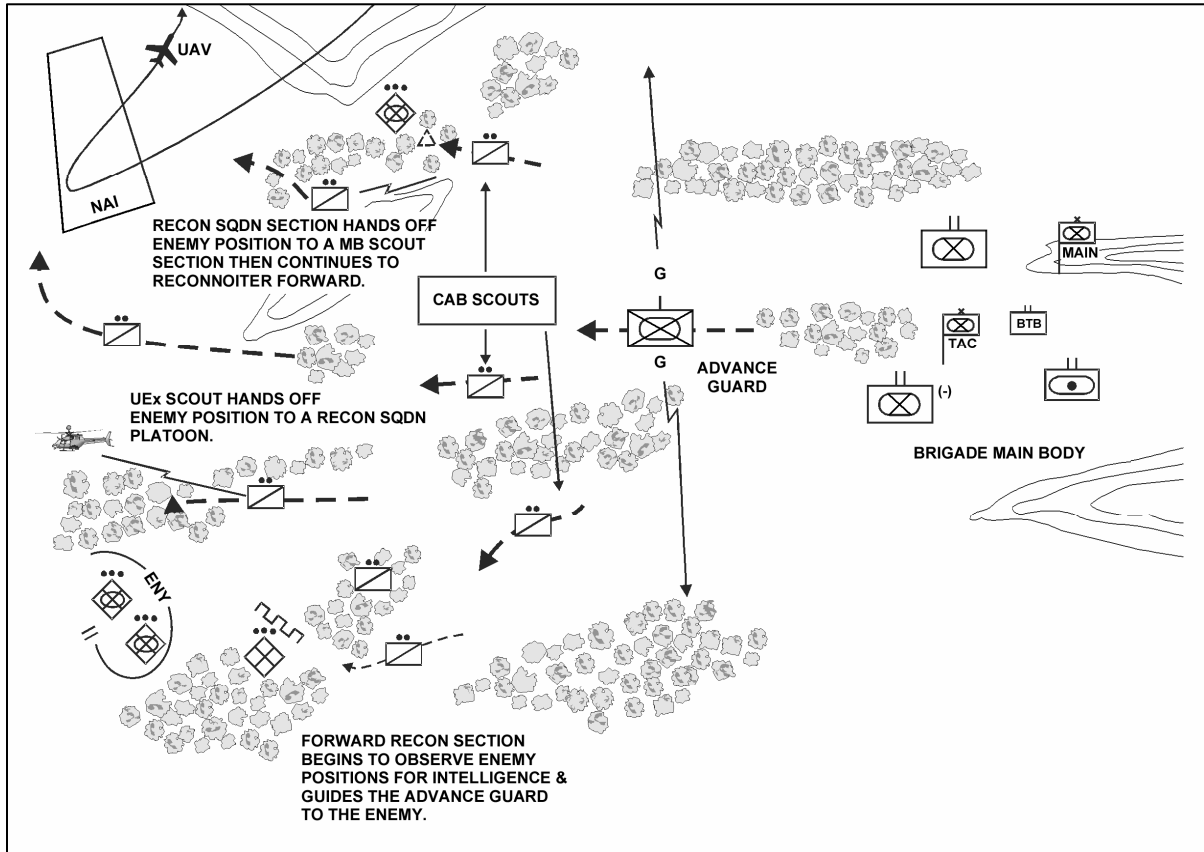


Figure 5-25. Forward Reconnaissance Forces Conduct Reconnaissance Handover to Advance Guard

EXECUTION OF THE MOVEMENT TO CONTACT

5-245. The HBCT seeks to move rapidly to maintain the advantage of a rapid tempo. However, the commander must balance the need for speed with the requirement for security. This decision is based on the effectiveness of the ISR effort, friendly mobility, effects of terrain, and the enemy's capabilities.

5-246. The CPs (TAC and MAIN) closely tracks the movement and location of all forces. Locations and movements of the flank and rear security forces are continually assessed to ensure adequate security of the main body and to ensure they are within supporting range of the main body and artillery. The BSB controls the movement of sustainment units and adjusts their movements to meet support requirements, avoid congestion of routes, and ensure responsiveness. The BTB controls movement of organic and attached units to support the HBCT concept. The HBCT may allocate additional forces to the BTB and give it additional security requirements (e.g., rear area and rear security) to perform.

ACTIONS AT OBSTACLES

5-247. Obstacles pose a significant threat to the HBCT's momentum. Lead security forces bypass or breach obstacles as quickly as possible to maintain their momentum. Once an obstacle is detected, a secure and favorable bypass is immediately sought. If a bypass is available, the unit in contact with the obstacle exploits and marks the bypass. Engineers are committed to mark the bypass and additional lanes as required. Enemy forces normally over-watch obstacles. Units should approach all obstacles and restrictive terrain with the same diligence that they approach a known enemy position.

5-248. When the advance guard is forced to breach, it maneuvers to suppress and obscure any enemy forces over-watching the obstacle then reduces the obstacle to support its movement. Some engineer forces from the advance guard should stay at the obstacle to continue creating lanes, improve marking of lanes, and guide the main body. If the advance guard is unable to breach the obstacle, subsequent forces from the main body are committed to a more deliberate attack.

DESTRUCTION OF SMALL ENEMY FORCES

5-249. Small enemy forces, which are identified by security forces, are destroyed with indirect fires or a combination of indirect fires and maneuver. Depending on the commander's engagement criteria, small enemy forces may be fixed by the security force in contact. Once the enemy is fixed, the security force leaves a small combat force to contain the enemy until the main body is able to destroy it. Detailed cross talk between committed and containing force commanders is critical to coordinate actions and avoid fratricide. The containing force directs and/or guides the committed elements of the main body to the best location to attack the enemy force. Once the enemy is destroyed, committed forces quickly move to continue the advance.

REPORT AND BYPASS

5-250. When conducting a movement to contact as part of a larger force, the higher commander may establish bypass criteria that allows the HBCT to report and bypass specific size enemy forces. When the criteria are met, the HBCT fixes the enemy force and leaves a small force to maintain contact while the remainder of the HBCT continues the advance. Once bypassed, the destruction of the enemy force becomes the responsibility of the HBCT's higher commander.

DEVELOPING THE SITUATION AGAINST A SIZABLE ENEMY FORCE

5-251. When the advance guard makes contact with a large enemy force, it develops the situation for the main body. The advance guard must quickly determine the enemy's size and activity while avoiding being fixed or destroyed. The advance guard develops the situation by maneuvering and maintaining pressure on the enemy force while aggressively probing and reconnoitering for the enemy's flank or other positions of advantage. If the enemy is moving, the advance guard determines the direction and rate of movement, size, and composition of the enemy formation(s). If the enemy is stationary, the advance guard determines the enemy's disposition and level of preparation to include the presence of prepared positions and obstacles. The advance guard seeks to determine the locations of enemy tank killing systems, gaps in the defense, and the enemy's flank. The HBCT commander uses this information to select a maneuver option and develop a maneuver and fire plan for the main body. Simultaneously with actions on contact, the advance guard rapidly positions observers to control indirect fires against the enemy.

5-252. When possible, the advance guard attempts to gain or create an assailable flank for the main body to exploit. Depending on the strength and disposition of the enemy force, the

commander may direct the advance guard to fix all or a portion of the enemy force to support the maneuver the main body. Examples of other actions the advance guard may take to develop the situation include:

- Destroy or contain enemy security forces.
- Seize key terrain, a flanking position, or other positions of advantage.
- Locate and penetrate a weak area of the enemy's defense or disposition.
- Divert the enemy force into a favorable position for the main body to attack.
- Cause the premature or indecisive commitment of the enemy's reserve or follow-on forces away from the attack of the main body.

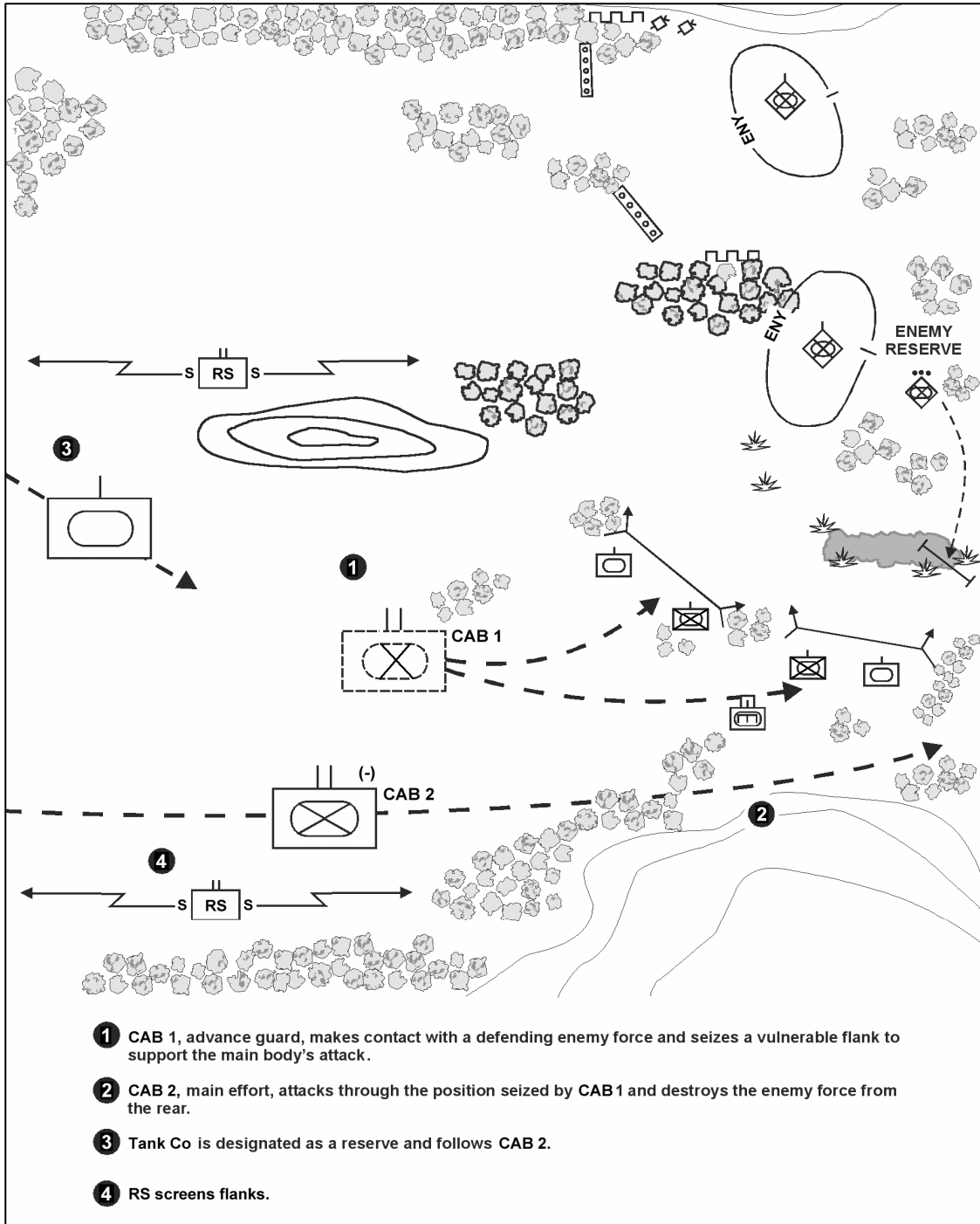


Figure 5-26. Advance Guard Developing the Situation

MANEUVER OPTIONS

5-253. The HBCT maneuvers decisively with the commitment of the main body against a sizable enemy force. It is paramount that the commander is provided timely and accurate intelligence so the appropriate maneuver option is selected. The commander normally makes

the final decision for execution of a maneuver option based on the progress of the initial engagement of the advance guard to develop the situation.

5-254. The movement to contact ends with the commitment of the main body. The following paragraphs provide a general description of the options that may develop after a movement to contact.

5-255. *Attack.* The commander directs an attack when the HBCT has greater combat power than the enemy or when he assesses the HBCT can reach a decisive outcome. The commander quickly develops a scheme of maneuver and concept of fires for the attack and issues orders to subordinate task forces. The commander redirects the reconnaissance effort to develop the intelligence picture of the enemy force and terrain; employs fires, CAS, and situational obstacles; and controls the movement, deployment, and possible retask organization of forces. The envelopment is normally the most desirable choice of offensive maneuver and is used when there is sufficient maneuver space. The commander normally seeks to envelop the enemy force by fixing or blocking the bulk of the enemy force then attacking a vulnerable flank. A penetration is normally used against a stationary enemy force that does not have an assailable flank. After a successful attack, the HBCT may continue the movement to contact if the situation is still unclear or executes other missions as directed by the higher commander.

5-256. *Defend.* The commander directs a defense when the HBCT has insufficient combat power to attack or when the enemy's strength forces the HBCT to halt and prepare for a more deliberate attack. The HBCT maneuvers to the best available defensible terrain—either to the front or rear. The commander may direct the advance guard or another security force to delay an enemy attack to provide time for deployment of the HBCT. Maneuver battalions quickly deploy, establish security, array forces, and develop fire plans. Special emphasis is placed on flank protection and adjacent unit coordination. As the enemy attacks, the commander repositions and maneuvers forces to defeat the enemy through massed fires, situational obstacles, and counterattacks. The commander seeks to defeat an attacking enemy force and create the opportunity for offensive action. In some cases, the HBCT may need to retain its position to allow the UEx commander time to commit additional forces.

5-257. *Retrograde.* The commander directs a retrograde when the HBCT lacks the combat power to attack or defend, to improve a tactical situation, or prevent a worse one from developing. Lead elements of the HBCT establish initial defensive positions while nonessential CS and CSS assets reposition to the rear. Indirect fires, obstacles, and smoke are employed to assist forward elements with disengagement and displacement. Maneuver battalions in contact avoid becoming decisively engaged (see Chapter 6).

SEARCH AND ATTACK

5-258. Search and attack is a technique for conducting a movement to contact that shares many of the characteristics of an area security mission (FM 3-0). A commander employs this form of a movement to contact, conducted primarily by infantry forces and often supported by heavy forces, when the enemy is operating as small, dispersed elements, or when the task is to deny the enemy the ability to move within a given area. The CAB is the echelon that normally conducts a search and attack, although large operations or operations over extended distances may dictate the HBCT conducts multiple search and attack operations in AO's. The HBCT assists its subordinate units by ensuring the availability of indirect fires and other support.

ORGANIZATION OF FORCES

5-259. The HBCT may have one or more subordinate units conducting search and attack operations, or the entire HBCT may be conducting a search and attack operation. The HBCT

normally assigns an AO to any element conducting a search and attack operation. The unit conducting a search and attack (whether CAB – level or HBCT) organizes into reconnaissance, fixing, and finishing forces, each with a specific purpose and task. The size of the reconnaissance force is based on the available intelligence about the size of enemy forces in the AO. The less that is known about the situation, the larger the reconnaissance force. The reconnaissance force typically consists of ISR, infantry, aviation, and electronic warfare assets. The fixing force must have enough combat power to isolate the enemy once the reconnaissance force finds him. The finishing force must have enough combat power to defeat those enemy forces expected to be located within the AO. The commander can direct each subordinate unit to retain a finishing force, or he can retain the finishing force at his echelon. The commander may rotate his subordinate elements through the reconnaissance, fixing, and finishing roles. However, rotating roles may require a change in task organization and additional time for training and rehearsal.

CONTROL MEASURES

5-260. The commander establishes control measures that allow for decentralized actions and small-unit initiative to the greatest extent possible. The minimum control measures for the HBCT for a search and attack are AO's, target reference points (TRPs), objectives, checkpoints, and contact points. For HBCT-level operations FOBs may be designated for placement and security of BTB and FSB assets. The commander uses other control measures, such as phase lines, as necessary.

PLANNING A SEARCH AND ATTACK

5-261. A commander conducts a search and attack for one or more of the following purposes:

- *Destroy the enemy*: render enemy units in the AO combat-ineffective.
- *Deny the area*: prevent the enemy from operating unhindered in a given area; for example, in any area he is using for a base camp or for logistics support.
- *Protect the force*: prevent the enemy from massing to disrupt or destroy friendly military or civilian operations, equipment, property, and key facilities.
- *Collect information*: gain information about the enemy and the terrain to confirm the enemy COA predicted as a result of the IPB process.

5-262. The products of the IPB process are critical to conducting a search and attack. They focus the force's reconnaissance efforts on likely enemy locations.

5-263. The search and attack plan places the finishing force, as the decisive operation, where it can best maneuver to destroy enemy forces or essential facilities once located by reconnaissance assets. Typically, the finishing force occupies a central location in the AO. However, the factors of METT-TC may allow the commander to position the finishing force outside the search and attack area. The commander weights this decisive operation by using priority of fires and assigning priorities of support to his other available combat multipliers, such as engineer elements and helicopter lift support. The commander establishes control measures as necessary to consolidate units and concentrate the combat power of the force before the attack. Once the reconnaissance force locates the enemy, the fixing and finishing forces can fix and destroy him. The commander also develops a contingency plan in the event that the reconnaissance force is compromised

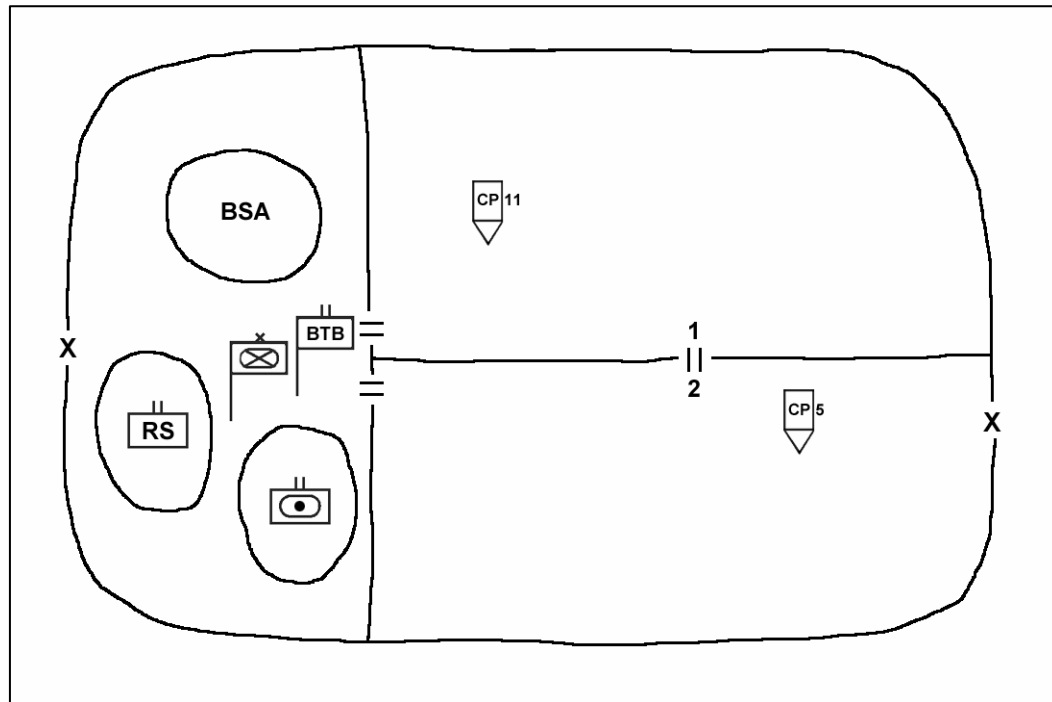


Figure 5-27. Example of Search and Attack Control Measures

5-264. Fires and effects support plans must provide for flexible and rapidly delivered fires to achieve the commander's desired effects throughout the AO. The commander positions his fire support assets so they can support subordinate elements throughout the AO. The commander must establish procedures for rapidly clearing fires.

EXECUTING A SEARCH AND ATTACK

5-265. Each subordinate element operating in its own AO is tasked to destroy the enemy within its capability. The commander should have in place previously established control measures and communications means between any closing elements to prevent fratricide. The reconnaissance force conducts a zone reconnaissance to reconnoiter identified named areas of interest (NAIs).

5-266. Once the reconnaissance force finds the enemy force, the fixing force develops the situation then executes one of two options based on the commander's guidance and the factors of METT-TC. The first option is to block identified routes that the detected enemy can use to escape or rush reinforcement over. The fixing force maintains contact with the enemy and positions its forces to isolate and fix him before the finishing force attacks. The second option is to conduct an attack to fix the enemy in his current positions until the finishing force arrives. The fixing force attacks if that action meets the commander's intent and it can generate sufficient combat power against the detected enemy. Depending on the enemy's mobility and the likelihood of the reconnaissance force being compromised, the commander may need to position his fixing force before his reconnaissance force enters the AO.

5-267. The HBCT (and possibly subordinate battalions) may establish fire-support bases as part of the operations of their fixing force to provide fire-support coverage throughout the area of operations during search and attack operations conducted in restricted terrain. These positions should be mutually supporting and prepared for all-around defense. They are

located in positions that facilitate aerial resupply. The development of these positions depends on the factors of METT-TC because their establishment requires diverting combat power to ensure protecting fire support and other assets located within such bases.

5-268. If conditions are not right to use the finishing force to attack the detected enemy, the reconnaissance or the fixing force can continue to conduct reconnaissance and surveillance activities to further develop the situation. Whenever this occurs, the force maintaining surveillance must be careful to avoid detection and possible enemy ambushes.

5-269. The finishing force may move behind the reconnaissance and fixing forces, or it may locate at a pickup zone and air assault into a landing zone near the enemy once he is located. The finishing force must be responsive enough to engage the enemy before he can break contact with the reconnaissance force or the fixing force.

5-270. The commander uses his finishing force to destroy the detected and fixed enemy during a search and attack by conducting hasty or deliberate attacks, maneuvering to block enemy escape routes while another unit conducts the attack, or employing indirect fire or close air support to destroy the enemy. The commander may have his finishing force establish an area ambush and use his reconnaissance and fixing forces to drive the enemy into the ambushes.

SECTION VI – EXPLOITATION

5-271. Exploitation normally follows a successful attack to take advantage of a weakened or collapsed enemy. Its purpose is the total disintegration of the enemy. To accomplish this, the HBCT attacks rapidly over a broad front to prevent the enemy from establishing a defense, organizing an effective rear guard, withdrawing, or regaining balance. The HBCT secures objectives, severs escape routes, and destroys all enemy forces.

5-272. The conditions for exploitation develop very quickly. During an attack, the commander and staff must clearly identify when the enemy's ability to fight weakens to the point that he is vulnerable to exploitation. Often the lead maneuver battalion in contact identifies the collapse of the enemy's resistance. The commander must receive accurate assessments and reports of the enemy situation to capitalize upon the opportunity for exploitation. The commander must also assess his ability to continue the attack following initial operations. He must rapidly assess relative combat power based on the enemy and his forces available. The conditions for exploitation are normally indicated by:

- A significant increase in EPWs.
- An increase in abandoned enemy equipment and materiel.
- The overrunning of enemy artillery, C2 facilities, and logistics sites.
- A significant decrease in enemy resistance and/or the decrease in organized fires and maneuver.
- An intermixing of support and combat vehicles in formations and columns.
- An increase in enemy rearward movement especially of reserves and fire support units.

5-273. The commander continues to redirect reconnaissance assets to identify locations and compositions of enemy forces beyond the HBCT's immediate front. The commander seeks to detect those enemy targets that most contribute to the enemy continued disorganization. Likely targets include reserves, C2 facilities, artillery, logistic nodes, and escape routes.

PLANNING CONSIDERATIONS

5-274. Since the opportunity for exploitation develops very quickly, the HBCT quickly transitions into the operation with minimum preparation. The goal is to seamlessly

transition from the current operation into the exploitation without loss of momentum. If the current condition of the HBCT precludes an immediate transition, the commander maintains pressure on the enemy through the use of artillery and CAS. The HBCT quickly completes the minimum reorganization activities required to continue the attack. The HBCT normally organizes for exploitation in the same manner as a movement to contact. The HBCT maintains the minimum size reserve required for maintaining flexibility. Digital enablers will enable the HBCT to rapidly execute these activities.

5-275. The commander directs the HBCT into exploitation through the use of a FRAGO. This order addresses as a minimum:

- Commander's intent
- The HBCT's formation
- Subordinate maneuver battalion objectives and tasks
- Modifications to the task organization
- Updated ISR plan
- Revised control measures
- Bypass criteria
- Guidance for the seizure of key terrain or facilities
- Concept of fires

5-276. The ECOORD quickly develops a decentralized fires and effects support plan that provides immediately responsive fires to the lead task force(s) in contact and engages vital enemy targets well ahead of the HBCT. Engineers are task organized well forward to maintain the tempo of the attack. Air defense assets continue to provide all-around air defense. CSS assets must quickly move and displace to maintain responsive. Increased fuel and POL consumption is anticipated and supported as far forward as possible. Due to the potential of bypassed enemy forces, security of MSR's must be considered.

5-277. Decentralized execution is characteristic of the exploitation; however, the commander maintains enough control to prevent overextension of the HBCT. Minimum control measures are used to maintain adequate control. The commander directs the main effort to seize key terrain or destroy enemy targets that most contribute to the enemy's destruction. Terrain oriented objectives such as chokepoints, crossing sites, or key terrain allows the HBCT to gain a position of advantage against the withdrawing enemy. The commander directs attacks against force oriented objectives such as enemy C2, artillery, reserves, and logistic sites to keep the enemy from regaining balance. The exploitation is conducted by rapid movement and the execution of hasty attacks.

PREPARATION

5-278. The HBCT seeks to capitalize on the opportunity to conduct exploitation as quickly as possible. Minimum time is used to prepare the force. Essential preparation tasks may include issuing of orders, resupply and refueling operations, task organization (as required) and the moving artillery and supporting forces.

5-279. During this short transition period, the HBCT maintains pressure on the enemy with artillery, CAS, and situational obstacles, or by conducting small-scale hasty attacks while the remainder of the BCT completes preparations.

EXECUTION

5-280. Reconnaissance systems maintain contact with the enemy and keep the commander advised of enemy activities. Often due the speed of the HBCT's formation, the maneuver battalion will use organic assets to include combat platoons, UEx aviation brigade attack/reconnaissance assets, or unmanned sensors (UAVs) in a security role along the

HBCT's flanks. This prevents additional combat power (or a minimum) from being diverted from the attack for security, reduces the risk of fratricide and keeps the attack from being unnecessarily slowed. CAS and FA fires attack moving enemy reserves, C2 facilities, withdrawing enemy columns, and enemy troop concentrations.

5-281. The HBCT normally conducts the exploitation as part of a larger operation (see Figure 5-28). The HBCT may be assigned the mission to seize a terrain-oriented objective. In this case, the HBCT avoids decisive engagement and moves to the objective as quickly as possible. If assigned a force oriented objective, the HBCT seeks and destroys enemy forces anywhere within its AO. The HBCT normally attacks over a broad front quickly destroying enemy forces as they attempt to escape. The exploitation ends when the enemy reestablishes its defense or when all organized enemy resistance breaks down.

5-282. Overextension is an inherent risk in exploitation. The HBCT's sustainment system must anticipate the occurrence of exploitation as part of all offensive operations and prepare accordingly. The selection, use, and management of sufficient MSRs are critical to responsive CSS operations. In addition to the strain on the sustainment system, the HBCT's LOCs and flanks may become vulnerable to enemy counterattacks. Adequate flank security is essential. While the commander must be concerned with the risk of overextension, he must also guard against being overcautious.

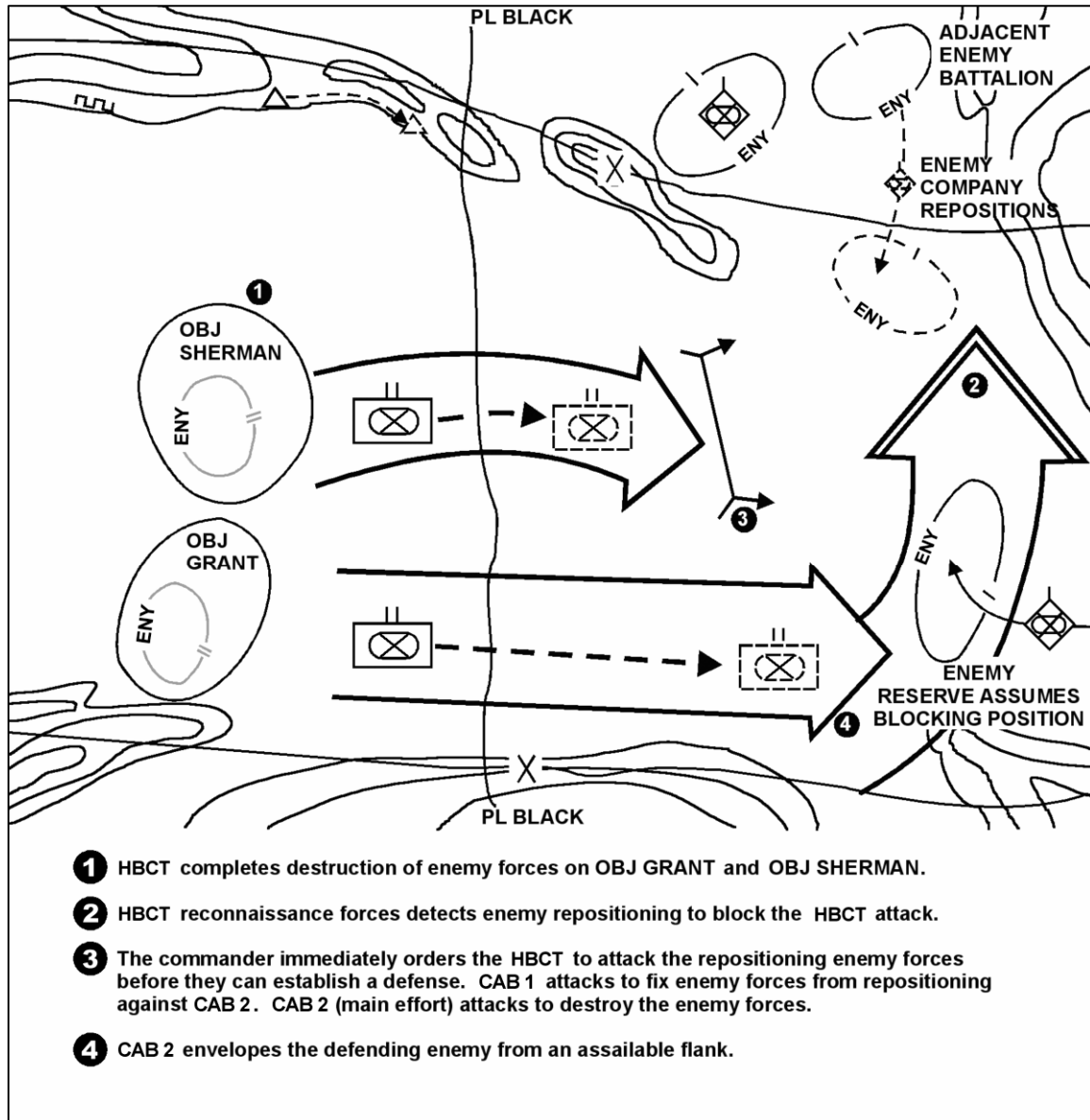


Figure 5-28. Exploit

SECTION VII – PURSUIT

5-283. The HBCT normally conducts a pursuit operation as part of a UEx or higher echelon pursuit, functioning as either the direct-pressure or encircling force. The pursuit normally follows a successful exploitation. Friendly forces in an exploitation are alert for indicators of an enemy collapse that would permit a pursuit operation. The pursuit is ordered when the enemy can no longer maintain its position and tries to escape. The primary function of pursuit is to completely destroy a retreating enemy. In a pursuit, the HBCT may point its advance toward a physical objective; however, the mission is the total destruction of the enemy's force. The HBCT exerts unrelenting pressure to keep the enemy from escaping, reorganizing or preparing defenses. When functioning as the direct pressure force, the HBCT plans and executes the mission in a similar manner as an exploitation. When functioning as

the encircling force, the HBCT plans and executes the mission as an attack against a terrain or force oriented objective. The pursuit normally ends in a defense as a result of the enemy being completely destroyed, the HBCT reaching a LOA or objective, or the HBCT is approaching culmination.

SECTION VIII – OTHER OPERATIONS

5-284. When the HBCT normally concludes an engagement or actions on the objective, it must pause to consolidate and reorganize before continuing the attack. If required, the commander decides the best time and location that facilitates future operations and provides force protection. The HBCT must maintain a high degree of security when performing consolidation and reorganization activities.

CONSOLIDATION

5-285. Consolidation is the process of organizing and strengthening a newly captured position. The HBCT may need to consolidate in order to reorganize, avoid culmination, prepare for an enemy counterattack, or allow time for movement of adjacent units. Consolidation is planned for every mission. Actions during consolidation include:

- Eliminate pockets of enemy resistance.
- Establish security consistent with the threat.
- Establish contact with adjacent friendly units.
- Prepare defensive positions.
- Position air defense assets to maintain coverage.
- Clear obstacles or improve lanes to support friendly movement and reorganization activities.
- Plan and prepare for future operations.
- Destroy captured enemy equipment and process EPWs.
- Maintain contact with the enemy and conduct reconnaissance.

5-286. The HBCT maintains contact with the enemy by redirecting reconnaissance, surveillance, and target acquisition assets, directing small-unit patrols, and possibly conducting limited objective attacks. In some situations, the HBCT may leave a small force to control key terrain or complete clearing the objective while the remainder of the HBCT continues the attack.

REORGANIZATION

5-287. Reorganization is all measures taken to maintain the combat effectiveness of the HBCT or return it to a specified level of combat capability. All units undertake reorganization actions as the situation permits to maintain their combat effectiveness. More extensive reorganization is normally conducted during consolidation. Reorganization tasks include:

- Establish and maintain security.
- Reestablish the HBCT chain of command, key staff positions, and C2 facilities lost before or during the battle.
- Treat and evacuate casualties.
- Recover and repair damaged equipment.
- Redistribute ammunition, supplies, and equipment as necessary.
- Conduct resupply and refueling operations.
- Reposition C2 facilities, communications assets, logistics, and fire support assets for future operations.

Chapter 6

Defensive Operations

The immediate purpose of defensive operations is to defeat an enemy attack, buy time, economize forces, preserve forces, or develop conditions favorable for offensive operations. Defensive operations alone normally cannot achieve a decision. Their purpose is to create conditions for a counteroffensive that allows Army forces to regain the initiative (FM 3-0 [FM 100-5]). Other reasons for conducting defensive operations include:

- Retaining decisive terrain or denying a vital area to the enemy.
- Attriting or fixing the enemy as a prelude to offensive operations.
- Surprise action by the enemy.
- Increasing the enemy's vulnerability by forcing him to concentrate his forces.

As part of UEx defensive operations, the HBCT may defend, delay, withdraw, or counterattack. The HBCT may also perform security tasks. The HBCT normally defends as part of the UEx's Main Battle Area (MBA). The UEx conducts deep operations to create the conditions for the HBCT's success by controlling the introduction of enemy forces into the MBA and weakening the enemy prior to close combat (see FM 3-90). The three types of defensive operations are:

- *Area Defense.* Concentrates on denying the enemy access to designated terrain for a specified time, rather than the outright destruction of the enemy.
- *Mobile Defense.* Orients on the destruction of the enemy through a decisive attack(s) by a striking force.
- *Retrograde Operations.* Forced or voluntary movements to the rear or away from the enemy.

SECTION I – DEFENSIVE CONSIDERATIONS

6-1. This section addresses considerations common to all defensive missions. Defensive principles and basic systems of defense remain unchanged. Successful defenses will still be characterized by thorough preparation, extensive security measures, efforts to disrupt the attack, concentration of combat effects; the earliest and heaviest possible counterattacks, and flexibility in execution. The two basic forms of defense (mobile and area) remain applicable. Both combine static and dynamic elements in different patterns. Modern technologies greatly enhance the natural advantages of the defense, and the design and performance of its static and dynamic elements.

6-2. Static elements structure the defense, break the attacker's momentum, and create opportunities for counterstrokes. Terrain oriented combined arms engagement areas, defined by natural and manmade obstacles and covered by units in prepared positions supported with massed effects, check the attacker's momentum, and control his maneuver within the defended area.

6-3. Located to meet and stop any enemy maneuver, static elements of a defense create dilemmas and imperatives for the attacker. He must overcome or avoid defensive positions in order to continue his operation but concentrating and slowing his movement to defeat defensive positions exposes him to the massed effects of the defender and slows the tempo of action. Loss of tempo is dangerous to the attacker because it permits the defender to recover from initial surprise and to adjust the defense to the actual form of the attack.

6-4. Engagement areas designed to defeat mounted attacks dominate avenues of approach and force the enemy to fight at a disadvantage. Open terrain exposes the enemy to sensors and security forces, leads him into the sights of the most lethal weapons at optimum range, and draws him into hidden mine fields emplaced on his likely avenue of approach. Covered routes require time and effort to clear, as infantry and engineers must breach obstacles, overcome strongpoints, and fight through successive defenses while under continuous fire.

6-5. Modular HBCTs can create such engagement areas more quickly; mask their locations more effectively; and control them with observation, obstacles and fires in less time than in the past. Precision indirect systems and long-range wide area weapons make overwatching forces more lethal. Improved surveillance capabilities mean fewer soldiers need to cover engagement areas of a given size. Improved sensor arrays can cover more areas, provide better warning, and support more effective targeting. Technological advances mean the same number of soldiers can occupy more engagement areas.

6-6. Dynamic elements are usually the decisive factor of the defense and provide the means of transitioning to the offensive. Any defense composed of only static elements is easily approached and eventually defeated. Properly employed dynamic elements (security forces, reserves, and counterattack forces) blind and mislead the attacker and face him with the danger of violent attack while his forces are oriented on static elements of the defense. In a well-designed defense, the attacker is forced to expend great effort in penetrating security forces that delay and disorganize his force as he advances. This gains time for the defending force as a whole while the attacker is thrown off of his plan and requiring him to deploy and fight earlier than intended. Enemy efforts to isolate static positions expose his flanks to counterattacks and create targets for the defender's operations in depth.

6-7. The HBCT's ability to conduct counterattacks and spoiling attacks is enhanced because of better ISR capabilities, more precise timing, more rapid concentration of forces and effects, and greater accuracy in finding and locating the decisive point. This means that such forces can be employed with greater economy. If fewer forces are needed in the static elements of the defense, more forces can be made available for the dynamic elements. It may be possible to pass quickly from defense to the attack, and on to exploitation. An exploitation following a successful counterattack can make operational gains either by reestablishing the defense on improved terms or by gaining the operational initiative and throwing the enemy on the defense. Of significance is the enhancement of networked indirect fires and rapidly responding Army or Joint air attack assets. Layered systems of sensors can detect the approach of the enemy on the ground and in the air, targeting sensors can provide accurate and timely data to "shooters", and precise and lethal munitions can engage rapidly and effectively. Elements of such systems are deployed and will be increasingly available. They are most effective against large-scale attack by mechanized conventional forces along high-speed avenues of approach. They are less effective when the enemy attacks in complex and mixed terrain because targeting moving forces in such terrain is difficult. Defense against an infiltrating enemy and unconventional forces also presents a challenge for current systems.

6-8. Security of forward forces of the HBCT is no longer restricted to ground that can be occupied and covered by artillery and ground reconnaissance assets. Organic unmanned aerial vehicles (UAVs), and improved ability to access national and theater level air surveillance platforms and Joint force intelligence collectors, provide early warning and advance information of attacks. This should extend reaction time against attacks by

conventional mechanized forces even though unconventional attacks will remain difficult to identify in advance. The HBCT must strike attacking forces in depth with joint assets to exploit enemy vulnerability. Using ISR capabilities and targeting to the depth of attacking forces, the HBCT can call on powerful reinforcing artillery, attack helicopters, fixed wing attack aircraft, and joint and Army electronic warfare attack weapons. The decisive engagement of the defense was formerly in the main battle area of the defense; now the decisive engagement may be in the exploitation with the HBCT able to economize forces for shaping and maneuver against the attacker.

PLANNING CONSIDERATIONS

6-9. Regardless of the type of defensive action, the commander develops a plan that is effective against all feasible enemy COAs. The enemy will normally outnumber the HBCT at the start of the battle and he will attempt to mass his combat power at locations to break through the defense. This requires the HBCT to economize forces in some areas, allocate a reserve, and maneuver to gain local superiority at critical points on the battlefield. The HBCT must shift combat power quickly to counter major enemy efforts while holding off secondary efforts. Flexibility is gained by organizing in depth, allocating a reserve, identifying the enemy main attack, and taking risk through economy of force. Key planning considerations are discussed below.

SEQUENCE OF DEFENSIVE OPERATIONS

6-10. As the commander and staff plan a defensive mission, they generally consider preparation and execution. Preparation normally consists of occupation, establishment of security, defense preparation, and continued security operations. Execution consists of security area engagement, MBA engagement, and follow-on missions.

6-11. *Occupation and Establishment of Security.* The commander and staff must plan how the HBCT will move into its AO and establish security. The HBCT may assume a defensive mission at the conclusion of an offensive operation, or may move into an area to prepare for an anticipated enemy attack. The HBCT may conduct a zone reconnaissance, movement to contact, approach march, or tactical road march to occupy the AO. The enemy situation and time available are the driving factors in this decision. The establishment of security is the first priority. Security forces with supporting air defense artillery (ADA), fire support, mobility, reconnaissance, and communications assets normally move into the AO first to protect the deployment of the HBCT. Security forces clear suspected enemy locations, check for contaminated areas and obstacles, and establish security for the AO. Commanders should consider the impact of local populations on security and work (in conjunction with its Civil Affairs teams) with local civil-military authority to reduce or negate that impact. If it is necessary to evacuate the local population out of the HBCT's AO, the HBCT commander and his staff need to consider the impact that displaced non-combatants will have on main supply routes (MSRs), operational security (OPSEC), local security, and life support resources. Military police (MPs), civil affairs (CA) teams, psychological operations (PSYOP) teams, and local civil-military authorities can reduce this impact

6-12. *Preparation and Continued Security Operations.* The commander and staff must plan, supervise, and resource defensive preparations to build the strongest position possible prior to the enemy's attack. Defensive preparations include setting the communication architecture and digital network, positioning weapon systems, positioning ISR assets, constructing obstacles, developing fire and effects plans, fortifying positions, maintaining routes, and rehearsing plans. During this phase, the HBCT maintains security through the use of forces conducting screen, guard, and/or area security missions. OPSEC, information security, obstacle protection, and air defense are also vital to the overall security effort. The preparation phase may last from a few hours to days depending on the enemy situation.

6-13. *Security Area Engagement.* As the enemy attack approaches the AO, the commander and staff monitor the situation via ISR operations and the common operational picture (COP) to anticipate the enemy's arrival and timing of other friendly events such as passages of lines and battle handover. The commander may also make final adjustments to his defensive plan during this time. When the UEx or UEy establishes a security force, the HBCT's reconnaissance and security forces assist the rearward passage of lines for these forces and accept battle handover. Reconnaissance and security forces maintain contact with advancing enemy forces and report critical information. The HBCT often uses security forces, fires (lethal and nonlethal), and obstacles within the security area to disrupt the enemy's momentum and weaken his forces. As the enemy advances into the HBCT's security area, MBA forces make final preparations for the ensuing battle.

6-14. *Main Battle Area (MBA) Engagement.* The battle is fought in the MBA. However, the success of the deep fight due to access to enhanced joint fires and effects and targeting (sensor to shooter links) may make the exploitation of success at depth the essential fight of the defense. The HBCT uses defending forces and reserves supported by obstacles, fires, and a viable deception plan to cause the enemy attack to culminate within the MBA. Defending MBA forces normally identify the enemy's main attack, reduce his combat power, and shape his advance. Reserves are used to counterattack or contain enemy penetrations. Success is achieved by retention of a designated area or defeat/destruction of an enemy force depending on the purpose of the defense. In a delay, success is achieved by controlling the enemy advance, causing him to repeatedly deploy and maneuver, and inflicting maximum damage on his force. Friendly forces immediately reorganize and prepare for follow-on enemy attacks, or follow-on missions upon conclusion of a successful defense.

DEVELOPING DEFENSIVE PLANS

6-15. Defensive plans vary greatly depending on the factors of METT-TC. The commander's assessment of METT-TC—based on the higher commander's order, his tactical judgment, and his physical view of the battlefield—ultimately determines his concept. The commander should take advantage of the opportunity to reconnoiter the battlefield when developing a defensive plan. He envisions the end state of the operation that results in the HBCT's mission accomplishment. Depending on the higher commander's intent, the HBCT may accomplish its mission by delaying the enemy for a specific time, retaining control of a specific area, or defeating an enemy force. The commander analyzes the terrain and potential enemy situation to determine where to defend and actions he considers critical to the success of the defense. He seeks to mass combat effects against enemy vulnerabilities and at locations where the terrain offers the greatest advantages.

6-16. Defensive plans should focus on a defeat mechanism. A defeat mechanism is the action or series of actions, not necessarily the type of force or unit, by which the HBCT intends to defeat the enemy. The defeat mechanism may be a single massive counterattack or a series of local actions such as a series of EAs in depth. Generally, the defeat mechanism in an area defense is the cumulative effects of direct fires and indirect fires supported by obstacles. The final defeat of the enemy usually requires a counterattack by the HBCT reserve or a transition into an offensive action. The defeat mechanism in a mobile defense is normally a counterattack(s) by forces supported by indirect fires, and obstacles while the enemy is fixed or delayed by other forces.

6-17. The commander must understand the natural advantages offered by the terrain and how the terrain will affect the enemy's maneuver. He uses terrain visualization products, terrain analysis by his staff, reconnaissance forces, and his personal reconnaissance of the terrain to gain this understanding. Understanding the terrain and exploiting its advantages are essential aspects for all successful defenses. The ABCS suite provides significant terrain

detail and analytical products that allow the commander significantly enhanced terrain tools for planning.

6-18. Battlefield successes largely depend on the commander's ability to see the battlefield and anticipate enemy actions. He seeks to identify how the enemy will try to use the existing terrain while determining how best to use the terrain to his advantage. The intelligence preparation of the battlefield (IPB) provides the products that support this visualization. The IPB integrates enemy doctrine with the weather, terrain, and the anticipated situation. The IPB helps the commander define where to concentrate combat effects, where to accept risk and potential decisive actions, the restated mission, commander's intent, and the IPB guide development of defensive plans. Maintaining contact with the enemy via external national and theater intelligence sensors and those units in contact allows the HBCT commander to develop the situation out of contact.

6-19. The commander and staff determine the array of forces, Essential Fire Support Tasks (EFST), and obstacle effects within a security area, MBA, and rear area required for supporting the defeat mechanism. They determine what effects forces, fires, and obstacles must achieve on enemy formations by avenue of approach and how these affects will support the defeat mechanism. They define the task(s) and purpose for subordinate units and establish priorities for combat support (CS) and sustainment operations. Obstacle and fires and effects support plans are developed concurrently with the scheme of maneuver. The commander drives integration by stating his EFSTs and intended obstacle effects. This is how the commander intends to mass the effects of direct and indirect fires with obstacles to shape the battlefield in support of the defeat mechanism.

ORGANIZATION OF DEFENSIVE ACTIONS

6-20. The HBCT normally organizes defensive battlefields in a contiguous manner with forces arrayed in a security area, MBA, and rear area (see Figure 6-1).

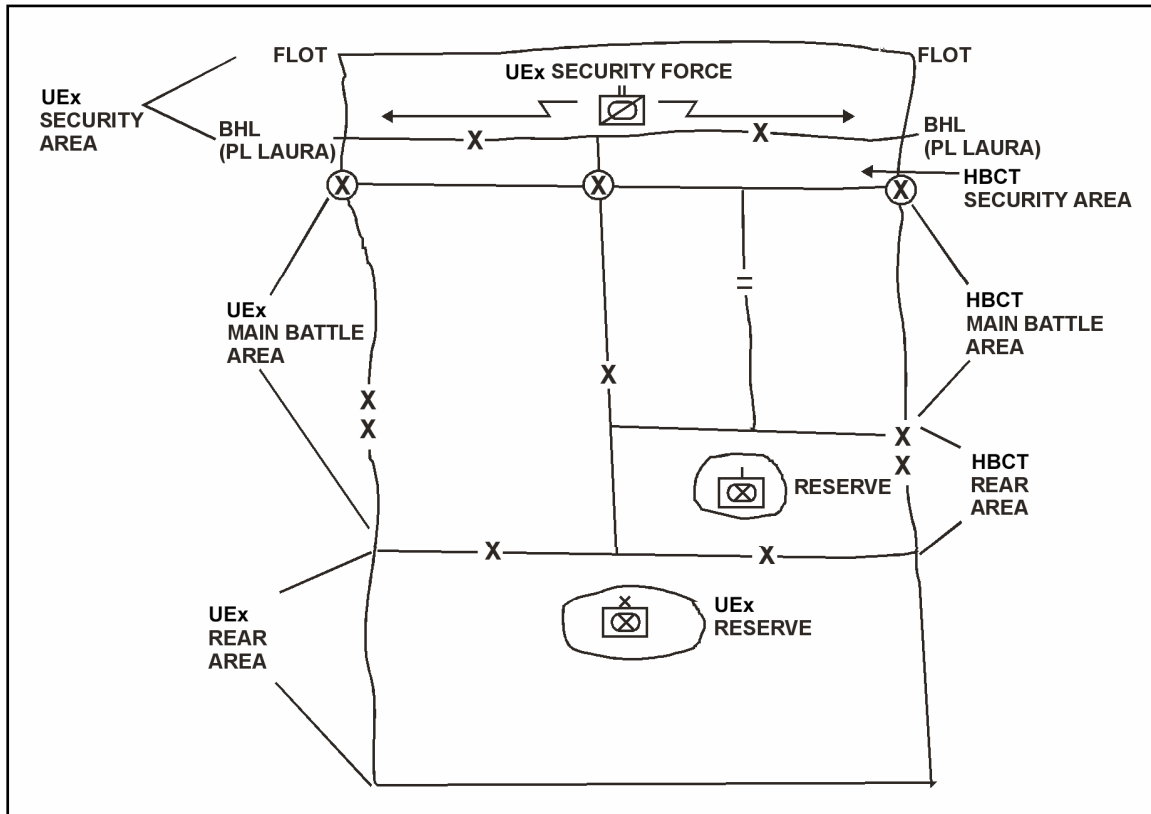


Figure 6-1. Typical Organization of a Defensive Battlefield

SECURITY AREA

6-21. The HBCT normally establishes a security area to provide early warning and reaction time, deny enemy reconnaissance efforts, and protect the MBA. The forward security mission is normally executed as a guard or screen. There are three general options for organizing the security force (see Figure 6-2):

- Forward defending maneuver battalions establish their own security areas.
- Maneuver battalions provide security forces that operate with the HBCT reconnaissance squadron under the HBCT's direct control.
- A maneuver battalion operates the HBCT's security force.

6-22. The UEx commander defines the depth of the HBCT's security area through control measures and his concept of operations. The HBCT's security area extends from the forward edge of the battle area (FEBA) to the HBCT's forward boundary. Depth in the security area provides the MBA more reaction time and allows the security force more area to detect and engage enemy forces. A very shallow security area may require more forces and assets to provide the needed reaction time. The HBCT commander must clearly define the objective of the security area. He states the tasks of the security force, in terms of time required or expected to maintain security, expected results, disengagement and withdrawal criteria, and follow-on tasks. He identifies specific avenues of approach and named areas of interest (NAIs) the security force must cover. Security forces also assist the rearward passage of lines of any UEx and UEy (or higher echelon) security forces at the battle handover line (BHL).

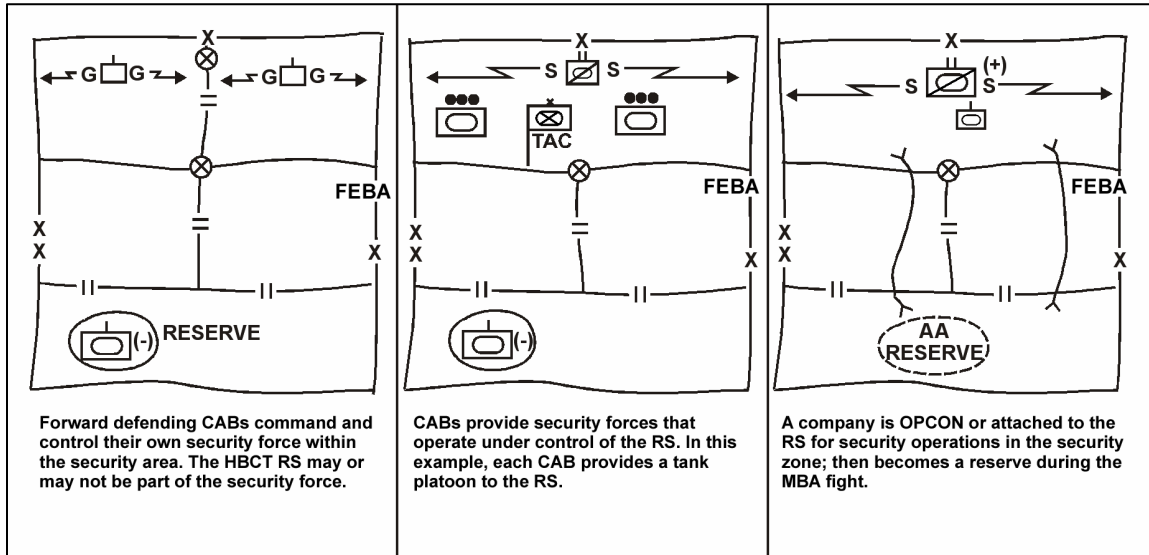


Figure 6-2. Options for Organizing the Security Area

6-23. Security forces establish observation posts (Ops) and conduct patrols to detect and destroy enemy reconnaissance assets. UAVs are used to detect and aid in the targeting of reconnaissance assets and HPTs, and confirm or deny CCIR. This is a vital step in disrupting the enemy's plan and getting inside his decision cycle. The S2 analyzes likely routes and methods the enemy will use to conduct reconnaissance. He templates likely locations and activities of enemy OPs, patrols (mounted and dismounted), and other reconnaissance assets. NAIs are established at these locations to focus counter-reconnaissance activities.

MAIN BATTLE AREA

6-24. The MBA is where the HBCT deploys the bulk of its combat power against the enemy. The HBCT's MBA extends from the FEBA to the forward maneuver battalion's rear boundary. The commander selects his MBA based on the higher commander's concept of operations, IPB, initial ISR results, and his own estimate of the situation. The commander assigns responsibilities within the MBA by assigning boundaries to subordinate forces. If the commander does not assign boundaries to subordinate task forces, the HBCT is responsible for terrain management, security, clearance of fires, and coordination of maneuver within the entire AO. The commander may control his forces by assigning maneuver battalions an AO, battle position (BP), or strongpoint. The BTB retains command of organic elements located in the MBA, and is responsible for security of the HBCT-level command posts (CPs). The focus of the BTB will, in most cases, be security operations in the rear area.

6-25. *Area of Operation.* An AO gives maneuver battalions freedom of maneuver and fire planning within a specific area. A defense in AO allows the maneuver battalion commander to distribute his fires to suit the terrain and anticipated enemy situation. Maneuver battalion AOs are allocated based on covering enemy avenues of approach. A maneuver battalion's AO must provide adequate depth based on its assigned tasks, the terrain, and the anticipated size of the attacking enemy force. An AO requires continuous coordination with flank units for security and to maintain a coherent defense. The commander cannot allow subordinate maneuver battalions total freedom to develop their defenses if the HBCT's defense is to remain cohesive. Control measures such as PLs, coordinating points, EAs, obstacle belts, and BPs are used to coordinate task force defenses within the MBA (see

Figure 6-3). During defensive preparations, the commander and staff use confirmation briefs, backbriefs, inspections, and supervision to ensure task force defenses are coordinated and that unacceptable gaps do not develop.

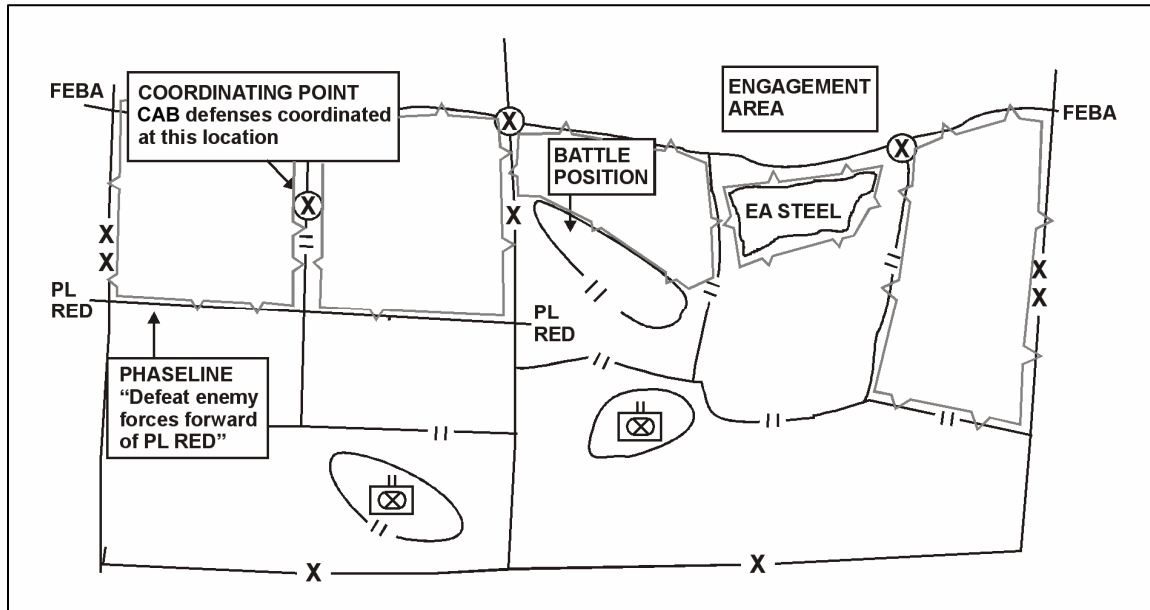


Figure 6-3. Example Control Measures used to Coordinate Defense by AO

6-26. *Battle Positions.* The commander assigns a maneuver battalion a BP when he wishes to control its fires, maneuver, and positioning. Boundaries are normally still assigned to provide space for maneuver battalion security, CS, and CSS elements that normally operate outside a BP. When the commander does not establish unit boundaries, the HBCT is responsible for fires, security, terrain management, and maneuver between positions of different maneuver battalions. The BP prescribes a primary direction of fire by the orientation of the position. Maneuver battalion BPs are positioned and oriented on well-defined enemy BCT size avenues of approach. A maneuver battalion BP must provide sufficient space for dispersion and depth of weapon systems, supplementary and alternate positions, and flanking fires if possible. The commander defines when and under what conditions the maneuver battalion can displace from the BP or maneuver outside it. Also, the use of prepared or planned BPs with the associated tasks of prepare or reconnoiter provides flexibility to rapidly concentrate forces and adds depth to the defense.

6-27. *Strongpoint.* A strongpoint is a heavily fortified BP tied into a natural obstacle or restrictive terrain to create an anchor for the defense. A strongpoint implies retention of terrain with the purpose of controlling key terrain and/or blocking, fixing, or canalizing enemy forces.

6-28. Defending units require permission from the higher headquarters to withdraw from a strongpoint. Strongpoints are prepared for all-around defense. Strongpoints for armored or mechanized forces are seldom used because they sacrifice the inherent mobility advantage of heavy forces. Strongpoints require extensive engineer effort and resources. All combat, CS, and CSS assets within the strongpoint require fortified positions. Also, extensive protective and tactical obstacles are required to provide an all-around defense. A strongpoint normally requires one full day of engineer effort of a same size engineer force as the force defending the strongpoint. Before assigning a strongpoint mission, the commander considers the following:

- Loss of survivability and countermobility effort to other areas within the defense.
- Potential for the defending force to be encircled or isolated by the attacking enemy.
- Availability of sufficient time and resources to construct the position.

REAR AREA

6-29. The rear area extends from the rear boundaries of the forward maneuver battalions to the HBCT's rear boundary. It normally contains the bulk of the HBCT Sustainment capability and may include additional CS assets, uncommitted combat forces, artillery units, and C2 facilities. The BTB is responsible for rear area security operations; however, all units and the brigade support battalion (BSB) are responsible for their own local security. Planning for combat operations in the rear area should not unnecessarily divert combat power away from the MBA. However, the BTB has limited forces on hand to respond to aggressive enemy actions to destroy or disrupt rear operations. HBCT defensive plans must address the early detection and containment or destruction of enemy forces attempting to operate in the rear area. Units in the HBCT rear area are responsible for planning, executing, and defending against Levels I and II enemy attacks. However, rapid response to rear area threats, especially Levels II and III, is vital to the HBCT's ability to execute a successful defense. To counter Levels II and III threats, the HBCT commander may have to commit combat forces and fires to counter enemy actions directed against the rear area. The commander must balance the risk of diverting combat power away from the MBA against the potential impact that the enemy's actions in the rear area will have on the overall operation. Fire support and attack aviation (when available), with their ability to rapidly provide responsive fires and effect, are key to defeating rear area attacks while preserving the integrity of ground combat forces in the MBA.

6-30. Commanders should consider the following when positioning and allocating artillery and attack aviation units to fight rear area threats:

- *Positioning.* A field artillery (FA) battery providing fires to the rear will be at the expense of the main/supporting efforts.
- *Observers.* A dedicated source to conduct calls for fire must have eyes on the target. Aerial observers from the aviation brigade, capable of directing artillery, attack aviation, and joint effects are often the best observers against rear areas threats.
- *Clearance of Fires.* When firing into the rear area, HBCT S3 must rapidly deconflict who owns the ground, coordinate unit positioning, routes and activities.
- *Type of Threat and Desired Effects.* The use of area fire weapons (aviation rockets/mini-guns as well as FA fires) is not the most accurate or effective means of defeating Level I and II threats. Commanders will normally have to commit a ground force to ensure and confirm that all enemy forces are defeated.

6-31. The staff must identify the enemy threats to the rear area and critical functions to be protected. IPB should include likely avenues of approach into the rear area and potential LZs or DZs for enemy airmobile forces. The ISR operations of units within the rear area maintain the surveillance and responsibility to defend these areas.

RESERVE

6-32. The reserve is a force(s) withheld from action to be committed at a decisive moment. The reserve provides the HBCT flexibility to exploit success or deal with a tactical setback. The maintenance of a reserve is essential for depth in a defense.

6-33. Critical to planning is the commander's risk assessment, both for forward deployed forces and for those forces committed/required in the rear area. A challenge arises when fighting the HBCT for identifying and establishing a suitable reserve force. The challenge arises from the reduction in the number of maneuver battalions from three to two. The

commander's mission analysis must address the most efficient means to form a reserve or mitigate risk by other means.

6-34. *Positioning the Reserve.* The reserve is positioned to quickly respond to anticipated missions either in support of MBA or rear operations. A reserve maintains force protection from enemy fires and detection by maximizing covered and concealed positions, wide dispersion, and frequent repositioning.

6-35. When resourced or METT-TC allows, the HBCT will begin defensive operation with a company reserve, and allocate additional forces to the reserve as operations progress. In other cases, his initial reserve force may be as small as a tank or mechanized infantry platoon. The commander and staff must look for opportunities to utilize other forces, such as fires, aviation, airmobile Javelin teams, and rapidly emplaced intelligent minefields to assist with the reserve mission. The HBCT commander gains information superiority over his enemy in order to eliminate as much uncertainty as possible and achieve decisive results. He must capitalize on the capabilities of digitization to apportion his available troops to the required defense tasks. Solid intelligence can lead him to concentrate his committed units against a specific enemy weak point and allow him to withhold a reserve of battalion size.

6-36. A reserve is assigned a BP when it is assigned a planning priority to defend its position; otherwise an assembly area is used. Maintaining and positioning a reserve is a key requirement for achieving depth within the defense. The commander and staff determine the size and position of the reserve based on the accuracy of knowledge about the enemy and the ability of the terrain to accommodate multiple enemy COAs and risk. When the HBCT has good knowledge about the enemy, and the enemy's maneuver options are limited, the HBCT can maintain a smaller reserve. If knowledge of the enemy is limited, and the terrain allows him multiple COAs, then the HBCT needs a larger reserve positioned deeper in the AO. This gives the HBCT the required combat power and reaction time to commit the reserve effectively.

6-37. *Alternatives to a designated reserve.* Based upon METT-TC factors, the HBCT may choose not to designate a ground maneuver unit as a dedicated reserve force. An alternative is to task, via OPORD or FRAGO, a subordinate unit to "be prepared to" to provide a designated size force to execute specific missions, within a specified timeline. An example would be the HBCT giving a CAB the mission of be prepared to counterattack with a company into an EA or against a wargamed enemy penetration.

6-38. To generate a larger ground maneuver reaction capability, the commander may find it necessary to redirect committed elements after they have accomplished their initial tasks, in the event of a penetration, or when the enemy's defeat frees them for other tasks. The speed, agility, and emerging digitization at the unit level enables companies, and sometimes battalions, to be committed, withdrawn, redirected and recommitted during the fight. Employing a positional reserve requires the best possible SU and COP (to include updated accurate threat icons). Rapidly maneuvering a force from one area of the MBA to another, (left to right or front to rear) requires everyone in the HBCT to know the location of the positional reserve, the location of the enemy, and the locations of other friendly forces. Additionally, the movement of ground forces over the distances expected in the expanded battlespace requires time.

6-39. *Combat support and sustainment for reserve operations.* Essential CS and sustainment units are task organized to the reserve and normally includes engineers, ADA, reconnaissance, and logistics assets. During the preparation phase, CS and sustainment units may support other efforts within the MBA. But it is essential that control of task organized CS, and sustainment units assigned to support the reserve, pass to the reserve force in sufficient time to linkup, resupply, and conduct troop-leading procedures (TLPs).

6-40. *Tasks of the reserve.* The reserve's likely tasks are issued as planning priorities and may include one or more of the following:

- Counterattack
- Contain enemy penetrations
- Reinforce other committed forces
- Protect sustaining operations
- Assume the mission of another committed force
- Rear area operations

6-41. *Counterattack.* The HBCT may decide to use the reserve as a counterattack force to penetrate enemy forces or defeat the attacker. Basic guidelines for counterattacks include the following:

- Attack one objective at a time and weigh it with all available combat power and fires. Avoid piecemeal commitment of the counterattacking force. Once committed, the counterattack force is normally the main effort.
- Determine movement times based on routes available and develop clear DPs for when and where to launch the counterattack.
- Defeat the targeted enemy force before being attacked by subsequent enemy forces. Indirect fires and situational obstacles may delay follow-on attacking enemy forces.
- Determine and recognize enemy deception efforts aimed at causing the premature or indecisive commitment of the reserve.
- Seek to avoid the enemy's strength. The most effective attacks are against exposed enemy flanks and/or rear. Attacks from an unexpected direction at the point and time of the enemy's greatest vulnerability have the best potential for success. Take advantage of the protection and concealment offered by the terrain and/or limited visibility.
- Maintain flexibility. Although counterattack plans are developed during the planning process, the counterattack force must be prepared to quickly attack at different times and locations based on the actual situation. Anticipation of events, a clear understanding of the commander's intent, and a heavy reliance on standard operating procedures (SOPs) greatly increase the agility of the counterattack force.
- When feasible, launch counterattacks around other committed units rather than through them. This reduces the vulnerability and time-consuming coordination associated with a passage of lines.
- Consider the strength, disposition, and location of the enemy's reserve. If the reserve is committed before the enemy reserve is committed, the HBCT may lack the ability to counter the enemy reserve. If the enemy's reserve is uncommitted, the HBCT must take measures to prevent its decisive commitment into the battle. Fires, situational obstacles, and CAS may be able to delay, neutralize, or destroy the enemy reserve, providing time for the HBCT to counterattack and recover its reserve.

6-42. The commander uses DPs and NAIs (developed during construction of the DST) in conjunction with ISR and battlefield results ascertained via reports and the COP to trigger execution of a counterattack (see Figure 6-4). The commander and staff consider the enemy situation and estimate time and space factors relating to the movement of enemy forces. The staff considers time and space requirements for the counterattack force to close on the enemy force, attack, and then withdraw or consolidate before follow-on enemy echelons can interfere. They consider the likely strength and composition of the targeted enemy force to determine supporting efforts, fires, and obstacles required for supporting the counterattack objective. They also consider what likely interdiction against enemy reserves and follow-on forces is necessary. They must determine what the reserve will do once it has completed the

counterattack. If the mission of the counterattack force is to stay and defend against another enemy echelon (such as when MBA forces are weak and the reserve is still strong), it must have time to gain good defensible positions before follow-on enemy echelons can interfere. If the reserve is to withdraw after its mission and continue to serve as the HBCT reserve, the plan must address its reconstitution. The counterattack plan must address the following:

- Task(s) and purpose of the counterattack force.
- Task(s) and purpose of the counterattack force once the counterattack is completed.
- Commander's intent.
- Planning assumptions to include the size and shape of the assumed penetration or salient; the strength, composition, and disposition of the enemy force; and the status of forces in the MBA.
- Supporting efforts, units, fires, and obstacles that will support the counterattack.
- Adequate control measures such as routes, axis of advance, boundaries, restricted fire line (RFL), objective(s), EAs, and limit of advance (LOA).
- Adequate FSCMs and airspace coordinating measures (ACMs)
- Specific control measures and procedures for a passage of lines.
- Traffic control plans for ensuring movement routes remain open.

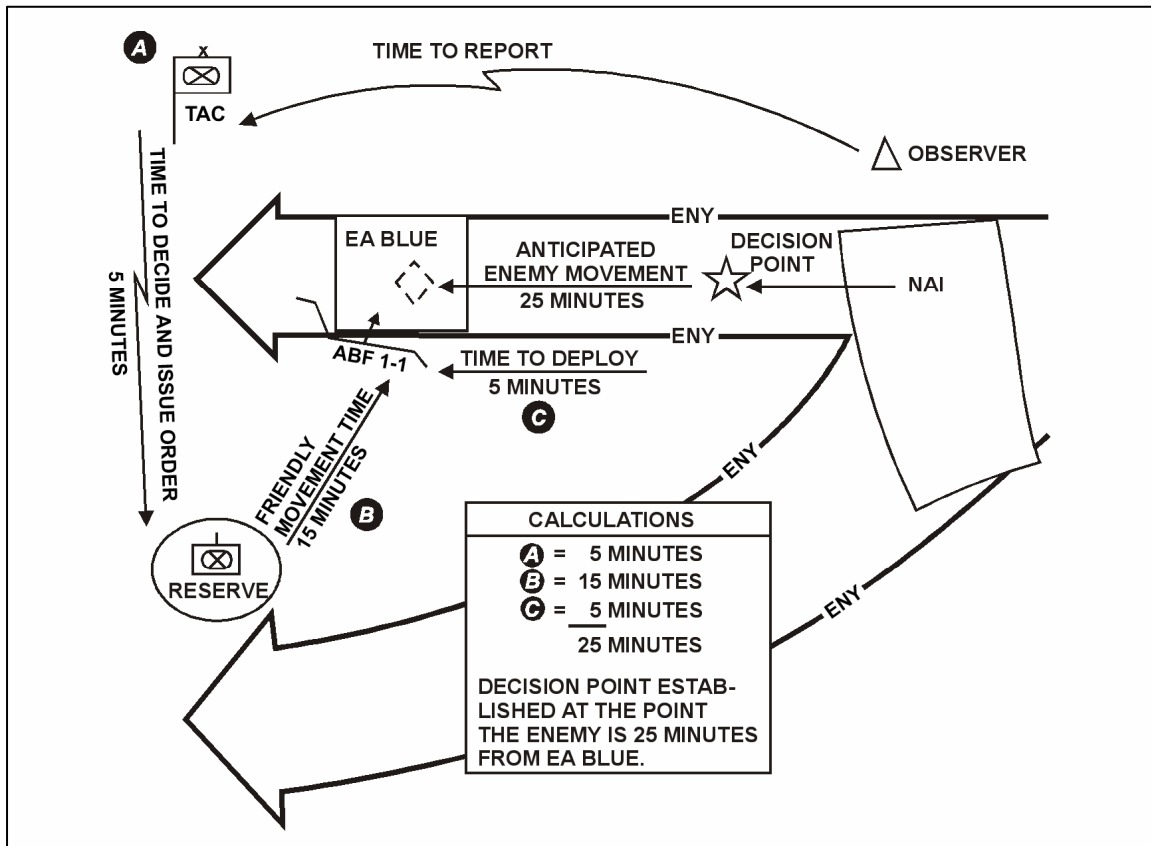


Figure 6-4. Example of Counterattack Planning

6-43. Effective counterattacks require detailed coordination and refinement. This includes reconnaissance of routes and positions, rehearsals, verification of time and space factors, fire planning, and coordination with adjacent units. Counterattack plans are rehearsed during the day and night. The counterattack force should mark routes, establish guides, and

improve routes to ensure smooth execution. The reserve commander coordinates with adjacent task forces for:

- Movement and attack routes.
- Passage of lines, if required.
- Location and orientation of friendly positions and units.
- Actions for continuation of the attack to or beyond the FEBA.
- Coordination of key control measures to include boundaries, objectives, checkpoints, and the LOA. Also includes coordination of fires (target reference points [TRP], EAs, and RFL).
- Location of forward observers (FOs), scouts, and reconnaissance assets communication and digital nodes.
- Location of obstacles and obstacle lanes guides and far and near lane markings.

6-44. In some cases, the enemy attack may culminate without the need for the commitment of the reserve. This provides the opportunity for the HBCT to commit the reserve to exploit success. The commander uses the reserve to defeat the enemy, seize key terrain, or to attack key enemy targets that prevents the enemy from regaining the initiative. Other forces may quickly join the initial attack of the reserve to further exploit the situation. In Figure 6-5, the enemy attack culminates in a portion of the MBA and the HBCT counterattacks with one maneuver battalion destroying remaining enemy forces within the AO as the reserve attacks vital enemy targets to defeat the enemy in detail.

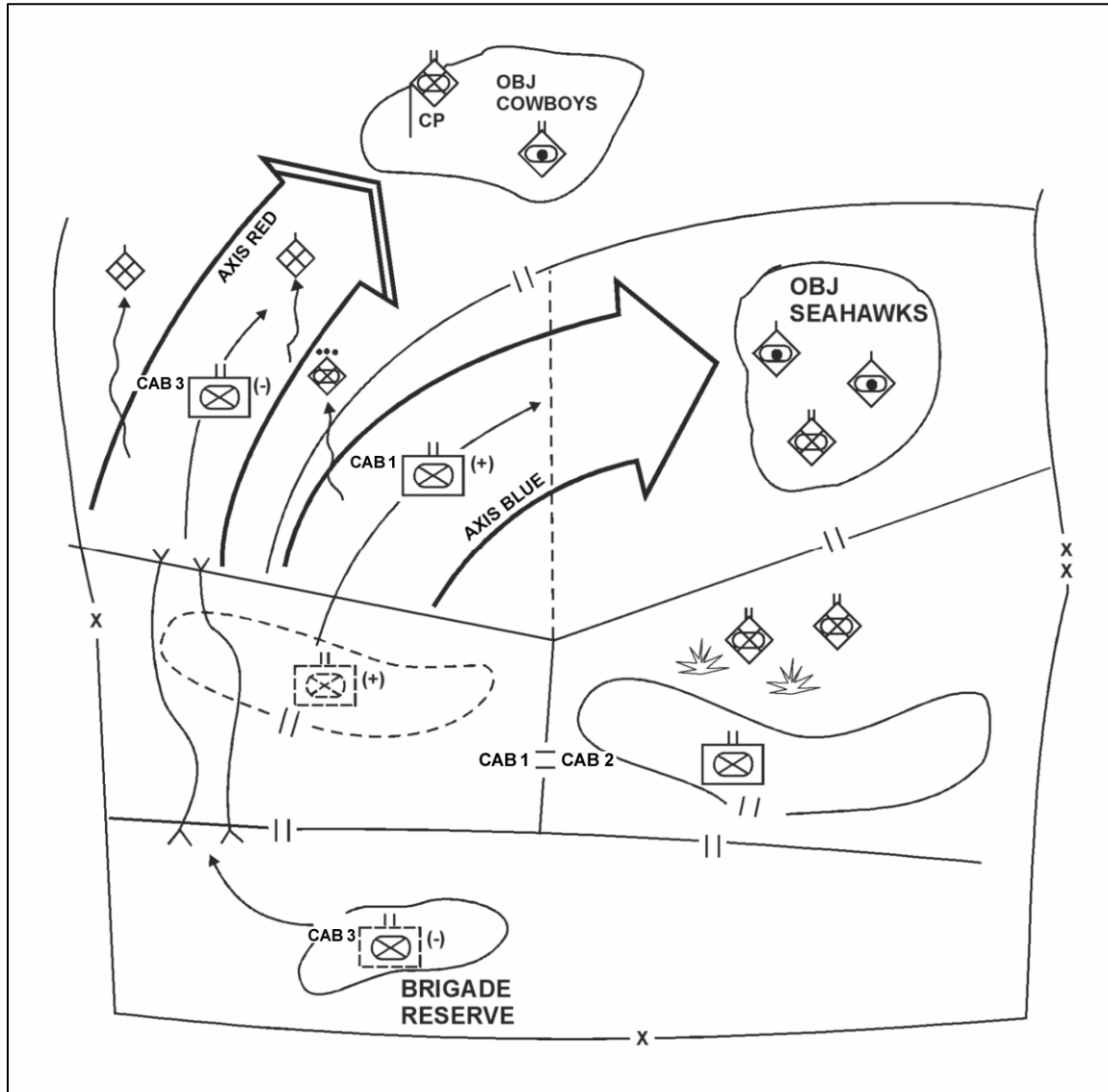


Figure 6-5. Exploiting Success with the Reserve

6-45. *Contain enemy penetrations.* The commander may commit the reserve to contain enemy penetrations when the enemy's strength prevents the HBCT from launching a decisive counterattack (see Figure 6-6). During planning, the staff can prepare for penetrations by analyzing enemy COAs and friendly weaknesses to anticipate possible locations of penetration. During planning, the staff war games possible enemy penetrations. They consider the actions and routes of the assumed penetrating enemy force to identify favorable terrain for countering it. They develop these areas as BPs, EAs, or objectives then assign the reserve the appropriate planning priorities to respond to the possible penetration. The staff defines routes, control measures, and FSCMs needed to control the attack. Hypothetical enemy penetrations must be considered, graphically displayed and given to all subordinate commanders. Subordinate commanders use this information in their planning. Although plans are developed in advance, the HBCT must be prepared to counter unexpected enemy penetrations wherever they occur.

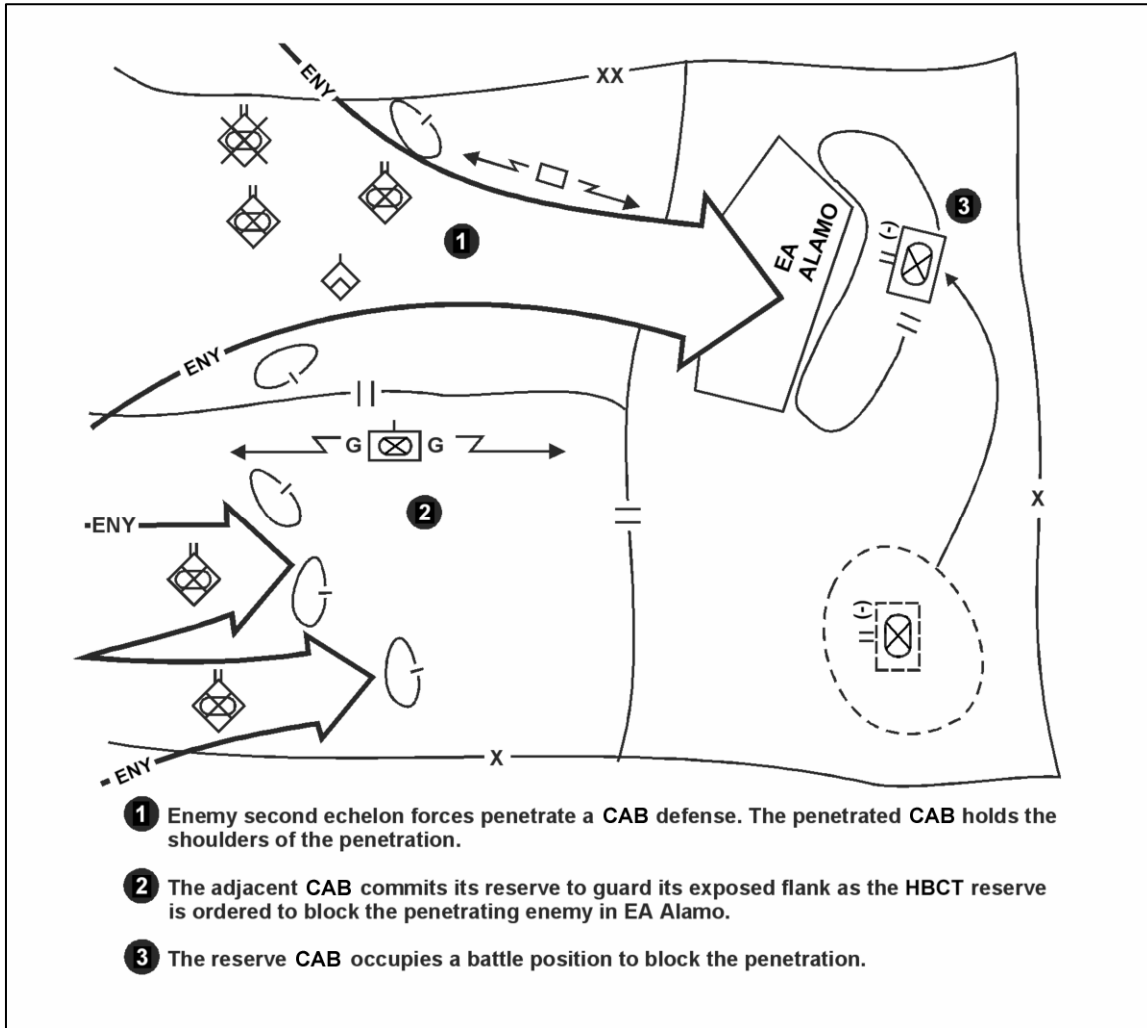


Figure 6-6. Blocking an Enemy Penetration

6-46. *Reinforce other committed forces.* The commander may commit the reserve to reinforce a committed maneuver battalion that has sustained heavy losses or to build up a defense in a critical area of the battlefield. The commander should only use the reserve to reinforce a critical effort, which if lost, will cause the collapse of the entire HBCT defense. Reinforcing missions are least likely to take the initiative from the enemy. Such a task is a reaction to the attacker's initiative and can be decisive only if the reserve completely destroys the attacker or at least holds the enemy advance for a flanking counterattack by other reserve forces. When given a reinforcing mission, the reserve must possess sufficient combat power to accomplish the mission. Without this strength, the reserve will be destroyed and the attacker will be free to exploit success. When committing the reserve to a reinforcing mission, the commander must define how the reserve is to integrate into the threatened unit's defensive scheme, command and control (C2) organization, and positioning requirements. This mission is normally only used when the HBCT's reserve is a company-size force.

6-47. *Protect sustaining operations.* The commander may use the reserve or a portion of the reserve to deal with enemy threats to the rear area. Fighting in the rear area may become necessary during preparation or execution of the defense. The commander must seriously

consider the implications to the MBA engagement in deciding whether to commit the reserve to action in the rear area.

6-48. *Assume the mission of another committed force.* It may become necessary for the commander to commit the reserve to assume the mission of another committed force (see Figure 6-7). The HBCT can only execute this mission if augmented by the UEx with sufficient ground forces to allow the appropriate force ratios by the assuming unit in order to assume the mission. This is a very complicated mission and usually can only take place during a lull in the battle. The commander may have the reserve assume a position to the rear of the committed force then the forward force may delay through the reserve, withdraw behind the reserve, or the two units conduct a relief in place. By assuming the mission of another committed force, the HBCT can maintain the ability to conduct continuous operations by rotating fresh units into the battle. If the relieved unit(s) is designated as the reserve, it is important to understand that its combat effectiveness is lowest right after relief. Effectiveness will increase with time, rest, and reconstitution.

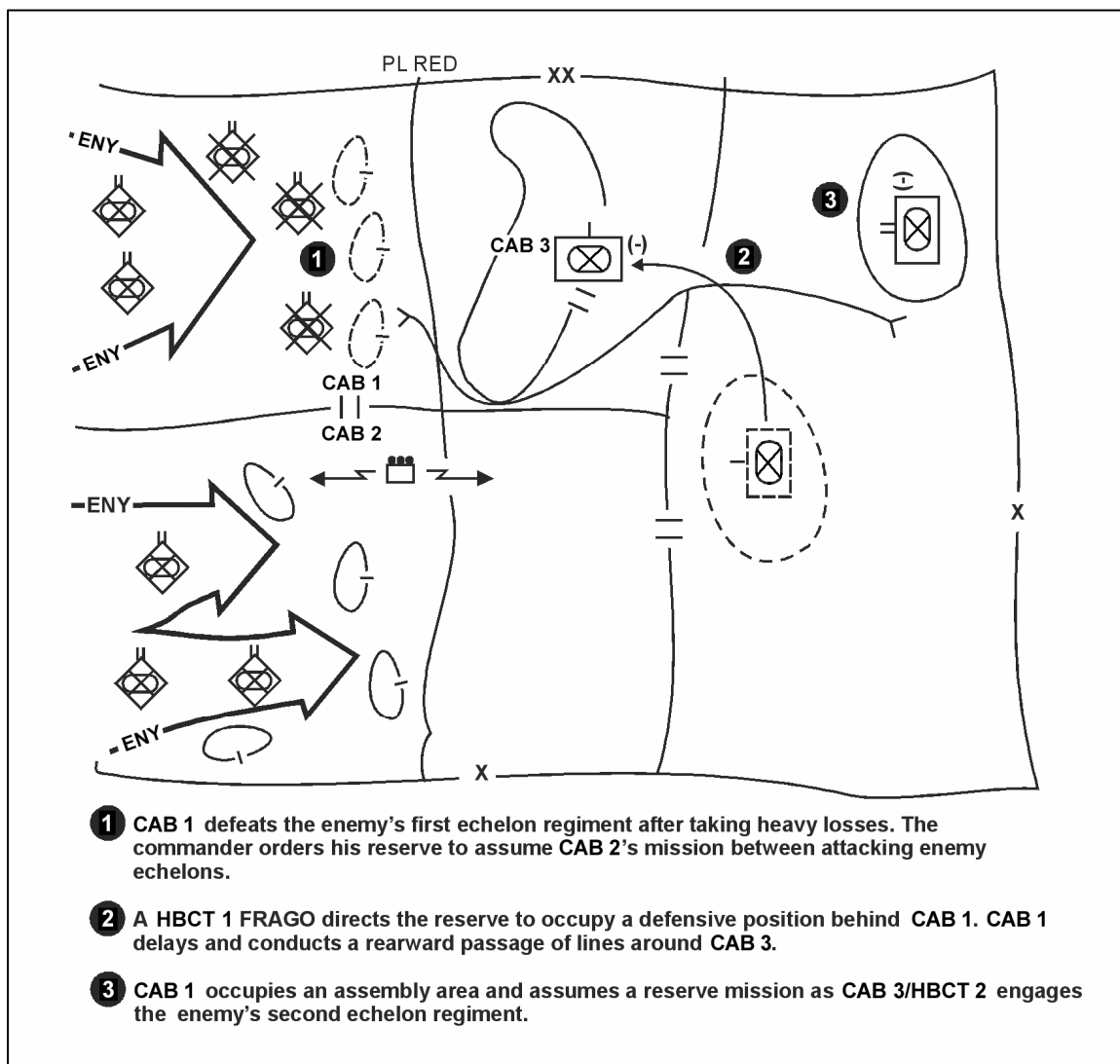


Figure 6-7. Assuming the Mission of a Committed Force

SECTION II – AREA DEFENSE

6-49. An area defense concentrates on denying the enemy's access to designated terrain for a specific time rather than on the outright destruction of the enemy. The HBCT normally conducts an area defense when the following conditions exist:

- Mission requires holding certain terrain for a specific period of time.
- There is enough time to organize the position.
- The HBCT has less or equal mobility than the enemy.
- The terrain limits counterattacks to a few probable employment options.
- The terrain affords natural lines of resistance and limits the enemy to a few well-defined avenues of approach, thereby restricting the enemy's maneuver.

6-50. The HBCT either possesses or is provided the resources to conduct an area defense (such as sufficient engineer effort and adequate barrier materials).

6-51. The basic principles for the area defense will not change although the modular UEx and HBCT will execute them differently. The static elements of the defense – battle positions, strong-points, blocking positions, prepared defensive positions – will be more dispersed and less dependent on their neighbors for security. Harder to detect and template, they will appear disjointed or look more like a security area than a defense to the enemy. Towns, infrastructure and positions in open and close terrain are all integrated into an area defense. The HBCT's ability to maintain awareness over larger areas, focus devastating precision and wide area fires, emplace dynamic obstacles freely and initiate well-timed local counterattacks will make future area defenses a more active, deeper and more lethal than in the past.

6-52. UEx and HBCTs may employ area defenses against either mounted or dismounted attacks. When the enemy is primarily dismounted, the defended area may be shallower and the defenders will have to provide for local security and for surveillance and defense of all covered approaches. While the defender may use delay against a mounted attacker, he will have less freedom of maneuver within the defended area against an infiltrating enemy.

6-53. Manned and technical (unmanned) security operations well away from the defended area will provide early warning and identify the attacker's main effort as early as possible to facilitate the final adjustments required to meet it. Deep, layered, and protected systems of covering surveillance, fires, and air defenses react with precise, lethal, and suppressive fires to disrupt the coherence of the attack—suppress command and control, and supporting fires; upset timing and mutual support; and delay the arrival of reserves. One aim of these activities is to defeat the attacker's ability to concentrate support for his main effort. An interlocking web of mutually supporting engagement areas and obstacles entrap and exhaust the attacker's main effort and restrict his maneuver options. Concentrated long-range fires focus on the attacker's main effort while dynamic counter strokes exploit these combined effects to expel penetrations and restore the coherence of the defense. If the enemy does shift his main attack axis to another subordinate, this now becomes the new main effort of the defense. The flexibility to shift the focus of support to the new main effort contributes to success. These combined actions force the attack to culminate short of its objective. The defender then must exploit this success to restore the defense or seize the offensive.

6-54. Rapid reactive systems of covering fires will complicate the attack of an area defense in the future. Mounted ground forces in open terrain will especially vulnerable to such fires. Any penetration of the area of surveillance of such systems is immediately identified friend or foe, an engagement decision made, the optimum shooter of the moment selected, targeting data is sent to that shooter, the target is engaged, damage is assessed, and the cycle may repeat again if required. This "kill chain" could be automated or it could contain human nodes as sensors or decision makers.

ORGANIZATION

6-55. The commander organizes his defensive scheme by assigning tasks, allocating forces, and apportioning CS and CSS support within a security area, MBA, and rear area.

PLANNING CONSIDERATIONS

6-56. . Area defensive plans are normally characterized by MBA forces that shape the enemy into positions of disadvantage; expose the enemy's flanks, break the momentum of the enemy's attack, and dissipate the enemy's combat power. Reserves are committed to counterattack, exploit success, or block enemy penetrations. Success is gained by fighting from prepared positions in depth, employment of a reserve, and the integration of maneuver, fires, obstacles, local counterattacks, sound deception effort, and the expert use of camouflage—all designed to cause the enemy's attack to culminate in the MBA. Because the HBCT may be outnumbered, a successful area defense requires winning critical engagements at different locations along multiple avenues of approach within the HBCT's AO.

6-57. The commander focuses defensive plans on potential enemy vulnerabilities and areas where the terrain offers natural advantages to his force. He decides where and when to concentrate combat effects and accept risk through economy of force. He first determines if the HBCT will conduct a forward defense or an in-depth defense. The commander and staff design a concept of operations that allows the HBCT to mass combat effects at critical times and locations. The concept of operations should incorporate dynamic elements that avoid passive defensive patterns that favor the attacker. The HBCT may use one or a combination of the following techniques in developing a concept of operations:

- **Counterattack.** The HBCT may use a counterattack or series of counterattacks to defeat the enemy. Supporting efforts are used to reduce the enemy's combat power, defeat secondary efforts, and shape his attack into vulnerable positions. The counterattack force attacks into the enemy's flank or rear to defeat the enemy in detail. The HBCT may use the reserve to counterattack or may use part or all of its available forces to counterattack. Also, additional forces from the UEx may be identified as the HBCT counterattack force, thus enabling the HBCT to have a stronger static defense. A single counterattack is usually the final action that defeats the enemy in detail after other defensive actions have reduced his combat power to or beyond the point of culmination. During mission analysis, force ratios must be analyzed to ensure success.
- **Attrition through Depth.** The HBCT may use the depth of the AO to attrite the enemy to the point of defeat by forcing him to fight through a series of engagements in depth. The enemy's formations are defeated as they advance through the depth of the AO by massed fires (FA, CAS, intelligence and electronic warfare [IEW]) supported by obstacles and local counterattacks.
- **By Position.** The objective of the defense may be accomplished by defending from prepared positions. The HBCT deploys MBA forces along defensible terrain supported by strong obstacles and fires. Reserves attack at the decisive moment exploiting enemy weakness and counter enemy penetrations. The enemy's combat power is slowly exhausted from repeated unsuccessful attacks against the HBCT's positions. The HBCT may defend from well-fortified positions that defeat all enemy attacks such as in a forward defense. Often, this technique is used for a defense along a large natural obstacle such as a river. In some cases, defending forces can delay or reposition to prepared positions located deeper in the HBCT's AO. Forward forces divert, weaken, and/or defeat the enemy's lead formation then occupy strong defensive positions to defeat the enemy's final attack.

SCHEME OF MANEUVER

6-58. Forces, fires, and obstacle effort are allocated to achieve the commander's intent. In determining how to allocate forces, the commander and staff determines the probable combat power ratios the HBCT will face by avenue of approach. They array forces in relationship to likely enemy combat vehicles, soldiers, and combat multipliers to the HBCT's combat vehicles, soldiers, and combat multipliers. They allocate combat forces to the main effort, shaping operation(s), and reserve based on their assigned tasks, the terrain, and size enemy force each avenue of approach can support (probable force ratio). Company-size forces are normally allocated against enemy battalion-size avenues of approach. The staff arrays forces to meet the acceptable force ratio or the commander's stated level of risk for each avenue of approach. Simultaneously, obstacle and fires and effects support plans are developed to support subordinate tasks. The commander accepts risk along less likely avenues of approach to ensure adequate combat power is available for more critical efforts. The staff ensures each subordinate force has sufficient combat power with supporting fires and obstacles to achieve their assigned tasks by quickly war gaming subordinate battles.

6-59. The commander and staff must establish provisions to coordinate the defense between each maneuver battalion. They ensure that subordinate defensive schemes provide a cohesive defense. The cohesion of the defense has a significant impact on the overall effectiveness of the defense. If the defense is to remain viable, the commander must prevent unacceptable gaps and assailable flanks from developing in the disposition of his forces. In some cases, the commander must accept gaps within the defense, but must take measures to maintain security within these risk areas. The HBCT may use surveillance assets, security forces, patrols, or other economy of force missions for these areas.

TECHNIQUES

6-60. There are two general techniques for an area defense—in depth or forward. However, the higher commander may dictate the choices of defensive maneuver for the HBCT. Also, the specific mission may impose limitations such as time, security, and retention of certain areas that leave little choice for the HBCT.

6-61. *In-depth Defense.* An in-depth defense is the preferred form of maneuver. It reduces the risk of the attacking enemy force quickly penetrating the defense. The enemy is unable to exploit a penetration because of additional defensive positions employed in depth. The in-depth defense provides more space and time to defeat the enemy attack. It provides the commander more time to gain information about the enemy's intentions and likely future actions before decisively committing to a plan of his own (see Figure 6-8).

6-62. An in-depth defense is used when the following occurs:

- The mission allows the HBCT to fight throughout the depth of the AO.
- The terrain does not favor a defense well forward and there is better defensible terrain deeper in the AO.
- Sufficient depth is available in the AO.
- Cover and concealment forward in the AO is limited.
- Weapons of mass destruction (WMDs) may be used.

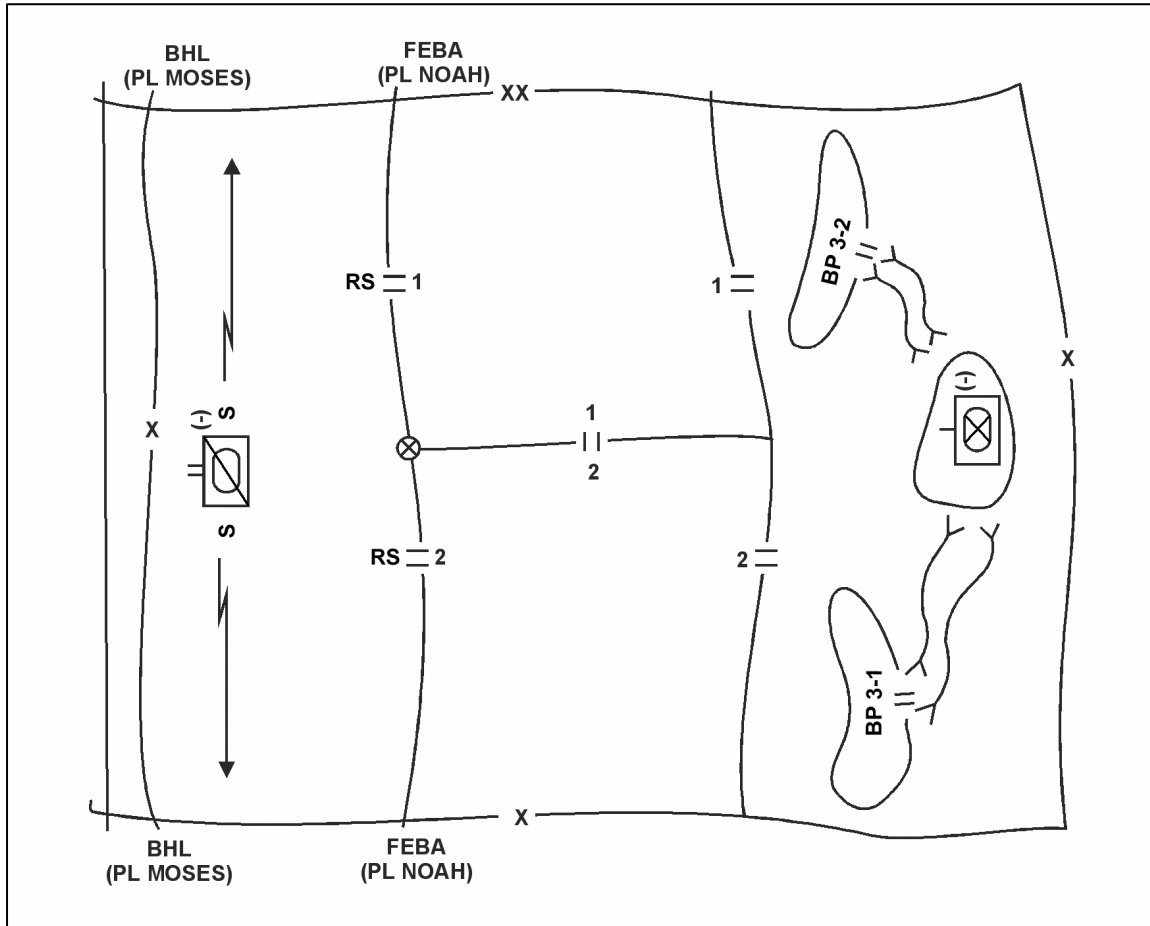


Figure 6-8. Example of an In-Depth Defense

6-63. *Forward Defense.* The intent of a forward defense is to prevent enemy penetration of the defense. Due to its lack of depth, a forward defense is the least preferred form of maneuver. The HBCT deploys the majority of its combat power into forward defensive positions near the FEBA (see Figure 6-9). The HBCT fights to retain its forward position and may conduct counterattacks against enemy penetrations or to destroy enemy forces in forward EAs. Often, counterattacks are planned forward of the FEBA to defeat the enemy.

6-64. A forward defense is used when the following occurs:

- Terrain forward in the AO favors the defense.
- Strong existing natural or man-made obstacles such as a river or a rail line are located forward in the AO.
- The assigned AO lacks depth due to the location of the area or facility to be protected. Cover and concealment in the rear portion of the AO is limited.
- Directed by higher headquarters to retain or initially control forward terrain.

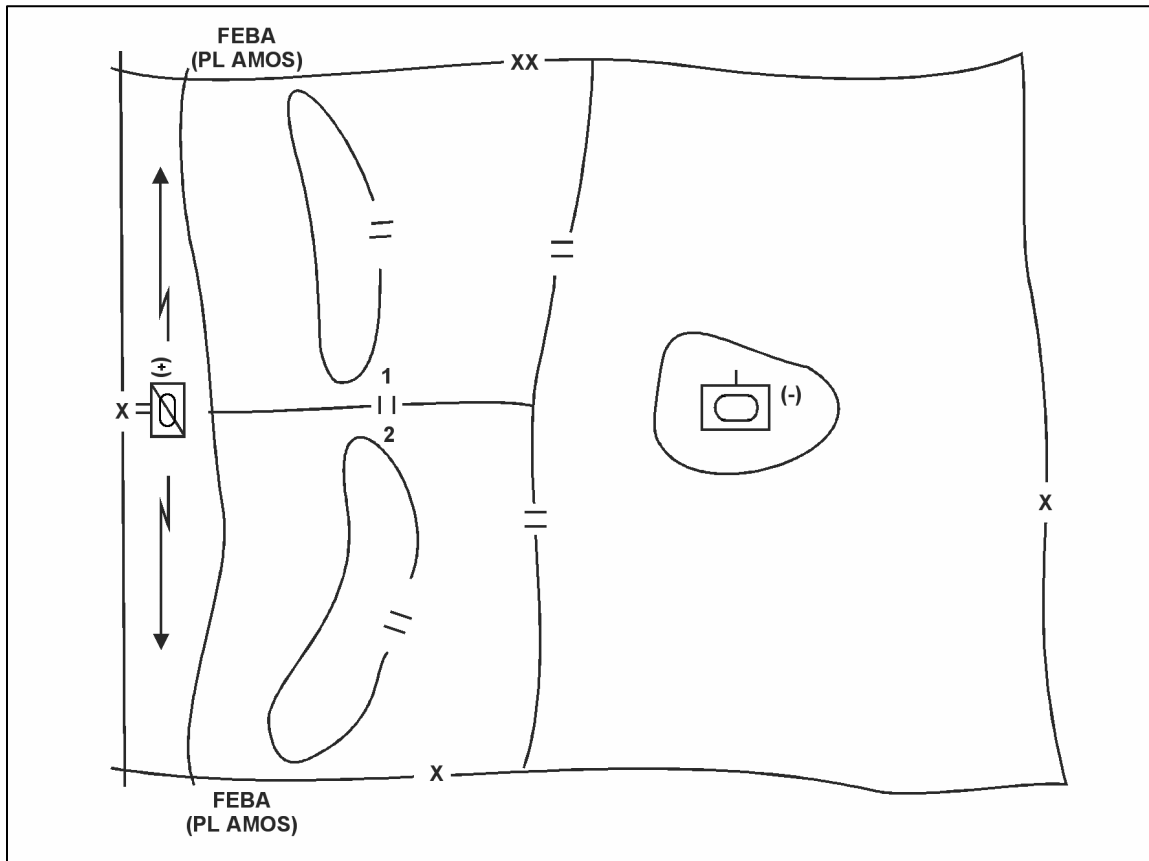


Figure 6-9. Example of a Forward Defense

INTEGRATION OF COMBAT SUPPORT AND COMBAT SERVICE SUPPORT

6-65. Key CS and sustainment considerations are discussed below.

6-66. *Fire Support.* Considerations for the fires and effects support plan include the following:

- Initial priority of fires is normally allocated to forward security forces. Plan targets along enemy reconnaissance avenues of approach. Ensure adequate fire support for the battle handover and withdrawal of the security forces. Consider the need to forward position fire support assets in support of security zone operations.
- Engage approaching enemy formations at maximum range with indirect fires and CAS. Plan the transition of fires to support the MBA fight. Develop clear triggers to adjust FSCMs and priorities of fires.
- Coordinate the movement of firing batteries to support the EFST. Ensure movements are coordinated with the scheme of maneuver to avoid confusion and possible interference with planned maneuver actions.
- Develop and rehearse the observation plan to ensure all targets are adequately observed.
- Ensure integration of fires in support of critical obstacle effects.
- Plan fires to support action in the rear area.

6-67. *Engineer Support.* Based on METT-TC, the UEx may provide additional supporting engineer assets. Considerations for the scheme of engineer operations include the following:

- Plan the transition to countermobility and survivability work in detail ensuring adequate time for subordinate engineer TLPs.
- Sight situational obstacles early. Plan multiple locations to support depth and flexibility in the defense. Ensure adequate security for situational obstacle emplacement systems. Integrate triggers for execution in the DST.
- Ensure the obstacle effort along task force and adjacent unit boundaries is coordinated.
- Focus the countermobility effort to shape the enemy's maneuver into positions of vulnerability.
- Ensure adequate mobility support for withdrawing security forces, the reserve, and repositioning of MBA forces. Consider support for artillery movements.
- Ensure integration of survivability priorities for critical systems and units.
- Develop obstacle plans that are synchronized with maneuver and fires, and maximize all resources to include all available barrier materials, personnel, and reinforce natural obstacles when possible.

6-68. *Air Defense Support.* If the mission analysis requires ADA coverage, key considerations for the air defense plan include the following:

- Position ADA assets and radars along air avenues of approach to provide early detection and engagement of enemy aircraft; defeat enemy air before it enters the MBAs AO/AI.
- Provide all-around air defense protection to the HBCT with mutual supporting and overlapping fires. Weighted coverage towards likely air avenues of approach.
- Plan primary, alternate, and supplementary firing positions to support defensive positions in depth, delays, and counterattacks.
- Reposition ADA assets to replace loss assets or mass against significant air threats.
- Ensure adequate security, survivability support, and CSS (especially missile caches) for ADA assets.
- Establish priorities of air defense protection based on the criticality, vulnerability, and recuperability of units and the threat. Normal ADA priorities in the defense include:
 - *Critical BPs and SPs.* The enemy will likely employ heavy air attacks against critical friendly positions to support a breakthrough of the HBCT's defense.
 - *Reserve.* The reserve has a critical role in the defense. The enemy will attempt to identify and target it to prevent its decisive employment.
 - *C2.* C2 assets are normally stationary and produce a high electronic signature. This makes them more susceptible to identification and targeting by enemy air attacks. C2 assets normally receive incidental area coverage provided by ADA assets protecting forward maneuver forces.
 - *Logistics Sites.* Logistic units are normally stationary and located near roads causing them to be easily identified from the air. The BSA, unit maintenance collection points (UMCPs), and other logistic sites are normally covered by area defense.
 - *Chokepoints and Bridges along MSRs and other Key Routes.* These locations are vital to the movement of logistics and combat power and create a vulnerability the

6-69. *Nuclear, Biological, Chemical Support.* Considerations for nuclear, biological, chemical (NBC) include:

- Integrate NBC reconnaissance assets into the HBCT's reconnaissance and security plans. Position NBC reconnaissance assets forward in the security area and at

likely locations for enemy employment of chemical agents. Support to counterattacking forces is especially important.

- Identify and establish a reporting relationship with any Biological Identification Detection System (BIDS) units operating in the HBCTs AO.
- Develop decontamination plans based on the commander's priorities. Establish decontamination priorities of support and effort. Ensure thorough decontamination plans are coordinated to include decontamination site locations, MSRs, chemical casualty collection points (CCCP), engineer support, MP support, water resupply, and chemical defense equipment (CDE). Patient decontamination is coordinated with the HBCT S3. The HBCT surgeon, the HBCT sustainment and operations cell, the maneuver battalion S3s, the maneuver battalion surgeons, the Force Health Protection Officer (FHPO) from BSB support operations section, and the forward support medical company (FSMC) commander plan it. Patient decontamination is performed by a pre-trained decontamination team (composed of at least eight non-medical personnel) that works under the supervision of medical personnel. Patient decontamination teams perform best when they are trained and are permitted to exercise their skills with the supporting BAS or FSMC. For definitive information on patient decontamination procedures (see FM 4-02.7 [FM 8-10-7]).
- Integrate the employment of smoke to support the defense. Coordinate the use of artillery and mechanized smoke and ensure they are synchronized with other actions.
- The priority of support and task organization of NBC assets often changes during the operation. The chemical officer (CHEMO) must ensure all units clearly understand changes in the priority of support, task organization, and positioning of NBC assets. Additionally, units must understand the command and support relationship of NBC assets supporting their mission.

6-70. Sustainment. As defensive preparations get under way, the commander must pay attention to the flow of logistics to sustain his force and the defensive preparations. Considerations for the CSS plan include the following:

- Plan the sustainment of security forces. Address MEDEVAC, equipment recovery, and resupply for security forces. Plan the resupply of critical classes of supply for security forces to support a quick transition from their security mission to follow-on missions. Consider providing the security forces with prepositioned stocks of critical supplies in depth of the security zone.
- Plan primary and alternate MSRs to support the full depth of the defense. Coordinate MSRs to avoid interfering with maneuver or obstacle plans.
- Consider stockpiling limited amounts of Class V and III in centrally located BPs or locations.
- Institute a C2 plan for CSS vehicles in the HBCT area.
- Plan to send forward push configured load packages of critically needed supplies on a scheduled basis.
- Plan resupply during limited visibility to reduce the chances of enemy interference.
- Plan to dispatch maintenance support assets forward to reduce the need to evacuate equipment.
- Plan for the use of aviation assets to resupply critical supplies.
- Plan for the increased demand on decontaminants and mission oriented protective posture (MOPP) gear.
- Plan for high expenditure of Class V.
- Plan for increased demand for barrier materials (Class IV and V). Plan to push the materials forward early based on preliminary estimates.

- Plan MEDEVAC and provide assistance to evacuate reconnaissance squadron wounded from the security area.
- Plan for ambulance exchange point (AXP) throughout the depth of the defensive AO.
- Coordinate with MPs and CA teams concerning refugee control and CSS requirements.

6-71. *Force Health Protection (FHP)*. During linear or contiguous defensive operations, one of the primary tactical advantages is that the HBCT controls the ground on which it will operate. This advantage enables reconnaissance and marking of primary and alternate evacuation routes by FHP units, and the ability to conduct mounted rehearsals on those routes. Historically, the number of casualties sustained during defensive operations has been lower than in offensive operations. During the defense, the risk to medical units increases. Acquiring and transporting casualties from combat units that are in contact with an advancing enemy, to include enemy employment of air and artillery delivered obstacles increases that risk. These factors may adversely impact LOCs, evacuation routes, resupply, and repositioning of the FHP units/elements. Additionally, enemy targeting of friendly air evacuation assets forward on the battlefield will degrade the ability of air evacuation units to perform their mission. Enemy infiltration or penetration is focused on interdicting supply routes and destroying CSS units. Since FHP units/elements normally locate with CSS elements, Class VIII resupply, MEDEVAC, and patient treatment operation can be disrupted. To alleviate the risk to patients and FHP assets in a high intensity environment, HBCT planners should ensure SEAD operations are integrated into air evacuation plans, ensure ground evacuation assets and routes are integrated into the defensive plan, and that the FHP architecture and plan is rehearsed and understood by all. To further reduce the risk to air evacuation assets, and depending on METT-TC, HBCT FHP planners should consider evacuating patients from the BAS to an AXP by ground ambulance; then, use air ambulances to evacuate urgent and priority patients the remaining distance to the FSMC.

6-72. Additional FHP considerations for defensive operations include the following:

- Threat actions and the maneuver of friendly combat forces can complicate forward area patient acquisition. As a result, medical personnel are permitted much less time to reach the patient, complete vital emergency medical treatment (EMT), and remove him from the battle site.
- Heaviest patient workloads, including those produced by threat artillery and NBC weapons, can be expected during the preparation or initial phase of the threat attack and in the counterattack phase.
- The threat attack can disrupt ground and air routes and delay evacuation of patients to and from treatment elements.
- The depth and dispersion of the defense can create significant time and distance problems for evacuation assets.
- The threat exercises the initiative early in the operation, which could preclude accurate prediction of initial areas of casualty density. This makes the effective integration of air assets into the MEDEVAC plan essential.

RECONNAISSANCE CONSIDERATIONS

6-73. ISR operations answer the commander's PIR/IR and detect enemy actions. The HBCT relies on the intelligence capability and collection efforts of the UEx to monitor the enemy situation outside of the HBCT's AO. The HBCT commander and staff monitor this via the UEx COP and ISR efforts/results. Additionally, organic HBCT assets are employed to collect information and intelligence inside the HBCT AO. The reconnaissance squadron, in conjunction with UAVs, Prophet, SOF, TAC HUMINT teams, maneuver battalion scout

platoons, and forces on the ground provide early warning to the HBCT and information against the commander's PIR/IR.

6-74. The commander must understand the enemy situation. He seeks to identify the size, composition, and actions of the enemy's formations. The commander's primary concern is the identification of the enemy's main and supporting efforts, location, and intent of the enemy reserve. The commander uses IPB products, known intelligence, and the higher headquarters' assessments combined with his own tactical judgment to anticipate enemy COAs. As the battle develops, the commander uses security forces, reconnaissance assets, and reports from units in contact to view the enemy situation and anticipate the enemy's future actions. Key considerations are discussed below.

PROVIDE EARLY WARNING AND REACTION TIME OF AN ENEMY ATTACK

6-75. The HBCT normally establishes a forward security force to provide early warning and reaction time for an enemy attack. Reconnaissance and security forces in the security area detect enemy actions that indicate the enemy's main and secondary efforts, and movement/commitment of the enemy reserve. These units report vital information about the enemy's attack so the HBCT can quickly react. Critical information includes the speed, direction, composition, and strength of enemy formations. They also detect and report locations of HPTs such as bridging assets, reserves, forward security elements, or artillery formations. This supports the effective targeting of these assets. The staff integrates intelligence from the UEx and/or UEy collection efforts and from units operating forward of the HBCT. This includes information from spot reports (SPOTREPs), UAV, joint surveillance target attack radar system (JSTARS), and other higher-level and external collection assets. Early warning of enemy air attacks, air mobile insertions, and infiltration are also vitally important to provide adequate reaction time to counter these threats as far forward as possible.

IDENTIFY ENEMY DECISIONS AND COMMITMENT TO SPECIFIC ACTIONS

6-76. Observers are positioned at likely enemy DPs that reveal the enemy's commitment to a specific action such as an attack along a particular avenue of approach. By confirming or denying enemy actions, the staff is able to anticipate the enemy's future actions. This allows the HBCT commander to reposition forces and act quickly to counter enemy actions.

REPORT ENEMY ACTIONS

6-77. As the enemy makes contact with the HBCT, security and reconnaissance assets continue to observe and report enemy activities. This includes enemy flanking maneuvers, breaches of friendly obstacles, enemy force concentrations, employment of combat multipliers, and BDA. Commanders use this information to immediately counter the enemy. The HBCT commander and staff also use this information to assess the enemy's condition and likely future actions.

MONITOR ENEMY FOLLOW-ON FORCES

6-78. While the HBCT is engaged with the attacking enemy force, the collection effort must maintain contact with follow-on enemy forces that may be committed into the AO. This is done through a combination of intelligence from higher headquarters and the forward positioning of reconnaissance assets that maintain observation of the avenues of approach leading into the MBA. The HBCT relies heavily on battlefield surveillance assets such as UAV or access to JSTARS for this information. When forces are positioned forward of the MBA, the commander must make provisions for their support and evacuation.

SUPPORT FRIENDLY DECISION MAKING

6-79. The XO (MAIN CP) ensures that the ISR effort is focused on answering the PIR that support the commander's foreseen combat decisions. In an area defense, the commander's critical decisions normally include the following:

- Commitment of the reserve and/or counterattack (most important).
- Immediate modifications or adjustments to the defensive plan.
- Withdrawal of forward security forces.
- Initiation and employment of fires against enemy formations.
- Execution of situational obstacles.
- Shift of the main effort.

PREPARATION FOR THE DEFENSE

6-80. During the preparation phase, the commander and staff monitor the situation and adjust the plan based on updated enemy intelligence, enemy reconnaissance activities, the COP, and the progress of defensive preparations. The staff monitors, coordinates, and supervises preparations to enforce the commander's intent. The staff coordinates intelligence, logistics, fires, obstacles, and CS to ensure all systems are responsive and proactive. The HBCT uses the preparation time prior to the enemy's attack to build the strongest defense possible. The HBCT staff and subordinate commanders coordinate to ensure the HBCT commander is kept informed on the dynamically changing progress of obstacle and unit preparation.

INSPECTIONS

6-81. The commander, aided by his staff, supervises the planning and preparation of subordinate forces to ensure they are consistent with his intent. He inspects and monitors the progress of defensive preparations to ensure they are on track. The commander seeks to identify shortfalls early enough to shift resources. He pays special attention to the array of forces, fires, and obstacles along flanks, seams between subordinate maneuver battalions, or other areas that enemy will likely try to penetrate. The commander must recognize that the enemy will not freely drive into locations where he is vulnerable to massed fires. Only by forcing him to these locations with well-integrated fires and obstacles will the defense be successful. These areas are a primary concern.

REHEARSALS

6-82. The objective of the combined arms rehearsal is to practice the defense against multiple enemy COAs and conditions. A successful area defense is dependent upon the defender anticipating future enemy actions and then quickly acting to counter the enemy. During the rehearsal, the HBCT S2 must portray an aggressive, thinking, and uncooperative enemy. Each subordinate commander arrays his maneuver forces, obstacles, reconnaissance and security forces, and planned targets. The HBCT S6 should array all communication architecture and digital network nodes located in the HBCT AO. The HBCT commander ensures the maneuver battalion plans are consistent with his concept of operations. He ensures the defensive plans of each subordinate maneuver battalion are compatible and that control measures such as coordinating points and PLs are sufficient for flank coordination. The rehearsal covers the following:

- Reconnaissance and security operations.
- Battle handover and passage of lines.
- MBA engagement.
- Employment options of the reserve.

- Emplacement of situational and reserve obstacles.
- Actions to deal with enemy penetrations; major enemy efforts along areas of risk or flank avenues of approach; and enemy actions in the rear area.
- Reorganization.
- Execution of follow-on missions.

6-83. The HBCT may conduct a full force or reduced force rehearsal to take full advantage of the opportunity to practice the defense under realistic time and space conditions. The commander must consider OPSEC, the time available, and potential impact on subordinate defensive preparations in determining whether to conduct a full force rehearsal. Sustainment units, in addition to the sustainment rehearsal, should ensure that they rehearse medical evacuation drills over all evacuation routes, during both day and night conditions.

OCCUPATION AND ESTABLISHMENT OF SECURITY

6-84. The first priority during occupation of a defensive AO is security (ground and air) and reconnaissance. The commander, assisted by the staff, develops movement and occupation plans that balance the need for intelligence, security, reconnaissance, movement of logistics, and movement of combat forces. Security forces clear the proposed defensive AO. They check for enemy forces, obstacles, and NBC contamination. Additionally, they may conduct tactical questioning of the local population and civil authority in an attempt to gather intelligence. Security is established to provide early warning and reaction time as well as to protect the occupation of the defense. Security is continuous from initial occupation through cessation of hostilities. Commanders must ensure that the composition of the security force is robust enough to successfully clear enemy reconnaissance forces from sector while simultaneously reacting to possible enemy incursions or local attacks. The commander and staff must carefully plan and supervise the occupation phase of the defense to ensure a rapid and secure transition to defensive preparation.

6-85. ISR produces SU needed by the HBCT commander to support his C2 and decision-making. ISR operations are *focused* collection efforts and are performed prior to or in advance of other combat operations, as well as during military operations, to provide information to the commander to confirm or modify his concept. The reconnaissance squadron is the HBCT commander's principal reconnaissance organization. The reconnaissance squadron conducts surveillance as a primary task in support of its reconnaissance mission(s).

6-86. Rarely will the reconnaissance squadron fight for information. The squadron will primarily use passive surveillance, technical means, and human interaction to gain information. The primary missions the reconnaissance squadron will conduct are area, route, and zone reconnaissance. Within this framework of reconnaissance, the reconnaissance squadron must be aware of the demographics in its AO. Traditional reconnaissance is focused on conventional forces and knowing their personnel. Threat conventional forces are still a part of understanding the personnel demographics; however, the squadron must understand the different cultural and economic backgrounds of the people it encounters on a day-to-day basis. The squadron must clearly understand the threat—be it conventional forces, paramilitary, terrorist, or organized crime—that undermines the stability of the local economy. The squadron should be very concerned with understanding the needs of the local populace. Refugee situations are a part of the demographic makeup of an environment. The squadron will most likely be augmented with CA and/or PSYOP assets in order to execute its mission. Understanding the full dimension of demographic framework is the basis of the characteristics of an environment and determines much of the reconnaissance objectives. Examples of human/social-oriented reconnaissance are as follows:

- Local police chief

- Factional leaders
- Local political leaders
- Local military commanders
- Local media publications and broadcasts
- Local religious leaders

LEADERS RECONNAISSANCE

6-87. When feasible, the commander and subordinate leaders conduct a reconnaissance of the AO to develop most of the plan based on their view of the actual terrain. The commander and staff develop a plan for the leaders' reconnaissance that includes provisions for security, leaders and key staff members required to participate, designation of a recorder, areas to be reconnoitered, and time allocated for the reconnaissance. When available, the commander may use aviation assets to conduct the leader's reconnaissance.

PREPARATION (CONTINUED SECURITY OPERATIONS)

6-88. Subordinate units quickly array their forces and begin to prepare their defenses. Special emphasis is placed on monitoring the construction of obstacles, routes, and fortifications. Preparation plans and allocation of resources are adjusted as required to meet the commander's priorities based on the expected time of attack and progress of preparations. The commander and staff also verify subordinate unit coordination and coordinate the defense with the HBCT's adjacent units. The UEx reinforces the HBCT reconnaissance squadron with engineer assets in the high intensity combat environment.

6-89. The HBCT S2, using ISR results to develop a more accurate COP, closely monitors the enemy situation and focuses on enemy indicators that reveal the enemy's likely time and direction of attack. This assessment is continuously analyzed to determine impacts on the preparation time available. The S3 closely monitors the status of forces operating forward of the HBCT to anticipate timing for any passages of lines and battle handover. The XO and the entire staff monitor the status of defensive preparations and determine any required adjustments based on progress or lack thereof. The XO analyzes potential impacts of the lack of progress in specific areas and late completion times of preparation tasks. The HBCT engineer officer monitors the progress of all engineer effort within the AO. He continuously projects the end state of this effort based on current and projected work rates. He must identify projected shortfalls early. He determines how to shift assets to make up for shortfalls or recommends where to accept risk in unaccomplished work. The staff closely monitors the current maintenance status of critical systems and determines any required adjustments to the plan or task organization.

6-90. Often, the UEx and/or UEy establish a security area forward of the HBCT. As forward UEx and/or UEy security forces gain contact with the enemy, the commander closely monitors the friendly and enemy situation within the HBCT's AI. The S2 keeps the commander and subordinate units informed of the enemy situation. The commander, assisted by the staff and XO, analyzes the enemy situation to anticipate the likely enemy forces to be committed in the HBCT's AO.

6-91. The commander and staff periodically review the COP and ISR results to ensure the DST and CCIR are still valid for the anticipated enemy situation. The commander may adjust initial defensive plans based on the following considerations:

- Information from the UEx and/or UEy security force battle.
- Intelligence from UEx.
- Enemy reconnaissance activities and other enemy actions within the AO and AI that may indicate the enemy's future intentions.

- Current progress of defensive preparations to include countermobility and survivability effort.
- Current logistic and maintenance status.
- Available combat power.
- Time available to make adjustments.

6-92. As the enemy closes on the HBCT's AI, the HBCT begins final preparations that typically include:

- Final coordination for battle handover and passage of lines.
- Positioning of situational obstacle emplacement systems.
- Verification of communications status and digital network.
- Withdrawal of unnecessary CSS assets from forward locations and final positioning of CSS units to support the battle.
- Evacuation or destruction of unused Class IV/V (obstacle material) to prevent capture or loss to enemy action.
- Withdrawal of engineer forces from forward areas based on an event trigger.
- Linkup of CS and CSS assets with the reserve or other supported combat forces if not previously accomplished.
- Review of the reconnaissance plan to ensure it still meets the commander's PIR.
- Final positioning or repositioning of reconnaissance assets, security forces, sensors, and/or observers.
- Positioning of teams to close lanes in obstacles or execute reserve obstacles.
- Final positioning of C2 facilities and leaders.
- Employment of directed, reserve, or situational obstacles.
- Final positioning and protection of indirect fire observers.
- Periodic situation updates and issuing of final guidance to subordinates.

6-93. . This time may also be used to register indirect fire targets with artillery and mortars, if not already done. However, the commander must consider the risk of exposing his artillery assets and fire plan to the enemy. The commander may also conduct a final radio, digital, or even a map rehearsal with key leaders.

BATTLE HANDOVER

6-94. The battle handover is the transfer of responsibility for the battle from forward security forces to the HBCT. The higher commander who established the security force prescribes criteria for the handover, where it will pass through and designates routes, contact points, and the BHL. The BHL is normally forward of the FEBA where elements of the passing unit are effectively overwatched by direct fires of the forward combat elements of the HBCT. The HBCT normally employs security forces in the area immediately behind the BHL. The HBCT commander coordinates the battle handover with the security force commander. This coordination may be made in person, or collaboratively via the ABCS suite. This coordination overlaps with the coordination for the passage of lines and the two should be conducted simultaneously. This coordination is best established as SOP to facilitate rapid accomplishment. Coordination normally includes:

- Establishing communications.
- Providing updates on both friendly and enemy situations.
- Coordinating passage.
- Collocating C2 (if required).
- Dispatching representatives to contact points and establishing liaison.
- Recognition signals.

- Status of obstacles and routes.
- Fire support, air defense, and CSS requirements.
- Defining exact locations of contact points, lanes, and other control measures.
- Actions to assist the security force with breaking enemy contact.
- Coordinating and exchanging maneuver, obstacle, and fire plans.

6-95. The HBCT commander and the security force commander identify the location of the BHL and other designated control measures and then recommend changes to the higher commander. The security force and the HBCT coordinate specific passage lanes and other details when not contained in the higher headquarters' plan.

6-96. The battle handover also involves the rearward passage of security force elements and other supporting UEx and UEy assets. As the security battle matures and the security force approaches the BHL, it will displace unnecessary CS and sustainment assets behind the BHL. The HBCT commander ensures his forces are ready to guide and assist their passage into the HBCT's AO. Often, these assets will need to locate within the HBCT's AO until the battle handover is completed. The normal sequence of rearward passage of forces is sustainment assets, artillery, ground combat forces, and if available, air assets. The staff monitors and supervises the rearward passage of the security force elements through the HBCT's AO.

6-97. While a line defines the battle handover, events may dictate that the security force breaks contact forward of or behind the BHL or in the gaps that develop between attacking enemy echelons. As security force elements cross the BHL the HBCT directs their movements along designated routes through the HBCT's AO. As necessary, the HBCT's security forces and fire support systems assist the passing force with breaking contact from the enemy. Mass artillery, smoke, CAS, and possibly situational obstacles are used to support the break in contact. Commanders must closely coordinate control of fires to avoid confusion during execution. Close coordination at all levels is essential to execute this process. The battle handover is completed when the passing unit is clear and the HBCT has assumed control of the battle.

6-98. During battle handover, the HBCT's forward security forces:

6-99. Assist passage of lines and disengagement.

6-100. Gain and maintain contact with enemy forces as the battle handover occurs.

6-101. Continue to locate and destroy enemy reconnaissance and security elements to preclude observation of the primary defensive positions.

6-102. Close lanes, execute reserve obstacles, and/or emplace situational obstacles in the security area as the passing force withdraws.

EXECUTION

SECURITY AREA ENGAGEMENT

6-103. When the tasks of the UEx's security force mission are met, and the security force begins its movement from the security zone to the flanks of the UEx or rearward, the security force passes a final enemy situation report (SITREP) to the HBCT (via FM voice and digital means) and the HBCT assumes control of the battle.

6-104. HBCT security forces observe and maintain contact with the approaching enemy, report enemy movements, avoid decisive engagement, and withdraw as lead enemy formations enter the HBCT's security area. The commander may direct security forces to disrupt, delay, or destroy lead portions of the enemy formations. The commander may also include his security forces as part of a deception effort to deceive the enemy as to the actual

location of the MBA. The commander must consider the follow-on missions of his security forces, the potential for these forces to be overrun or isolated, and the overall impact their direct combat achieves. Main battle forces eavesdrop on the security force fight to remain abreast of the situation. The command may employ sensors and stay-behind forces in order to maintain situational understanding as other security elements withdraw.

6-105. The HBCT continues to disrupt the tempo of the approaching enemy formations so they are unable to restore their lost momentum. The commander normally maintains joint and indirect fires complemented by non-lethal capabilities on the approaching enemy formations as they enter the MBA. The commander must clearly state his EFETs for this phase of the defense and ensure his fire support system remains responsive to weight its effort to the MBA fight as it develops. The commander orders the execution of situational obstacles that best support the MBA engagement, supervises occupation of defensive positions, and assesses the impact of fires against the enemy. A major concern of the commander is to identify the enemy's main effort, determine the direction of the attack, and gain time to react.

MAIN BATTLE AREA ENGAGEMENT

6-106. All systems and units (combat, CS, sustainment) are focused on fixing and destroying enemy forces that enter the MBA. Only through decisive combat can the HBCT defeat/destroy a determined enemy and complete its mission.

6-107. Maneuver. During the MBA engagement, the HBCT shifts combat power and priority of fires to defeat the enemy's attack. This may require the following:

- Adjustment of subordinates' AOs and missions
- Repositioning of forces
- Shifting of the main effort
- Repeated commitment and reconstitution of a reserve
- Modification of the original plan

6-108. Forward forces within the MBA normally break the enemy's momentum, reduce his numerical advantage, and force the enemy into positions of vulnerability. The HBCT masses (possibly repeatedly) combat effects at decisive times and locations to counter major enemy efforts and defeat enemy formations. The HBCT economizes and takes risks in less threatened areas, shifts fires, and maneuvers the reserve and/or MBA forces to gain local fire superiority at critical locations. Obstacles, security forces, surveillance assets, and fires can assist covering areas where risk is accepted. Often, the HBCT must trade ground to gain the time necessary to concentrate forces, mass fires, and attrite the enemy. The commander must decide and mass forces and fires swiftly since periods that allow him to gain an advantage are normally brief.

6-109. *Maintain Cohesion.* The HBCT must maintain a cohesive defense if the defense is to remain viable. The commander ensures maneuver battalion movements do not uncover adjacent battalions or adjacent BCTs. Often, the HBCT must accept gaps in the defense. In such cases, the commander must take measures to cover these gaps and detect enemy efforts towards these risk areas. The commander and subordinate commanders use security forces, surveillance assets, and patrols to maintain a cohesive defense.

6-110. Subordinate commanders cross talk and continually report their situation, enemy actions, and future plans to the HBCT commander. Digitally equipped, subordinate commanders now accomplish this via the COP. The commander assesses individual maneuver battalion plans to ensure they are consistent with his scheme of maneuver. Often, defending maneuver battalions must modify their defensive plans to protect and refuse their flanks when necessary actions of an adjacent battalion create an assailable flank. The HBCT

commander must ensure all maneuver battalion actions are coordinated and controlled to provide a cohesive defense.

6-111. *Rear Area Threats.* During the MBA fight, protection of rear areas is necessary to ensure freedom of maneuver and continuity of operations. Because fighting in the rear area can divert combat power from the MBA, the commander carefully weighs the need for such diversions against the possible consequences to the overall operation. To make such decisions wisely, the commander requires accurate information to avoid late or inadequate responses and to guard against overreacting to exaggerated reports. The BTB commander will monitor the MBA fight and ensure the rear picture is clear to the HBCT commander.

6-112. The HBCT S3 includes detailed planning for the entire rear area as part of the OPLAN for defensive missions. The BSB commander is responsible for the BSA. For security purposes this includes the OPCON of all elements operating within the BSA. The BTB is responsible for rear area security for any areas or forces not under the control of other HBCT units. Consistent with the commander's estimate, the BTB commander may be assigned security or combat forces to provide rear area security.

6-113. HBCT planning considerations for sustaining operations include:

- Securing rear areas and facilities
- Preventing or minimizing enemy interference with C4
- Preventing or minimizing disruption of CS and sustainment support to forward units
- Providing unimpeded movement of friendly units throughout the rear area
- Finding, fixing, and destroying enemy attacks in the rear area. (The BSB commander must designate ready reaction forces, plan for contingencies, and rehearse the plan for this to be effective.)
- Providing Area Damage Control (ADC) after an attack

6-114. *Penetrations.* Each maneuver battalion commander is responsible for controlling enemy advances within his assigned AO. Maneuver battalion commanders must provide the HBCT commander early warning and reaction time for potential enemy penetrations.

6-115. If a maneuver battalion is threatened with a penetration, the HBCT commander may take several actions to counter the situation. In order of priority, he may do any or all of the following:

- Allocate immediate priority of all available indirect fires, to include CAS and Army attack assets, to the threatened unit. This is the most rapid and responsive means of increasing the combat power of the threatened unit.
- Direct and/or reposition adjacent units to engage enemy forces that are attacking the threatened unit. This may not be possible if adjacent units are already decisively engaged.
- Commit the reserve to reinforce the threatened unit.
- Commit the reserve to block, contain, or destroy the penetrating enemy force.

6-116. When a penetration does occur, units within the MBA continue to fight, refusing their flanks, and engaging the enemy's flanks and rear. The penetrated force must hold the shoulders of the penetration to prevent the area of penetration from widening and to protect adjacent unit flanks. Adjacent units must take immediate action to secure their exposed flanks, which may include security missions or the establishment of blocking positions. Adjacent units may also need to reposition forces, readjust subordinate AOs and tasks, or commit their reserve. MBA forces attempt to reestablish contact across the area of penetration when possible. It is critical the BSB and other rear forces are notified of penetrations.

6-117. A major penetration within the MBA usually dictates the commitment of the reserve to decisive combat. The commander assesses the situation, determines where and when to engage the penetrating enemy force, and issues verbal orders to execute his plan based off existing operational graphics; or if digitally equipped, in addition to verbal orders he inputs simple graphic control measures (such as checkpoints, objective) into a digital platform (FBCB2 or inter-vehicular information system [IVIS]) to orient the force, while forces in contact send SPOTREPs (size, activity, location, unit, time, and equipment [SALUTE] or size, activity, location, and time [SALT]) to increase the fidelity of the counterattack force's COP (see Figure 6-10a and Figure 6-10b).

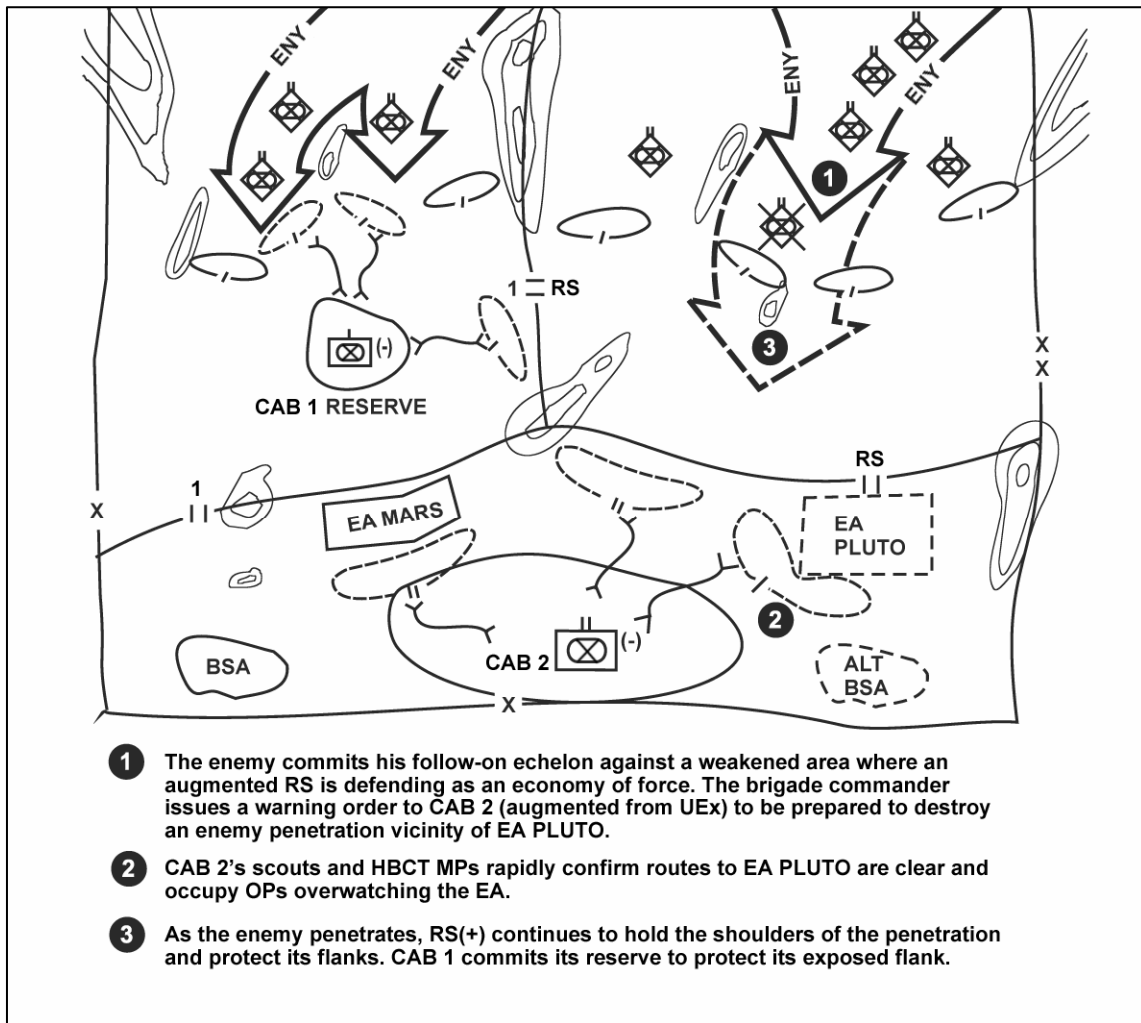


Figure 6-10a. Reacting to a Penetration

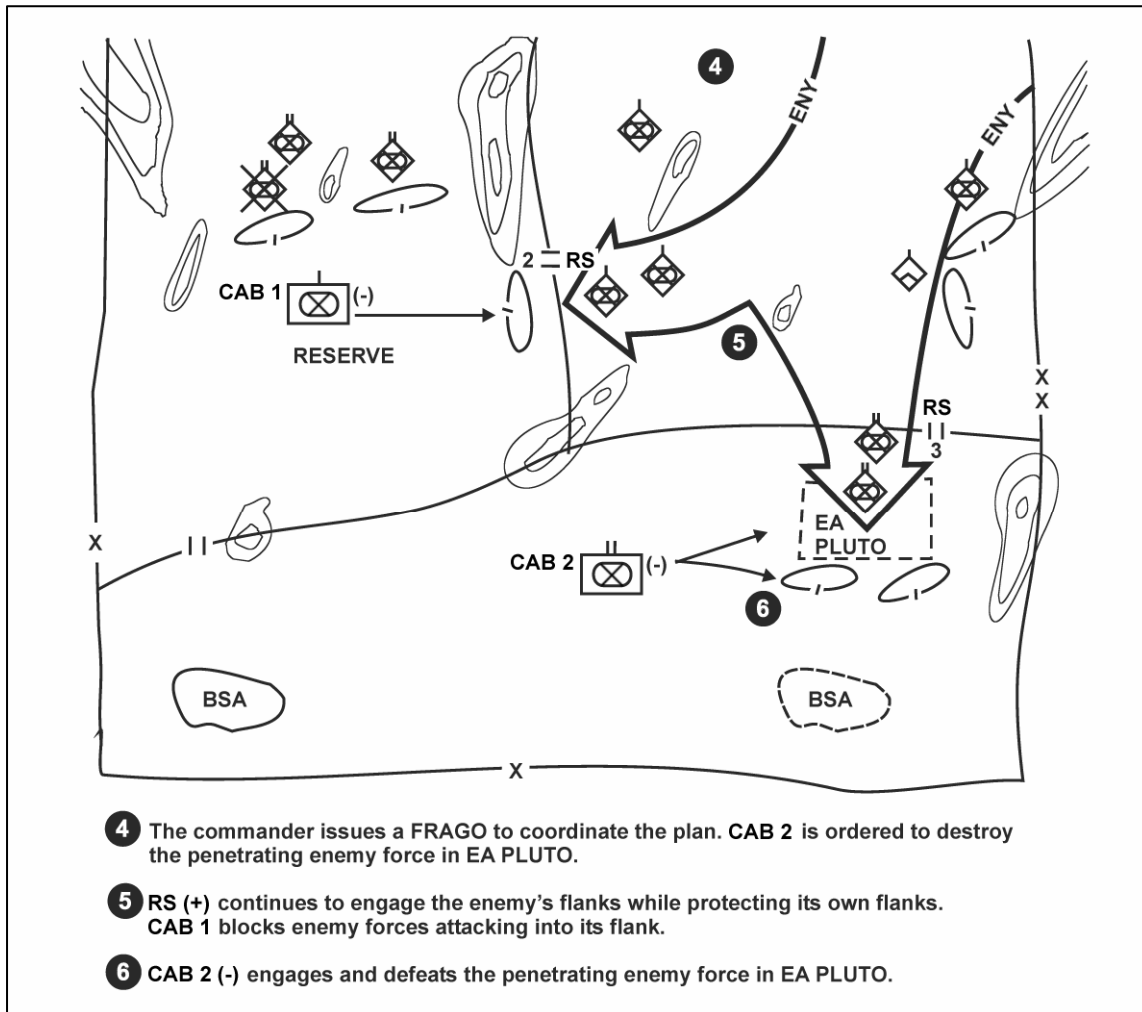


Figure 6-10b. Reacting to a Penetration (Continued)

6-118. The following steps are normally used to counter a penetration:

- *Maintain contact with the penetrating enemy force.* Forward MBA forces may be able to transition into a delay to maintain contact or the commander may redirect reconnaissance assets, security forces, and observers to locate and observe the enemy. The commander seeks to determine the penetrating enemy force's size, composition, direction of attack, and rate of movement. Forces in contact must also adjust indirect fires and CAS against the enemy to disrupt, delay, or divert his attack.
- *Take immediate actions to hold the shoulders of the penetration.* This may require changing task organization, adjusting adjacent task force boundaries and tasks, executing situational or reserve obstacles, or shifting priority of fires.
- *Move threatened CS and sustainment units.* Based on the enemy's direction of attack, CS and sustainment units may need to move away from the penetration. These movements must be controlled to ensure they do not interfere with counterattack plans or movements of combat forces.
- *Determine where and how to engage the penetrating enemy force.* Based on the enemy's size, composition, and direction of attack the commander selects the best

location to engage the enemy. The reserve may counterattack into the enemy's flank or it may establish a defensive position in depth to defeat or block the enemy. The staff establishes control measures for the reserve's attack. An EA or objective is used to orient the reserve to a specific location to engage the enemy. A BP may be used to position the reserve along defensible terrain. When the situation is vague or the enemy has multiple avenues of approach, the commander may establish an AO for the reserve. This requires the reserve to locate, and move to intercept and engage the enemy anywhere in the assigned AO. The commander and staff develop a concept of fires and consider required adjustments to FSCMs. They also decide on the commitment of directed, reserve, or situational obstacles to support the action. Traffic control is especially critical. Sufficient routes must be designated for the reserve to use and provisions such as the use of MPs must be taken to ensure those routes remain clear.

- *Issue an order.* If the operation is not well controlled, the situation could easily deteriorate into a total force failure. Orders must be developed quickly and issued clearly, concisely, and calmly. A simple, well thought-out plan, developed during the initial planning process, greatly improves the ability of subordinates to react effectively.

6-119. The HBCT commander must keep the UEx commander well informed of the HBCT's situation. Potential enemy penetrations of the HBCT's AO are immediately addressed to the division commander. Depending on the resources available, the UEx commander may reinforce the HBCT with additional fires, CAS, attack aviation, or maneuver forces. When necessary, some penetrations may be eliminated by the UEx reserve.

6-120. *Counterattack.* Counterattacks are conducted to take advantage of an attacking enemy's weakened condition by striking against his flanks or rear, or to deny the enemy commander the momentum and initiative. They are also conducted to dislodge an enemy from within the perimeter of a battalion defensive position. As the enemy's advance is slowed and weakened, his maneuver options become less available. As a result, he may transition to a hasty defense along the FLOT, or he may attempt to gain a foothold within a battalion's defensive position from which he can defend. This situation allows the commander to seek decisive opportunities to counterattack the enemy with all available force and ultimately secure the initiative of the battle. Timing is critical to a counterattack. If committed too soon, reserves may not have the desired effect or may not be available for a more dangerous contingency. If committed too late, they may be ineffective. Once committed, counterattack forces may penetrate the enemy's flanks and attack the enemy's artillery and logistic areas, or penetrate the enemy's flanks and attack them from the rear. Both actions are decisive and will create grave concern for the enemy.

6-121. Adequate warning time must be given to the reserve. The reserve cannot remain ready to go indefinitely. A rested reserve force will perform better than one that has been on one hour alert for the previous 48 hours. Reserve commanders and staffs must closely monitor the flow of the battle. This includes monitoring the HBCT command net as well as eavesdropping on other committed units' command radio nets.

SECTION III – MOBILE DEFENSE

6-122. A mobile defense is a force oriented defensive action that focuses on the destruction of the enemy rather than the retention of terrain. Terrain is traded to overextend the attacker and diminish his ability to react to counterattacks. The object of the mobile defense is to defeat the main effort of a predominantly mounted attacking force with a powerful blow from an unexpected direction. Mobile defenses aim to maximize dislocation and disintegration by striking at enemy vulnerabilities. They will ultimately use destruction as well, but will attempt to destroy disorganized enemy forces after the counterattack has

developed. HBCTs will use shaping and counterattacking roles in a mobile defense. A mobile defense requires considerable depth. The defender allows the enemy to advance into a position(s) to set up large-scale counterattacks. An HBCT does not normally conduct a mobile defense, but is employed as part of a UEx or UEy mobile defense. But in some unique situations, the HBCT may conduct a mobile defense. Considerations that may dictate a mobile defense include:

- The enemy force has greater combat power but less mobility than the HBCT does
- When the HBCT must defend a vast area without well-defined avenues of approach
- When directed or allowed by the higher commander
- The mission is the destruction of the enemy force versus retention of terrain
- The AO has sufficient depth
- The HBCT lacks the combat power to adequately defend all the avenues of approach in the AO

6-123. In contemporary operations mobile defenses will be less linear and harder for the enemy to detect than in the past. Static elements of the defense will be more dispersed and long-range fires will be more effective in the early stages of the operation. Counterattack forces may occupy dispersed positions initially and appear to be static defenses in depth. The enemy may be allowed to move into an apparent gap and thus misled into believing that he is successfully bypassing the static portions of the force. Improved reconnaissance and surveillance and superior command and control will allow future defenders greater precision in timing and the situational understanding to make counterattacks timelier and better directed at enemy weaknesses. Powerful fires may be withheld until the enemy has massed, exceeded his air defense coverage, or lost his freedom of action by becoming decisively engaged or immobilized by obstacles.

6-124. Because the mobile defense has a more aggressive aim, its commander – usually a UEx commander for a mobile defense – accepts more risk and requires more maneuver strength and protected mobility in reserve. This approach is more useful when friendly forces desire an immediate transition to the offense because a significant portion of the enemy force is decisively defeated, and a large portion of the defending force is in an offensive posture. Thus, this system of defense may be useful in a counter-aggression scenario when the force is prepared to transition to the offense.

6-125. Like area defenses, a mobile defense needs deep and layered security operations to identify the attacker's main effort early and operations in depth to suppress enemy C2 and supporting fires, upset timing and mutual support, delay the arrival of reserves, and defeat the attacker's ability to concentrate support for the main effort. The principal difference from the area defense is how the mobile defense employs its static and dynamic elements. The primary function of the static elements of this defensive system is to contain the attacker's maneuver forces with strongly held area defenses designed to create an assailable flank. Then, while isolating the enemy main effort and concentrating fires against it, to launch a strong counterattack against an assailable enemy flank. The defender exploits this success to seize the initiative.

ORGANIZATION

6-126. Mobile defenses derive their strength from a strong, well-coordinated attack into an assailable flank that the defender creates by allowing enemy forces to move well into the defended area. To accomplish this, forces may be designated as fixing, striking, or reserve forces. Security forces, static elements, and long range fires deceive the enemy as to his success, disorganize his formations, and channel his force into the path of planned counterattacks. A large ground and air reserve then attacks the weakened, deceived, and extended enemy force from the flank or rear.

6-127. The fixing force is an economy of force operation. Its purpose is to control the enemy's advance, provide reaction time, isolate selected enemy elements, and shape the attacking force into vulnerable positions. The fixing force executes its mission as a delay. The fixing force normally fights as a self-contained combined arms force and conducts operations over a considerable area.

6-128. The striking force is the defeat mechanism of the defense, since success of the mobile defense depends upon its decisive counterattack(s). The sole purpose of the striking force is to conduct counterattacks. It becomes the main effort upon commitment. It is organized with the majority of combat effects available to the HBCT upon commitment, often consisting of one-half to two-third of the HBCT's combat power. The striking force requires greater relative combat power and mobility than the targeted enemy force it is seeking to defeat. The striking force is normally a tank-heavy force. The HBCT commander may seek additional combat assets from the UEx (for example, attack aviation) to augment the striking force.

6-129. The commander may retain a small reserve independent from the striking force. The reserve generally operates in support of the fixing force to help shape the enemy's attack and deal with unexpected threats. If immediately available, the commander may employ the reserve in support of the striking force.

PLANNING CONSIDERATIONS

6-130. Defensive plans are developed to ensure that the HBCT can shape the enemy's attack to conduct decisive counterattacks. Plans for a mobile defense are based on counterattacks by the striking force.

6-131. The commander's visualization of the battle is essential. From his desired end state, the commander identifies those points in time and space where counterattacks will prove decisive. He expresses these points as force oriented objectives or EAs. He may identify one location that he sees as the most advantageous place to decisively counterattack or he may identify a series of attacks to defeat the enemy. The commander and staff define how to shape and control the enemy attack by identifying the mission of the fixing force, intended obstacle effects, and EFSTs. They must recognize the potential for the enemy situation to unfold differently than intended and should outline potential branches to the plan.

6-132. The staff synchronizes actions in time and space to sufficiently mass the combat power of the striking force at critical times and locations. The staff synchronizes maneuver, fires, and obstacles with other activities to support each planned counterattack. Plans are developed for each counterattack option based on assumptions that normally include time/space factors associated with the movement of forces, size of the enemy penetration, status of the fixing force, and strength, composition, and disposition of the targeted enemy force. DPs are developed to execute counterattacks and are incorporated into the DST. They ensure adequate means of detecting the conditions for each counterattack option are integrated into the collection plan. The staff develops the control measures needed to focus the striking force's counterattacks and coordinate its fires and maneuver with the fixing force. The staff war games the plan against all enemy COAs that may include different enemy schemes of maneuver, different size enemy forces than anticipated, major enemy efforts along less likely avenue of approach, and various combinations of enemy deep operations and fires. The staff continually refines planning assumptions used for the defensive scheme and DST the battle develops and enemy intelligence is collected.

SCHEME OF MANEUVER

6-133. The scheme of maneuver is developed around counterattacks. There are two general counterattack options during a mobile defense—limited objective and decisive. The HBCT may employ one or a combination of these options to defeat the enemy.

6-134. *Limited Objective Counterattacks.* Often, the enemy force is sufficiently large that it requires the striking force to conduct a series of attacks. Limited objective counterattacks focus on defeating isolated enemy formations in a series of attacks that weaken the attacking enemy to the point of culmination. This option normally provides the HBCT with the most flexibility. The risk associated with this option is two-fold. First, the striking force may become too weak over time to be effective during subsequent attacks. Second, the striking force may become involved in a single engagement for too long that prevents it from reaching subsequent objectives in time to prove effective.

6-135. *Decisive Counterattack.* A decisive counterattack is a single attack that breaks the enemy's momentum and ability to continue offensive actions. Usually a decisive counterattack is only feasible once the enemy's combat power has been significantly reduced. The striking force conducts the counterattack by avoiding or penetrating the enemy's forward combat elements and attacking an objective in the enemy's rear area. The striking force destroys vital enemy rear area assets to cause his advance to collapse or seizes key terrain that makes the forward positions of the enemy's combat force untenable or subjects them to encirclement. The primary risk for this option is the defeat of the striking force short of its objective. The commander must consider the ability of follow-on enemy forces to intervene before the enemy's advance is affected or the enemy's ability to counter the attack before a decisive result is achieved.

CONTROLLING A MOBILE DEFENSE

6-136. Counterattacks orient on EAs or objectives. Other control measures for counterattacks include boundaries, PLs, routes, axes of advance, LOA, RFLs, and checkpoints. Passage of lines graphics may also be required. Attack positions, assembly areas, or checkpoints are normally used to position the striking force for counterattacks into specific EAs or objectives. Counterattack planning is governed by the considerations discussed previously.

6-137. The parameters of the fixing force's mission are linked to counterattack plans. Due to its relative combat power, the fixing force normally accomplishes its mission as a delay. The fixing force may delay by AO or may be required to delay forward of a specific PL for a specific time. In some cases, the fixing force may defend for a short period of time in support of the striking force.

6-138. If an independent reserve is maintained, it normally operates in support of the fixing force. As the enemy reaches culmination, the reserve may be used to support the striking force. Employment of the reserve is governed by the considerations discussed previously.

RISKS

6-139. The four main risks generally associated with a mobile defense include:

- Forward delaying or defending forces may be isolated and defeated. This could cause the defense to collapse.
- Enemy deep operations and fires may impair the striking force's ability to react at critical points during the defense.
- The enemy may not maneuver into the area that the commander anticipated, resulting in the counterattack force being out of position to decisively influence the battle. Digitization allows information on the enemy's actual location to be transmitted as part of the COP. This allows the counterattack force to adjust its maneuver to the movement of the targeted enemy force.
- The enemy may maintain a higher degree of momentum than the HBCT is able to control, or the enemy commits significantly more forces into the AO than the HBCT can defeat. In both cases, the HBCT lacks the ability to decisively counterattack.

6-140. The plan must include provisions for action if the HBCT lacks the ability to defeat the enemy through counterattacks. Contingency plans are coordinated with the UEx during mission planning. In some cases, the HBCT may delay to provide time for commitment of the UEx reserve. The most effective contingency plans seek to maximize the depth of the HBCT's AO, advantages of the terrain, and superior mobility and agility of the HBCT.

BOS INTEGRATION

6-141. *Intelligence*. Considerations for ISR planning include:

- The composition, equipment, strengths, and weaknesses of advancing enemy forces main and secondary efforts
- The location, direction, and speed of enemy reconnaissance elements
- The location and activities of enemy follow-on forces and reserves
- Enemy initial and follow-on regimental or brigade command, control, and communications (C3) facilities

6-142. *Fire Support*. Considerations for the fires and effects support plan include:

- Plan targets and maintain the flexibility to position observers to support each counterattack option of the striking force.
- Plan FSCM and develop triggers for their adjustment to support each phase of the defense and all planned counterattack options.
- Synchronize the positioning and movements of artillery batteries to ensure responsive fires are available at critical points of the battlefield.
- Synchronize the use of smoke to obscure delaying actions of the fixing force and counterattacks of the striking force.
- Mass all available fires, to include CAS to weight the attack(s) of the striking force.

6-143. *Engineer Support*. When mission analysis and planning drives additional UEx engineer assets to be provided to the HBCT, considerations for the scheme of engineer operations include:

- Consider the need for route reconnaissance and improvements to support movements of the fixing force, striking force, and artillery.
- Balance engineer support between the fixing force and striking force. Weigh the striking force with mobility assets and consider its need for situational obstacle support to aid with flank protection. Weight the fixing force with countermobility and survivability assets and consider its need for mobility support between delaying positions.
- Consider the impact of the countermobility effort on planned counterattacks and future operations.

6-144. *Air Defense*. If provided, considerations for the air defense plan include:

- Ensure adequate air defense protection of the commander's priorities.
- Position air defense assets well forward and oriented on likely air avenues of approach. Goal is to defeat enemy air before it is able to influence friendly forces in the MBA.
- Shift air defense assets to support critical maneuver actions such as counterattacks or to replace lost air defense coverage of critical assets.

6-145. *Nuclear, Biological, Chemical*. Considerations for NBC include:

- Use NBC reconnaissance assets to ensure key routes (counterattack, delay, and MSR) are clear of contamination. Establish clear priorities of support for NBC reconnaissance based on the IPB and criticality of units.

- Integrate the use of smoke to support the delay of the fixing force. Smoke can also assist in concealing movement and attacks by the striking force.
- Position NBC recon elements with the strike force and reserve.

6-146. *Sustainment*. Considerations for sustainment include:

- Mobile defenses, by their nature, are subject to enemy penetrations. Position CS and sustainment forces to minimize the risk of being attacked or overrun.
- Due the greater distances involved in a mobile defense, a greater than normal amount of supplies and support will need to accompany each maneuver battalion.
- The fixing force will require large amounts of Class IV/V (obstacle material) and ammunition.
- The striking force will require large amounts of fuel, ammunition, and maintenance support. Additional support is often attached to the striking force.
- Ensure MSR's are developed to support all counterattack plans. Consider MSR security due to the large AO and potential for enemy interdiction.
- Plan refueling operations to support counterattacks and delaying actions. Ensure refueling operations are anticipated, planned, and synchronized with maneuver plans.
- Consider pre-stocks of ammunition and other supplies for the fixing force at subsequent positions in depth.
- Develop triggers to support the movement of CSS units and functions based on the scheme of maneuver, counterattack options, and anticipated enemy situation.
- Identify units with potential for high casualty density.
- Ensure status of MSR's/evacuate routes are disseminated to FHP elements and that triggers for opening or using alternate routes are established.
- Establish AXP's with triggers for their displacement to reduce ambulance turn-around time.
- Pre-position ambulance teams with maneuver BAS.
- Pre-position treatment teams based on METT-TC and casualty density estimates.
- Plan for heaviest patient workloads, including those produced by threat artillery and NBC weapons, and be prepared to implement a mass casualty plan.
- Integrate air ambulances from UEx and UEy, and the use of nonstandard air platforms for mass casualty operations into the HBCT FHP plan for clearing the battlefield and reducing evacuation time.

6-147. Sustainment considerations for the reconnaissance squadron include:

- Establishing sustainment procedures for both mounted and dismounted RECON missions.
- Establishing sustainment procedures for air versus ground insertion of RECON assets.
- Developing procedures for both aerial and ground sustainment.
- Developing resupply techniques to include:
 - Using multiple/false LZs away from outposts as cache drop-off points.
 - Predetermining the locations and times for resupply of Classes I, III, IV, V, VII, and XI.
 - Establishing locations for caches on successive missions/insertions.

RECONNAISSANCE CONSIDERATIONS

6-148. The commander's PIR normally centers on identifying and tracking the enemy's main and secondary efforts that allow him to effectively commit the striking force. Key considerations are discussed below.

6-149. *Identify the Enemy's Main and Secondary Efforts.* The initial priority of the ISR effort is to confirm the enemy's main and secondary efforts. Early detection of the enemy's main attack provides the commander reaction time to adjust the fixing force's positions and control the enemy penetration that, in turn, provides the time necessary to commit the striking force effectively. The reconnaissance squadron, reinforced with, or in conjunction with, UAVs and other intelligence collection assets and/or ground maneuver forces, focus on critical NAIs that help the commander identify the enemy's selected COA. The collection effort must also detect and monitor the actions of enemy reserves and follow-on forces that may intervene into the battle. The HBCT commander will monitor and track the UEx reconnaissance effort via the COP to complement his internal reconnaissance effort. This provides the commander an understanding of the time available to counterattack and the need to reinforce efforts in other areas of the defense.

6-150. *Support to the Striking Force's Counterattack(s).* The striking force requires as close to real time intelligence of the enemy situation as possible to ensure it engages the targeted enemy force at the right time and location in the best manner. ISR assets seek to identify the targeted enemy force's strength, composition, disposition, security forces, and rate/direction of movement; and if digitally equipped, enter that information into the HBCT's enemy database so that it becomes part of the HBCT COP. Additional reconnaissance assets are often assigned to the striking force to provide it a more robust and responsive collection capability. The commander must ensure adequate means are established to provide continuous updates of the enemy situation directly to the striking force.

6-151. *Synchronize the reconnaissance effort.* Due to the vast area and fluid situation associated with a mobile defense, synchronization of ISR operations is especially difficult. The commander must establish a mobile, flexible, and responsive reconnaissance effort. Flow of critical information from observers to the commander and effected subordinate units is essential. The staff carefully analyzes the terrain, avenues of approach available to the enemy, and feasible enemy COAs to determine positioning and movements of reconnaissance assets. The staff identifies locations where the occurrence or lack of occurrence of an enemy activity potentially indicates a future (COA). Reconnaissance assets will need to move and reposition to maintain contact with enemy forces and observe NAIs in depth as the battle develops. The commander must ensure the ISR plan is synchronized, resourced, understood, and rehearsed. The staff must also analyze the risk to reconnaissance assets during the battle and develop measures to protect and support reconnaissance forces. Potential risks to reconnaissance forces include detection and engagement by the enemy, loss of mobility or supportability due to enemy actions, and fratricide.

PREPARATION

6-152. The HBCT uses the preparation time available to build the strongest position possible while refining counterattack plans. The commander and staff supervise the defensive preparations through inspections and rehearsals.

INSPECTIONS

6-153. The commander supervises preparation of subordinate forces' plans and positions to ensure they are consistent with his intent. He ensures maneuver actions and fires and priorities are coordinated between the striking force and fixing force. The commander normally weighs his efforts towards the striking force. He ensures all maneuver forces

within the striking force understand their tasks and purpose, his intent, and the scheme of maneuver. The commander ensures all maneuver and fire plans within the striking force are fully coordinated and understood to ensure effective execution. Inspecting the striking force's rehearsals is a good way to ensure the commander's intent and concept of operations is understood and executed.

REHEARSALS

6-154. The HBCT rehearses the plan against a range of enemy options that cause the HBCT to execute various counterattack plans and contingencies. The goal is to exercise the HBCT's leadership and C2 systems against potential situations that may arise during execution and to force decision making under the anticipated conditions of the battle. This reinforces flexibility and exercises agility while promoting an understanding of the commander's intent. The commander ensures all subordinates understand their missions and the role of adjacent or supporting forces for each counterattack plan. The commander validates the DST during the rehearsal and ensures everyone understands the DPs and criteria that are linked to each counterattack option.

OCCUPATION AND ESTABLISHMENT OF SECURITY

6-155. The first priority is to establish security. The commander may direct the establishment of a forward security area. The reconnaissance squadron reinforced with tanks is a technique for establishing the HBCT forward security area. However, this mission is usually assigned to the fixing force and the forward security area is often the fixing force's initial position. When defending an extremely wide AO, the fixing force establishes a screen. Often, the HBCT must accept risk with some gaps within the forward security area due to the overall width of the AO. The commander should consider the need to reinforce the surveillance and security capabilities of the fixing force with additional assets. It is essential that all units maintain a high level of active and passive security. Employment of patrols, establishment of OPs, skillful use of UAVs and sensors, and effective use of the terrain to conceal dispositions are essential for effective security.

6-156. Units move into their assigned AOs and occupy positions as directed by the HBCT's movement plan. The striking force occupies positions in one or more areas depending on the terrain, enemy capabilities, size of the AO, and its planned manner of employment. The fixing force occupies its assigned AO to start defensive preparations. CS and CSS assets also occupy positions to support preparation of the defense. The reconnaissance squadron observes critical NAIs that assist in answering the priority intelligence requirements (PIR). In some cases, maneuver battalion scout platoons may assist in security missions for the HBCT.

6-157. The fixing force uses extensive obstacles to support its delay mission, shape the enemy's maneuver, and gain a relative mobility advantage over the enemy. The fixing force employs obstacles throughout the depth of its AO. Fighting positions are constructed to enhance survivability at planned BPs. The HBCT also maintains a flexible and responsive obstacle capability through the use of situational obstacles.

6-158. As part of the defense, the UEx will develop a deception story to protect the force, cause early committal of the enemy, and mislead the enemy as to the true intentions, composition, and the disposition of friendly forces. The HBCT will aid in the execution of the deception story to:

- Exploit enemy pre-battle force allocation and sustainment decisions.
- Exploit the potential for favorable outcomes of protracted minor engagements and battles.
- Lure the enemy into friendly territory, exposing his flanks and rear to attacks.

- Mask the aggressiveness of the sustaining and operational forces committed to the defense.

6-159. The reasons for employing deception go to the heart of maintaining a coherent defense. Those reasons are to:

- Defeat a large attacking force
- Retain territory
- Gain time

6-160. Defensive operations contain branches and sequels that give the commander preplanned opportunities to exploit the military situation. It is around these branches and sequels that deception potentials exist.

6-161. Specific deceptive actions that the HBCT commander can take to hasten exhaustion of the enemy offensive include, but are not limited to:

- Manipulating the SALUTE factors associated with defensive dispositions.
- Creating notional obstacles.
- Masking the conditions under which he will accept decisive battle.
- Manipulating the SALUTE factors associated with operational reserves, particularly their mission intent.
- Luring the enemy into a decisive battle, the outcome of which will precondition branching or sequencing to an offensive campaign.
- Inducing enemy operational reserves to remain uncommitted at the decisive time or place.
- Employing camouflage, decoys, false radio traffic, movement of forces, and the digging of false positions and obstacles.

EXECUTION

SECURITY AREA ENGAGEMENT

6-162. The security area engagement begins as the fixing force makes contact with the enemy. It may include battle handover and passage of lines with the reconnaissance squadron and UEx or UEy security forces operating forward of the HBCT. The RHL (Reconnaissance Handover Line) will also be exercised as forward units withdraw and hand off the responsibility for collecting, reporting, assessing, and tracking enemy units.

6-163. *Battle handover.* The fixing force normally conducts battle handover with the higher headquarters' security forces. The fixing force is prepared to assist the security force with breaking contact from the enemy. As the battle handover is executed, the fixing force makes contact with the enemy and undertakes its portion of the defensive mission.

6-164. *Shape and control the enemy advance.* The fixing force's first priority is to assess the enemy's main and secondary efforts. The fixing force controls the enemy's advance mainly through delaying actions supported by obstacles and fires. The fixing force may displace quickly to deceive the enemy by making him think he has been successful or to entice him into a position where the striking force can attack him. The fixing force normally retains ground only to support an attack of the striking force. As the fixing force fights the enemy, the commander employs the full weight of joint fires and effects against the enemy. These fires and effects include both lethal and non-lethal, CAS, UEx supporting fires, and may also integrate attack aviation support. In a mobile defense, the HBCT relies heavily on indirect fires, CAS, and situational obstacles to create favorable force ratios for counterattacks. Fires during this phase of the battle are used to:

- Support the fixing force's delaying action

- Disrupt or limit the momentum of the enemy's attack
- Destroy high-payoff targets (HPTs) that support the decisive action of the striking force
- Divert the enemy's attack
- Reduce the enemy's combat power
- Separate enemy formations

6-165. The fixing force commander, using the COP, reports his assessments of the enemy's strength, disposition, and intentions to the HBCT commander. The HBCT commander considers this report combined with other ISR results to determine when and where to counterattack. The commander repositions security forces, the reconnaissance squadron, and battlefield surveillance assets to provide detail information on enemy forces he intends to counterattack. The commander must also stay aware of enemy follow-on echelons that may be able to impact on the current or future situation. The commander, assisted by the staff, anticipates likely times and locations to counterattack, then adjusts counterattack plans based on the actual situation.

MAIN BATTLE AREA ENGAGEMENT

6-166. The commander launches his striking force in a counterattack when its offensive power, relative to that of the targeted enemy force, is the greatest. The striking force normally attacks with surprise and speed against a flank or the rear of the targeted enemy force. The commander weights the counterattack with all available combat power.

6-167. The striking force constitutes the bulk of the HBCT's combat power. Its purpose is to conduct decisive counterattacks. The commander should not spend its combat power against minor enemy successes. Piecemeal commitment of the striking force against local enemy successes jeopardizes the overall operation and does not support counterattacking at the decisive moment.

6-168. The commander's most critical decision is when, where, and under what conditions he will commit the striking force. The striking force must have the command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) required to focus its combat power at decisive times and locations. The weight of the ISR collection effort is placed on identifying the conditions for the striking force's effective commitment at the decisive moment. The commander ensures the HBCT's C4ISR system is focused on anticipating and identifying the DP for the striking force's commitment, and synchronizing the required actions to support its attack(s).

6-169. The striking force must be able to respond to unexpected developments rapidly and decisively. Although plans for counterattacks are developed in advance, they may be launched at a different time and in an entirely different location than planned. Mobility is critical. The striking force maintains mobility through reconnaissance, use of multiple routes, and mobility operations.

6-170. The HBCT develops the situation and maneuvers the striking force out of contact in a formation that is focused on massing fires and effects at the objective or EA. Using enhanced SU due to digital enablers, which is integrated into the COP, will strike the enemy at near-simultaneous, multiple, and critical points in his depth while also attacking his supporting and reinforcing capabilities. Speed is essential to close on the enemy force from an unexpected direction before he is able to effectively react. When a series of counterattacks serve as the defeat mechanism, the commander normally aims to defeat exposed portions of the enemy force in sequence. In this case, it is often best to counterattack by fire from the enemy's flank, rear, or other position of advantage. The counterattack by fire is completed by an assault, after which time the strike force may break contact to prepare for action elsewhere. The striking force may conduct a mounted assault to defeat a vulnerable enemy

force or rapidly penetrate an enemy force to gain access to a deeper objective. The striking force must maintain flank and rear security during a mounted assault. In some cases, the striking force may occupy hasty positions prior to the arrival of an enemy force. Once the enemy force closes into the EA, it is destroyed through massed fires and, if required, an assault. The risk inherent in this option is that it potentially allows the enemy to react or even fix the striking force.

SECTION IV – RETROGRADE OPERATIONS

6-171. Retrograde operations are defensive operations that are directed, organized movements away from an enemy. They may be forced or voluntary dependant on the tactical situation. In either case, the higher commander of the force executing the operation must approve the retrograde. Retrograde operations are conducted to protect an overwhelmed or weakened force, improve an untenable tactical situation, or to prevent a worse situation from developing. In either case, the HBCT's higher headquarters must approve the operation. Retrograde operations accomplish the following:

- Resist, exhaust, and damage enemy forces while avoiding becoming decisively engaged.
- Draw the enemy into an unfavorable situation.
- Avoid contact in undesirable conditions.
- Gain time.
- Preserve forces.
- Disengage from battle for use elsewhere in other missions.
- Reposition forces, shorten LOCs, or conform to movements of other friendly units.

6-172. The three forms of retrograde operations are as follows:

- *Delay.* This operation trades space for time and preserves friendly combat power while inflicting maximum damage on the enemy.
- *Withdrawal.* A planned, voluntary disengagement from the enemy. Withdrawals may be conducted with or without enemy pressure.
- *Retirement.* An operation in which a force that is not in contact with the enemy moves to the rear in an organized manner.

6-173. Retrograde operations are difficult and inherently risky. They are characterized by emphasis on the following requirements during planning and execution:

- Maintain morale and leadership.
- Preserve freedom of maneuver.
- Conserve combat power.
- Ensure unity of effort.

6-174. These requirements take on varying degrees of significance depending on the type of retrograde mission performed.

6-175. An integral part of successful retrograde operations is strong leadership and disciplined execution. Movement to the rear may be seen as a defeat, or a threat of isolation unless soldiers have confidence in their leaders and understand the purpose of the operation and their role in it. Leaders must be present, display confidence in the plan, be in control of the battlefield, and thoroughly brief soldiers on their role in the overall operation. Safe evacuation of casualties becomes paramount, as unit cohesiveness and morale may break down if soldiers perceive a breakdown in CASEVAC. Soldiers must be reminded that they are conducting combat operations that will free the unit for other operations, while continuing to inflict casualties upon the enemy.

6-176. HBCTs must preserve their freedom to maneuver. While a portion of the unit may become decisively engaged, the commander cannot allow the entire unit to do so. He must develop contingencies and be prepared to fight to free battalions or companies that can no longer extricate themselves.

6-177. *Conserve Combat Power.* Frequently the purpose of a retrograde is to conserve combat power for use elsewhere. Commanders must strike a balance between preserving the force and taking risk to delay the attacker. ISR that translates to information superiority can leverage the analysis required to determine where opportunities to strike the enemy exist and what the associated risks are. Commanders can use the results of that analysis to shape the battlefield to reduce risk while attriting the enemy.

6-178. *Slow the Enemy's Rate of Advance.* The enemy forward security element and advanced guard battalion must be fought and defeated, without becoming decisively engaged, in order to achieve an effective delay. The commander does this by shaping the battlefield with combat multipliers that affords opportunities to mass destructive fires and effects on the enemy. Effective integration of obstacles and fires will hinder and attrite the enemy, while preserving combat power of friendly forces.

6-179. *Ensure Unity of Effort.* Simple plans that stress initiative and freedom of action are best suited for retrograde operations due to fluid and rapidly changing situations. HBCT commanders ensure unity of effort through a clear intent, graphic control measures that are not overly restrictive, and personal presence at the decisive point.

DELAY

6-180. In a delay, the HBCT trades space for time, and inflicts maximum damage on the enemy. Inflicting damage is normally secondary to gaining time. The HBCT may execute a delay when it has insufficient combat power to attack or defend or when the higher unit's plan calls for drawing the enemy into an area for a counterattack. Delays gain time to:

- Allow other friendly forces to establish a defense.
- Cover a withdrawing force.
- Protect a friendly force's flank.
- Function as an economy of force effort to allow other forces to counterattack.

6-181. The two types of delay missions are as follows:

- *Delay within an AO.* This mission is used to slow and defeat as much of the enemy as possible without sacrificing the tactical integrity of the unit; presents low risk to the unit.
- *Delay forward of a specific area or position for a specific period of time.* This mission is used to slow an enemy advance for a specific period of time or defeat specified enemy formations within an area to support the higher commander's concept of operations. This often involves the decisive engagement of part or the entire unit and presents high risk to the unit.

ORGANIZATION

6-182. The HBCT normally organizes into a security force, main body, and reserve. The main body consists of the majority of the HBCT's combat power and is usually deployed well forward within the AO. The security force normally establishes a screen forward of the initial positions of the main body. The reserve contains or defeats enemy penetrations between delay positions, conducts limited objective counterattacks, and assists other units with breaking contact. CS and CSS assets tend to be widely dispersed and often attached to the units they support.

PLANNING CONSIDERATIONS

6-183. A delay consists of a series of independent subordinate actions that occur simultaneously across the HBCT's front. The HBCT's plan must recognize the need for subordinate commanders to have maximum freedom of action within the context of the commander's intent.

6-184. The commander determines the end state of the delay based on the higher commander's intent and specific parameters of the higher headquarters' delay order. The commander considers the factors of METT-TC, especially the effects of the terrain, to identify advantageous locations to engage the enemy throughout the depth of the AO. The commander and staff must determine how to array forces, allocate fires, and integrate obstacles to accomplish the mission against all feasible enemy COAs. They specifically decide whether to use alternate or subsequent positions in the delay; the acceptable level of risk for each subordinate unit; and where or if subordinate forces will accept decisive engagement to accomplish the mission.

6-185. The HBCT order must clearly articulate the parameters of the delay mission. The order specifically addresses subordinate missions in terms of space, time, and friendly strength. It also provides directions for actions if the subordinate is unable to meet the terms his delay mission. Table 6-1 gives an example of the parameters of a delay mission issued to a subordinate task force.

Table 6-1. Example of the parameters of a delay

<p>“CAB 1 delays forward of PL Blue (space) until 020900 FEB XXTo allow 2CAB to prepare its defense. Do not lose more than 30% combat power (friendly strength). If unable to meet mission parameters, provide at least 30 minutes warning before initiating rearward passage of lines and battle handover with CAB 2 along PL BLUE. Upon completion of</p>

6-186. The staff analyzes the effects of terrain and the anticipated enemy situation to identify positions that offer the best opportunity to engage, delay, and inflict damage on the enemy force. As the staff develops delay positions and control measures, they calculate enemy closure rates and compare it to friendly displacement rates between positions. Time and space factors dictate the amount of time subordinate units have to engage the enemy and move before becoming decisively engaged; these factors are calculated for each avenue of approach. The staff also analyzes the terrain and expected enemy situation to identify advantageous locations to engage the enemy such as chokepoints, natural obstacles, or canalizing terrain. They also consider possible locations to plan counterattacks and build situational obstacles. Situation templates (SITTEMPs) must tell the commander and staff where the enemy will likely be at certain times. This helps them decide where to emplace obstacles, mass fires, and where decisive engagements are likely or required. The staff considers maneuver actions, fires, obstacles, and the employment of other supporting assets necessary to degrade the enemy's mobility and support friendly forces' disengagement to subsequent positions. As the staff develops and refines the plan, they develop DPs for key actions. This includes triggers for the employment of fires, and situational or reserve obstacles; displacement of task forces to subsequent positions; and movement of indirect fire assets, C4ISR facilities, and sustainment units. The staff also selects routes for reinforcements, artillery, CPs, and sustainment elements to use and synchronizes their movements with the delaying actions of forward units.

SCHEME OF MANEUVER

6-187. The scheme of maneuver must allow the HBCT to dictate the pace of the delay and remain in control of the situation. The commander must select positions to fight the delay that allow his forces to inflict maximum damage on the enemy, support their disengagement, and enable their withdrawal.

6-188. Areas of responsibility are defined by establishing AOs or BPs for each maneuver battalion, and developing control measures to ensure adequate control while supporting decentralized freedom of action. Deep, parallel AOs are normally assigned to delaying task forces. AOs are assigned in the same manner as discussed previously. Each enemy avenue of approach is assigned to only one subordinate unit. Boundaries are used to define maneuver battalion AOs. When boundaries are drawn, terrain that provides fields of fire and observation into an area is assigned to the unit responsible for that AO or BP. Contact points and other control measures are established to support flank unit coordination. The commander and staff make provisions for coordinated action along avenues of approach that diverge and pass from one subordinate AO to another.

6-189. If the terrain is suitable, the commander may assign BPs (also referred to as delay positions) to subordinate maneuver battalions. BPs are planned in the same manner as discussed previously. Positions should incorporate as many of the following characteristics as possible:

- Good observation and long-range fields of fire.
- Covered or concealed routes of movement to the rear.
- A road network or areas providing good cross-country trafficability.
- Existing or reinforcing obstacles to the front and flanks.

6-190. *Maximize the use of terrain.* Delay positions should be on terrain that controls likely enemy avenues of approach. They should allow engagements against the enemy where his movement is most canalized and facilitate maximum delay with minimum forces. Ideally, terrain should support engagements at maximum weapon ranges.

6-191. *Force the enemy to deploy and maneuver.* Engagement at maximum ranges of all weapons systems causes the enemy to take time-consuming measures to deploy, develop the situation, and maneuver to drive the delaying force from its position. An aggressive enemy commander will not deploy if he correctly determines that friendly forces are delaying; he will use his mass and momentum to develop sufficient pressure to cause friendly forces to fall back. Therefore, the delay must be sufficiently tenacious to make him doubt the nature of the friendly mission and leave him no choice but to deploy and maneuver.

6-192. *Maintain a mobility advantage over the attacker.* A key to a successful delay is to maintain a mobility advantage over the attacking enemy. The HBCT seeks to increase its mobility while degrading the enemy's ability to move. The HBCT improves its mobility by:

- Reconnoitering routes and BPs.
- Constructing and improving routes, bridges, and fording sites between delay positions.
- Task organizing and positioning breaching assets within subordinate formations.
- Using multiple routes.
- Controlling traffic flow and restricting refugee movements to routes not used by the HBCT.
- Rehearsing movements.
- Displacing nonessential sustainment activities early in the operation.

- Maintaining the mobility of medical units/elements is achieved by rapid MEDEVAC of patients from battalion treatment facilities to the BSB medical company.
- Positioning air defense and security forces at critical points.

6-193. The HBCT degrades the mobility of the enemy by:

- Occupation and control of chokepoints and key terrain that dominates high-speed avenues of approach.
- Destruction of enemy reconnaissance and security forces that blinds the enemy and causes him to move more cautiously.
- Limited objective counterattacks.
- Engagements at maximum ranges.
- Extensive use of obstacles and the destruction of bridges and roads along avenues of approach no longer needed by friendly forces.
- Employment of indirect fires, electronic attack, smoke, and CAS.
- Effective use of military deception such as feints and demonstrations.

6-194. *Parameters of the delay order.* An order for a delay mission must specify certain parameters. First, it must direct one of two alternatives—delay by AO or delay forward of a specific line or area for a specific period of time. A mission of delay within an AO implies that force integrity is a prime consideration. In this case, the delaying force delays the enemy as long as possible while avoiding decisive engagement. If the delaying force is ordered to hold the enemy forward of a given PL for a specified time, mission accomplishment outweighs preservation of the force's integrity. It may require the force to defend a given position until ordered to displace.

6-195. The second parameter that the order must specify is acceptable risk. Acceptable risk ranges from accepting decisive engagement (for a limited amount of time or effects) in an attempt to hold terrain for a given period of time; to avoiding decisive engagement at all cost in order to maintain the delaying force's integrity. The depth available for the delay, the time needed by the higher headquarters, and subsequent missions for the delaying force determine the amount of acceptable risk.

6-196. Third, the order must specify whether the delaying force may use the entire AO or whether it must delay from specific BPs. A delay using the entire AO is preferable, but a delay from specific positions may be required to coordinate two or more units in the delay.

6-197. *Alternate and subsequent positions.* In planning, the commander chooses to delay from either alternate positions or subsequent positions. In a delay from alternate positions, two or more units in a single AO occupy delaying positions in depth (see Figure 6-11). As the first unit engages the enemy, the second occupies the next position in depth and prepares to assume responsibility for the operation. The first force disengages and passes around or through the second force. It then moves to the next position and prepares to reengage the enemy while the second force takes up the fight. A delay from alternate positions is particularly useful on the most dangerous avenues of approach because it offers greater security and depth than a delay from subsequent positions.

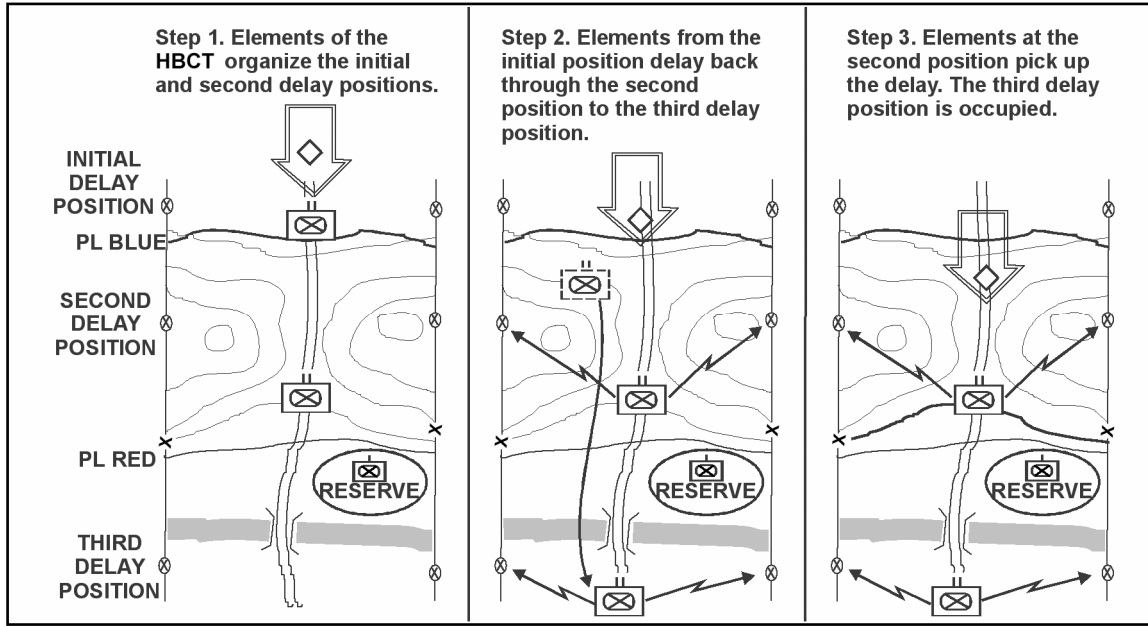


Figure 6-11. Delay by Alternate Positions

6-198. A delay from subsequent positions is used when the assigned AO is so wide that available forces cannot occupy more than a single tier of positions (see Figure 6-12). In a delay from subsequent positions, the majority of forces are arrayed along the same PL or series of BPs. The forward forces delay the enemy from one PL to the next within their assigned AOs.

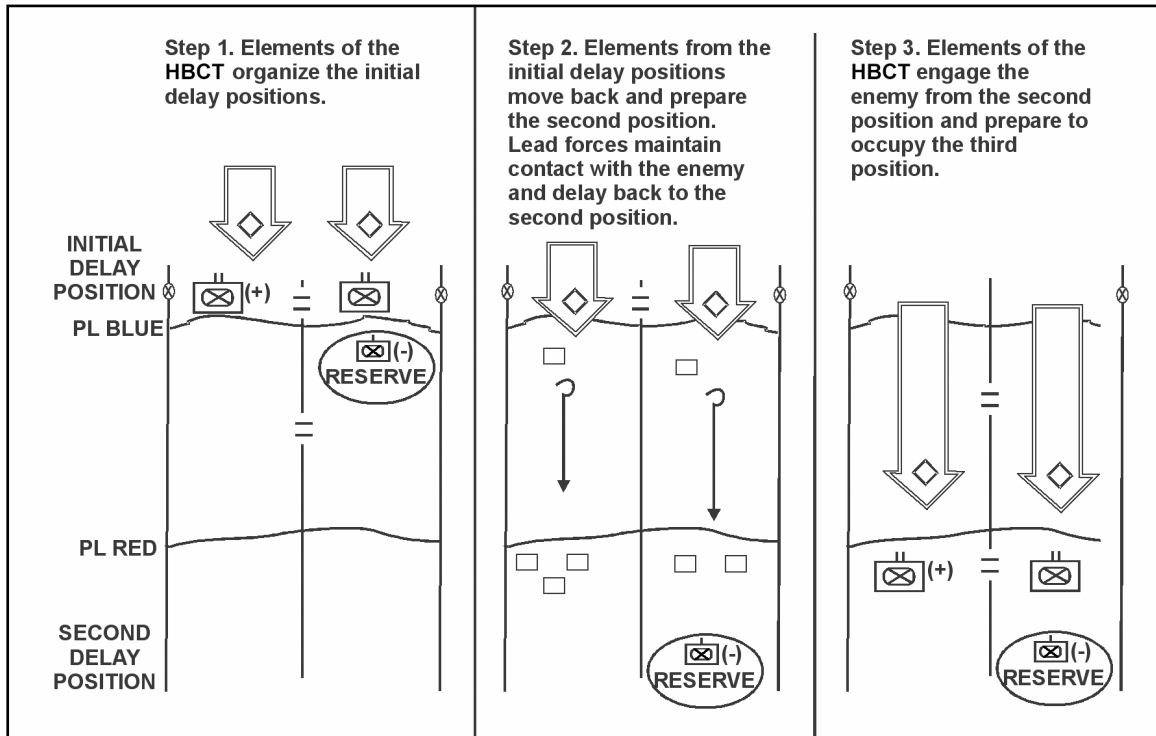


Figure 6-12. Delay by Subsequent Positions

6-199. In both techniques, the delaying forces maintain contact with the enemy between delay positions. The advantages and disadvantages of the two techniques are shown in Table 6-2.

Table 6-2. Comparison of methods of delay

METHOD OF DELAY	USE WHEN . . .	ADVANTAGES	DISADVANTAGES
Delay from subsequent positions.	AO is wide. Forces available do not allow themselves to be split.	Masses fires of all available combat elements.	Limited depth to the delay positions. Less time is available to prepare each position. Less flexibility.
Delay from alternate positions.	AO is narrow. Forces are adequate to be split between different positions.	Allows positioning in depth. Allows more time for equipment and soldier maintenance. More flexibility.	Requires continuous coordination. Requires passage of lines. Only part of the force is engaged at one time.

BOS INTEGRATION

6-200. *Fire support.* Key considerations for the fires and effects support plan include

- Engage the enemy with fires before he gets to friendly delaying positions to inflict casualties and disrupt his approach.
- Mass fires on HPTs and canalizing terrain to limit the momentum of the enemy's attack.
- Plan and designate priority targets along routes from one delaying position to the next.
- Mass all available fires (lethal and non-lethal) to support disengagements.
- Use of smoke to screen friendly movements.
- Synchronize the positioning and movement of artillery assets to provide responsive, continuous fires across the width of the delaying force.
- Ensure forward positioned observers are resourced with adequate security and mobility to prevent them from being isolated or destroyed.

6-201. *Engineer support.* When augmented with additional UEx engineer assets (based on mission planning), key considerations for the scheme of engineer operations include:

- Ensure adequate reconnaissance of routes to identify the need for improvement and maintenance. Prioritize routes and allocate engineer support to maintain adequate trafficability of critical routes.
- Task-organize mobility assets and engineer forces to support mobility requirements. Consider the mobility requirements of delaying task forces, reserve, artillery, and sustainment units.
- Develop the obstacle plan to support disengagement of delaying forces and shape the enemy's maneuver to meet the commander's intent. Consider counter-mobility requirements for all delaying positions throughout the depth of the AO.
- Consider the impact of the obstacle effort on the movement of friendly forces and future operations. Develop obstacle restriction, establish lanes, and employ situational or reserve obstacles to support mobility requirements.
- Plan survivability support for delaying positions, artillery assets, and other critical assets. Balance the need for mobility support and survivability.

- Integrate the employment of situational obstacles to attack the enemy's maneuver in specific EAs, support disengagement, and provide flexibility to deal with unexpected developments.
- Develop clear criteria for execution of reserve and situational obstacles. Integrate decisions for their employment in the DST.

6-202. *Air defense support.* When provided for air defense coverage, key considerations for the air defense plan include:

- Synchronize the movement and positioning of ADA assets with the delaying forces.
- Ensure adequate air defense coverage of friendly forces during movements from one delaying position to another. Consider protection along movement routes, chokepoints, and bridges friendly forces intend to use.
- Maintain flexibility to rapidly shift and mass ADA assets against significant enemy air threats that most threaten the HBCT's mobility.

6-203. *Nuclear, biological, chemical.* NBC reconnaissance assets are used to check routes and subsequent BPs for contamination. Smoke is integrated with tactical plans to support disengagement and movements. Decontamination plans are developed to support the full depth of the delay.

6-204. *Sustainment.* Support for a delay is particularly complex. Communication within the sustainment system, accurately tracking the battle and anticipation of support requirements are especially important. Key planning considerations include:

- Echelon sustainment elements in depth to provide support to forward delaying forces while establishing support for withdrawing forces.
- Ensure only critical supplies are moved forward. Move any supplies not required by forward forces to the rear. The same applies to transportation assets.
- Displace nonessential units early to avoid congested roads later.
- Maximize the use of back haul. All transportation assets moving resources forward assist in the evacuation effort. This may include evacuation of wounded soldiers when ambulances are not readily available.
- Emphasize maintenance support forward. Concentrate on exchange versus repair, maximize battle damage assessment and repair (BDAR), and use all available assets (to include firepower damaged vehicles) to evacuate damaged vehicles to the rear.
- Synchronize refueling and resupply operations with the scheme of maneuver and the anticipated enemy situation to ensure continuity of support. Maintain the ability to conduct emergency resupply and refueling support.

PREPARATION

6-205. Defensive preparations discussed previously also apply during the conduct of a delay. Specific considerations are discussed in the paragraphs below.

6-206. *Inspections.* The commander inspects planning and preparations of his subordinate units to ensure:

- Maneuver, fire, and obstacle plans are consistent with his intent.
- Flank coordination between delaying task forces is conducted to maintain cohesion and mutual support during the delay.
- Defensive preparations are proceeding according to established timelines.
- All leaders have a clear understanding of the scheme of maneuver and the commander's intent.

- Effective positioning of forces, development of fire plans, and the integration of fires and obstacles.

6-207. *Rehearsals.* When conducting a rehearsal for a delay, key leaders practice the operation against all feasible enemy COAs to promote flexibility of decision-making, plans, and execution. The HBCT commander examines each subordinate unit commander's plan as he fights the delay during the rehearsal and pays close attention to the following:

- Direct and indirect fire plans.
- Timing of movements and delaying actions from one position to the next; paying special attention to the disengagement criteria.
- Means and methods of disengaging from the enemy and maintaining contact with the enemy as the force moves to subsequent positions.
- Execution of situational and reserve obstacles to include closure of lanes.
- Movement times, routes, and positioning of CS and sustainment assets. Determine exactly what sustainment assets the subordinate commanders plan on evacuating early.
- Rehearse command and control and alternate means of communications.

6-208. The commander also rehearses plans to deal with potential reverses, enemy penetrations, and unanticipated decisive engagement. The rehearsal also serves to further synchronize the movement of combat forces, CS, and sustainment units. It is especially important to realistically portray movement times and required routes during the rehearsal to identify potential conflicts.

OCCUPATION AND ESTABLISHMENT OF SECURITY

6-209. The considerations addressed previously also apply to the delay. All units place special emphasis on the selection, reconnaissance, and improvement of routes to support the delay. Regardless of the time available, all units must take measures to reconnoiter routes and positions prior to use.

PREPARATION (CONTINUED SECURITY OPERATIONS)

6-210. Based on the time available, the HBCT employs extensive obstacles to support the delay. Obstacles are normally employed in depth to support subsequent delaying positions. The commander employs obstacles to support disengagement and shape the enemy's maneuver. Obstacles are a key element in maintaining a mobility advantage over the enemy.

EXECUTION

6-211. *Security area engagement.* The HBCT deploys security forces forward of the initial delay positions to give early warning and reaction time of the enemy's approach. The security force normally detects and destroys enemy reconnaissance and security elements without risking decisive engagement. The security force relies heavily on indirect fires and CAS to engage enemy forces, screen movements, and support disengagement. Forward maneuver battalions are normally responsible for conducting the forward security mission. The reconnaissance squadron may or may not be part of the forward security mission. As the enemy approaches, security forces detect the attack and report enemy maneuver and locations. In digitally equipped units, digital SPOTREPs are submitted which become the threat icons to the COP. The commander uses this information, combined with other available intelligence about the enemy, to determine the enemy's composition, strength, and direction/rate of attack, and makes a decision based on his SU of the situation.

6-212. The commander initiates fires against the approaching enemy formations as far forward of the delaying positions as possible. These long-range fires serve to inflict casualties

early and disrupt the enemy's momentum. As the enemy closes on the initial delaying positions, security forces move back into friendly positions while keeping the enemy under constant observation. Forward reconnaissance assets also move back to new positions to maintain contact with the enemy and avoid being cut off by the enemy's advance.

6-213. *MBA engagement.* The HBCT delays by forcing the enemy to repeatedly concentrate his forces to fight through delaying positions in depth. The HBCT must offer a continued threat of serious opposition, forcing the enemy to repeatedly deploy and maneuver. Delaying forces displace to subsequent positions before the enemy is able to concentrate sufficient resources to decisively engage and defeat them on their current position.

CONTROLLING THE DELAY

6-214. The commander generally decentralizes execution of the delay to the battalion level. He must rely on his subordinate commanders to execute their mission and request help if and when they need it. Subordinates displace once they meet previously established parameters. Displacements may be preplanned events or time dependent. The commander closely controls the disposition of his forces to maintain cohesion and control of the situation.

6-215. The HBCT commander directs or allows delays from one position or PL to the next only after considering the following:

- What are the strengths, compositions, and dispositions of attacking enemy forces? Are elements of the HBCT threatened with decisive engagement or bypass?
- What is the status of adjacent units? How does their status affect the HBCT's capability to continue to delay?
- Does the movement affect the cohesion of the HBCT's disposition? Are other movements necessary to maintain cohesion? Do any CS or sustainment assets need to reposition?
- What is the condition of the delaying force in terms of troops, equipment, and morale?
- How strong is this position in relation to other positions that may be occupied?
- Is unit survivability or time key to the mission and higher commander's intent?

COUNTERATTACKS

6-216. Whenever possible, the HBCT takes any opportunity to seize the initiative, even if only temporarily. By aggressively contesting the enemy's initiative through offensive action, the HBCT avoids passive defensive patterns that favor the attacking enemy. Counterattacks disorganize the enemy, confuse the enemy commander's picture of the situation, and help prolong the delay. Counterattacks also affect the enemy's momentum.

DECISIVE ENGAGEMENT

6-217. Friendly forces normally do not become decisively engaged except when necessary to prevent the enemy from prematurely advancing across a piece of key terrain or when a part of the force must be risked to prevent jeopardizing the integrity of the whole force. If elements of the HBCT are threatened with decisive engagement or have become decisively engaged, the commander must take actions to support their disengagement. In order of priority, he can do any of the following:

- Allocate priority of all supporting fires to the threatened unit. This is the most rapid and responsive means of increasing the unit's combat power.
- Reinforce the unit.
- Conduct a counterattack to disengage the unit.

TERMINATING THE DELAY

6-218. A delay mission ends with another planned mission such as a defense, withdrawal, or attack. If the enemy reaches his culmination point during the delay, the HBCT may maintain contact while another force counterattacks, withdraw to perform another mission, or transition to the offense. In all cases, the commander must plan for the expected outcome of the delay based on the situation and the higher commander's plan.

WITHDRAWAL

6-219. The withdrawal is a planned operation in which a force in contact disengages from an enemy force. Withdrawals may or may not be conducted under enemy pressure. The two types of withdrawals are:

- *Assisted.* The assisting force occupies positions to the rear of the withdrawing unit and prepares to accept control of the situation. It can also assist the withdrawing unit with route reconnaissance, route maintenance, fire support, and sustainment. Both forces closely coordinate the withdrawal. Once plans are coordinated, the withdrawing unit delays to a BHL, conducts a passage of lines, and moves to its final destination.
- *Unassisted.* The withdrawing unit establishes routes and develops plans for the withdrawal, then establishes a security force as the rear guard while the main body withdraws. Sustainment and CS elements normally withdraw first followed by combat forces. The HBCT may establish a detachment left in contact (DLIC) if withdrawing under enemy pressure to deceive the enemy as to the friendly movement. As the HBCT withdraws, the DLIC disengages from the enemy and follows the main body to its final destination.

ORGANIZATION

6-220. The HBCT normally organizes into a security force, main body, and reserve. It may also organize a Detachment Left in Contact (DLIC) or stay behind forces if required by the enemy situation.

6-221. The security force maintains contact with the enemy until ordered to disengage or until another force takes over the task. It simulates the continued presence of the main body. This requires additional allocation of combat multipliers beyond that normally allocated to a force of its size. When the HBCT's withdrawal is conducted without enemy pressure, the security force transitions into a rear guard because the most probable threat is a pursuing enemy. When withdrawing under enemy pressure, the security force establishes or operates as a detachment left in contact (DLIC) to provide a way to sequentially break contact from the enemy.

6-222. A DLIC is an element that is left in contact as part of the previously designated (usually rear) security force while the main body conducts its withdrawal. Its purpose is to remain behind to deceive the enemy into believing the HBCT is still in position while the majority of the HBCT withdraws. The commander must establish specific instructions about what to do if the enemy attacks and when and under what circumstances to delay or withdraw. The HBCT organizes a DLIC in one of three ways (see Figure 6-13):

- Each maneuver battalion provides forces for the DLIC mission, which then operates under the HBCT's control.
- A single maneuver battalion operates as the DLIC.
- Each maneuver battalion establishes and controls their individual DLIC.

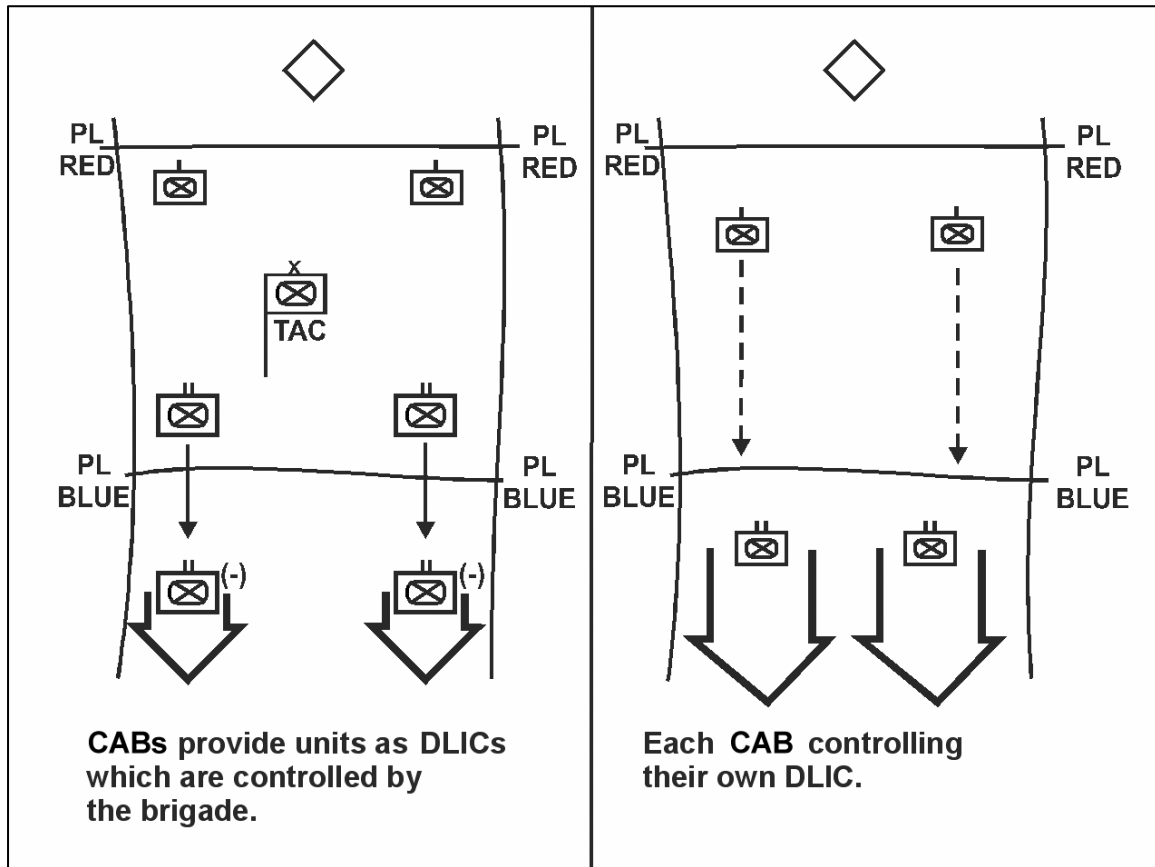


Figure 6-13. Method for Organizing the Detachment left in Contact

6-223. The main body consists of all elements except the security force and reserve. The main body withdraws along pre-designated routes to its final destination. The main body maintains all-around security during the withdrawal and movement.

6-224. The reserve provides the HBCT flexibility to deal with unexpected enemy actions. The reserve may take limited offensive action such as spoiling attacks to disorganize or disrupt the enemy. It can counter enemy attacks, reinforce threatened areas, and protect withdrawal routes.

PLANNING CONSIDERATIONS

6-225. Because the force is most vulnerable if the enemy attacks, the HBCT normally plans for a withdrawal under enemy pressure. Then contingencies are developed for a withdrawal without enemy pressure.

6-226. During planning the commander and staff specifically consider the following:

- Plan for a deliberate break in contact from the enemy.
- Displacement of the main body rapidly and safeguarded from enemy interference.
- Selection and protection of withdrawal routes.
- Retention of sufficient combat, CS, and sustainment capabilities throughout the operation to support forces in contact with the enemy.

6-227. The commander develops his vision of the battle based on withdrawing under enemy pressure. He must determine the composition and strength of the security force, main body,

and reserve. The commander must clearly define how he intends to deceive the enemy as to the execution of the withdrawal, how he intends to disengage from the enemy (use of maneuver, fires, and obstacles), and the final end state of the operation in terms of time, location, and disposition of forces.

SCHEME OF MANEUVER

6-228. A withdrawal may be assisted or unassisted. It may take place with or without enemy pressure. The combination of these two factors produces the four variations shown in Figure 6-14. The withdrawal plan considers which of the variations the HBCT is facing based on the higher headquarters' order and the enemy situation.

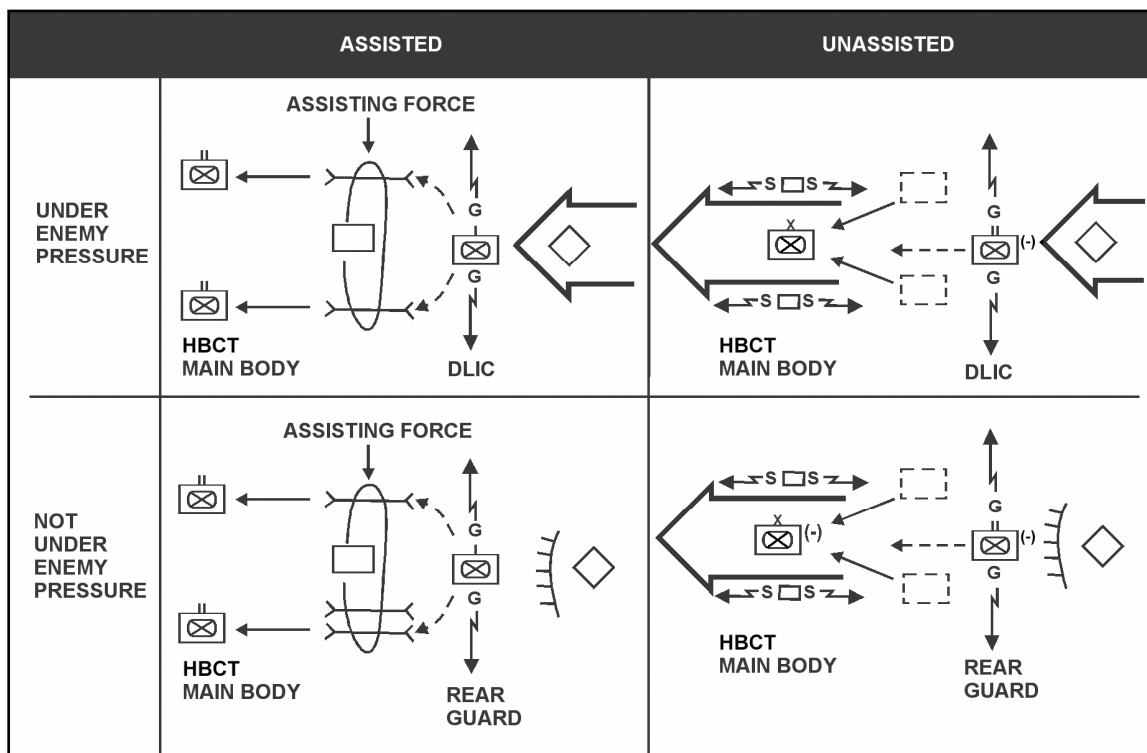


Figure 6-14. Types of Withdrawals

6-229. In an assisted withdrawal, the staff coordinates the following with the assisting force:

- Actions of the security force through which the withdrawing HBCT will pass.
- Reconnaissance of withdrawal routes.
- Forces to secure chokepoints or key terrain along the withdrawal routes.
- Elements to assist in movement control, such as traffic control points (TCP).
- Required combat, CS, and sustainment that can assist the withdrawing HBCT with disengaging from the enemy.

6-230. In an unassisted withdrawal, the HBCT establishes its own security and disengages it from the enemy. It reconnoiters and secures routes it will use in its rearward movement while sustaining itself during the withdrawal.

6-231. In a withdrawal under enemy pressure, when available routes allow, all units withdraw simultaneously. When simultaneous withdrawal of all forces is not practical, the commander decides the order of withdrawal. Several factors influence his decision:

- Subsequent missions.
- Availability of transportation assets and routes.
- Disposition of friendly and enemy forces.
- Level and nature of enemy pressure.
- Degree of urgency associated with the withdrawal.

6-232. The commander must make three interrelated key decisions:

- When to start the movement of selected CS and sustainment elements?
- When should forward elements start thinning out?
- When should the security force start its disengagement?

6-233. When conducting a withdrawal without enemy pressure, the commander can focus the plan on the best method to displace forces rapidly. He has the option of taking calculated risks that increase his force's displacement capabilities. He may order the main body to conduct a tactical road march instead of moving in tactical formations.

PREPARATION

6-234. The commander prepares the HBCT for the withdrawal by issuing orders and conducting inspections and rehearsals.

6-235. *Inspections.* The commander focuses on inspecting subordinate unit preparations to ensure a clear understanding of the scheme of maneuver and his intent. During an assisted withdrawal, the commander ensures adequate coordination for battle handover and passage of lines.

6-236. *Rehearsals.* The focus of the rehearsal is actions to maintain security, disengage from the enemy, and the movement of forces. When possible, key leaders or liaisons from the assisting force should attend the rehearsal. The commander ensures control measures, to include FSCMs, fully support the withdrawal. Leaders rehearse the plan against the full range of possible enemy actions. They rehearse contingencies for reverting to a delay, commitment of the reserve, and enemy interdiction of movement routes.

EXECUTION

6-237. The HBCT moves key forces and support to prepare for the withdrawal. This initial movement includes:

- Positioning security forces.
- Reconnoitering withdrawal routes and future assembly areas.
- Evacuating wounded soldiers and recovering equipment and nonessential supplies.
- Moving nonessential CS and sustainment units to the rear.
- Deploying artillery units to support the security force and/or DLIC.
- Moving engineers to repair or upgrade withdrawal routes and preparing obstacles to hinder pursuit by the enemy.
- Positioning MPs and other assets for traffic control.
- Positioning sustainment assets such as refueling sites and recovery assets to support the movement.
- Dispatching quartering parties to future assembly areas.

6-238. *Concealing the withdrawal.* The first priority is to conceal the withdrawal from the enemy. As the HBCT initiates the initial movement of forces, measures must be taken to maintain OPSEC. The following actions assist in maintaining OPSEC:

- Use of military deception, to include feints and demonstration, to cause the enemy to believe the HBCT intends to attack or defend.

- Maintenance of communication and information security.
- Avoidance of establishing patterns of movement that may indicate friendly intentions.
- Establishment of security focused on destroying enemy reconnaissance forces.
- Use of multiple withdrawal routes.
- Movement during limited visibility and along covered and concealed routes.

6-239. *Disengagement.* The security force remains in position and maintains a deception while the main body moves as rapidly as possible rearward to intermediate or final positions. After the main body withdraws a safe distance, the commander orders the security force to begin its rearward movement. Once the security force begins moving, it assumes the duties of a rear guard. If the enemy is not pursuing the HBCT, the security force may move in a march column.

6-240. The main body moves rapidly on multiple routes to designated positions. It may occupy a series of intermediate positions before completing the withdrawal. Usually CS and sustainment units, along with their convoy escorts, move first and precede combat units in the withdrawal movement formation. The staff enforces the disciplined use of routes during the withdrawal. Despite confusion and enemy pressure, subordinate units must follow specified routes and movement times.

6-241. *Actions on contact.* Security forces counter any enemy attempts to disrupt the withdrawal or pursue the HBCT. If the security force and the reserve cannot prevent the enemy from closing on the main body, the commander commits some or all of the main body to prevent the enemy from interfering further with the withdrawal. The main body delays, attacks, or defends as required by the situation. In this event, the withdrawal resumes at the earliest possible time. If the enemy blocks movement to the rear, friendly forces shift to alternate routes and bypass the interdicted area. Alternatively, they may attack through the enemy.

6-242. *Terminating the withdrawal.* Once the HBCT successfully disengages from the enemy, it normally has the following options:

- Rejoin the overall defense under favorable conditions.
- Transition into a retirement.
- Continue moving away from the enemy and towards its next mission.

6-243. The higher headquarters defines the HBCT's next mission. Follow-on missions are normally planned as the HBCT is preparing for or executing the withdrawal.

RETIREMENT

6-244. A retirement is a retrograde operation in which a force that is not in contact with the enemy moves to the rear in an organized manner. The HBCT normally conducts a retirement to reposition for future operations.

ORGANIZATION

6-245. The HBCT normally organizes into security elements and a main body. The formation and number of columns employed depend on the number of available routes and the potential for enemy interference. The commander typically wants to move his major elements to the rear simultaneously.

PLANNING CONSIDERATIONS

6-246. The commander and staff develop a movement plan based on the terrain and enemy situation. They develop the movement formation and order of movement to balance the need

for security and speed. Security forces are established to protect the main body from surprise, harassment, or attack by any pursuing enemy forces. Each march column normally maintains an advance guard, rear guard, and flank security (see Figure 6-15). The main body may organize into an approach march or tactical road marches if speed is most important and the need for security is low.

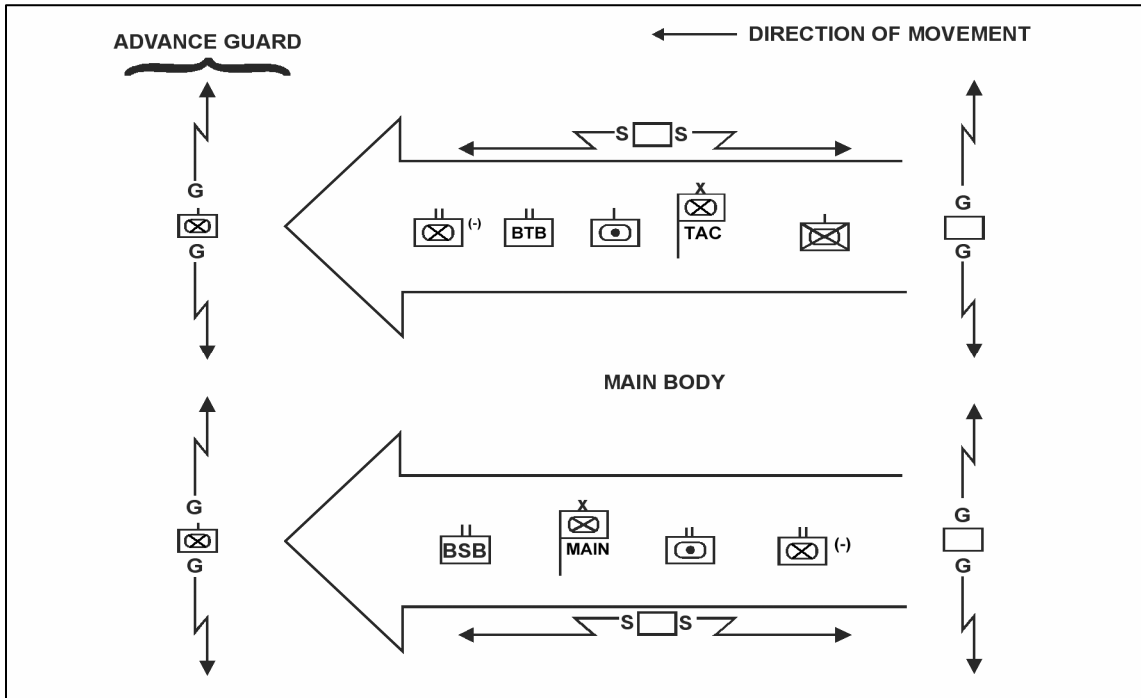


Figure 6-15. Retirement Operations

PREPARATION

6-247. During preparations, the HBCT and subordinate units conduct rehearsals and prepare for the movement. OPSEC and security operations are maintained. Advance priorities and quartering parties are dispatched as required.

EXECUTION

6-248. During a retirement, the HBCT normally moves to an assembly area to prepare for future operations. The elements of the HBCT move in accordance with establish movement times and routes. Strict adherence to the movement plan is essential to avoid congestion. The staff closely supervises the execution of the movement plan. Sustainment and CS assets (units) not attached or organic to the task forces or separate companies usually move to the rear first, followed by combat forces.

SECTION V – COUNTERMOBILITY, MOBILITY, AND SURVIVABILITY INTEGRATION

6-249. The commander focuses mobility and survivability planning through his intended obstacle effects, survivability priorities, and mobility priorities. The HBCT Engineer Officer develops the scheme of engineer operations that includes engineer task organization, priorities of effort and support, subunit missions, and mobility and survivability instructions for all units. The staff develops obstacle control measures, establishes obstacle restrictions,

and integrates obstacles with maneuver and fire support to achieve the commander's intended obstacle effects on the enemy's maneuver.

COUNTERMOBILITY

6-250. Counter-mobility is normally the engineer main priority during defensive operations. Obstacle planning and integration is a vital part of all defensive planning (see FM 3-34.1 [FM 90-7]). The obstacle plan is developed concurrently with the fires and effects support plan and scheme of maneuver. The commander drives the obstacle planning effort by stating his intended obstacle effects. This is what effects he intends for fires and obstacles to have on the enemy to support his concept of operations. It consists of the following three elements:

- *Target.* The target is the enemy force that the commander wants to effect with fires and tactical obstacles. The commander identifies the target in terms of the size and type enemy force, the echelon, the avenue of approach, or a combination of these methods.
- *Effect.* This is the intended effect that the commander wants the obstacles and fires to have on the targeted enemy force. All tactical obstacles produce one of the following effects; block, turn, fix, or disrupt. The obstacle effect drives integration, focuses subordinates' fires, and focuses the obstacle effort.
- *Relative location.* The relative location is where the commander wants the obstacle effect to occur against the targeted enemy force. Wherever possible, the commander identifies the location relative to the terrain and maneuver or fire control measures to integrate the effects of obstacles with fires.

6-251. The primary concentration of counter-mobility planning is on providing focus to the obstacle effort, granting obstacle emplacement authority, and ensuring friendly mobility. This is done through the development of obstacle belts and restrictions. The HBCT Engineer Officer and his staff determine friendly counter-mobility capabilities based on anticipated time, logistics, and forces available. These capabilities are allocated to meet the requirements needed to produce the intended obstacle effects. The HBCT must accept risk in some areas to mass counter-mobility effort in more critical areas.

TACTICAL OBSTACLES

6-252. Obstacles are force oriented combat multipliers. The HBCT employs tactical obstacles to directly attack the enemy's ability to move, mass, and reinforce. Tactical obstacles are integrated into the scheme of maneuver and fires to produce specific obstacle effects. Obstacles alone do not produce significant effects against the enemy; obstacles must be integrated with fires to be effective. Fires and obstacles produce four distinct effects—disrupt, fix, turn, and block. Table 6-3 addresses the characteristics and uses for each obstacle effect.

OBSTACLE BELTS

6-253. Obstacle belts are the graphic control measures used by the HBCT to direct, integrate, and resource tactical obstacles. The staff plans obstacle belts within assigned obstacle zones. Obstacle belts focus obstacles in support of the scheme of maneuver and ensure that obstacles do not interfere with the maneuver of the HBCT or higher headquarters. The combination of obstacle belts with specific obstacle effects is the graphic representation of the commander's obstacle intent. It conveys the effect that must be achieved by fires and obstacles (obstacle effect) against a specific size enemy force (target) within the defined belt (relative location) to the task force commanders. Other general guidelines include:

- Obstacle belts attack the maneuver of enemy BCT-size units and are allocated against BCT avenues of approach.
- Obstacle belts do not cross unit boundaries. A single unit is responsible for a belt; however, more than one obstacle belt may be assigned to a unit.
- Maneuver battalion commanders cannot plan or emplace tactical obstacles outside HBCT directed obstacle belts without the commander's prior approval.
- Assigning a specific obstacle effect to a belt does not prevent task force commanders from employing the full range of tactical obstacle effects within the belt; however, the combined effect must achieve the assigned effect of the belt.
- Resourcing Class IV/V (barrier materials) and manpower are critical to develop obstacle belts.

MOBILITY

6-254. The staff analyzes the scheme of maneuver, obstacle plan, and the terrain to determine mobility requirements. Considerations include:

- Lanes in the obstacle plan to support maneuver and necessary movement of forces and logistics.
- Route reconnaissance, improvement, and maintenance.
- Construction of routes, fording sites, and lanes through existing obstacles.
- Repair of existing bridges or culverts.

6-255. In determining mobility requirements, the staff considers all tactical movements that include repositioning, sustainment traffic, counterattacks, delays, and C2 movements. They also must consider the obstacle plan's impact on potential branch plans and anticipated missions for the reserve. The staff develops locations for lanes, establishes obstacle restrictions, and directs necessary mobility tasks to subordinate units to meet the mobility requirements.

6-256. When the staff directs an obstacle lane, they must establish a plan for closure. Lane closure plans include:

- Location, width, and type marking (day and night) for the lane.
- Unit(s) responsible for closing the lane, maintaining lane markings, and providing security for the lane.
- Method for closing the lane.
- Authority for closing the lane.
- Units (designation and size) expected to use the lane.
- Requirements for obstacle turnover, guides, and positioning of recovery assets.
- Emergency procedures for closing the lane in the event of imminent enemy capture.

6-257. The Engineer Officer analyzes the scheme of maneuver, terrain, and enemy countermobility threat to determine how to best employ mobility assets. Engineers are task organized to provide mobility support to critical units on the battlefield. This includes defending task forces, delaying units, the reserve, C2 movements, security forces, and artillery. Engineers must linkup with supported units early enough to prepare for their mobility missions. The commander must balance the need for mobility support with the need for preparing obstacles and positions in depth. This decision is based on the scheme of maneuver, enemy's countermobility threat, and the commander's acceptable level of risk.

SURVIVABILITY

6-258. The supporting engineer force enhances survivability by digging fighting positions and assisting units with preparing fortifications such as bunkers. The commander should

start the survivability effort as soon as practical. He may employ blade assets to support systems such as artillery, C2, and ADA during the time before his combat systems are ready for survivability support. The commander should establish a NLT time or a directed time to be ready for survivability support to forward task forces. This helps to ensure blade time is not wasted.

6-259. The commander establishes his priorities of survivability support by specific unit, type weapon system, or a combination of these methods. He may also specify the type position to be dug for a unit or type system. The HBCT Engineer Officer allocates the required blade assets to accomplish the commander's priorities. The Engineer Officer normally employs one of the following methods to organize the survivability effort:

- Task-organize blade assets to engineer companies supporting the defending task forces.
- Shift blade assets between engineer companies based on time or progress based criteria.
- Mass all or the majority of the blade assets under the engineer battalion's control to support one unit at a time with massed blade effort.

6-260. The time available, commander's priorities, equipment operators' skill, and maintenance status of the blade assets are factors the HBCT Engineer Officer considers in determining how best to organize the survivability effort.

SECTION VI – FOLLOW-ON OPERATIONS

6-261. During the planning for the defensive battle, the HBCT commander and staff must discern from the UEx OPORD what the follow-on missions will be and how they intend to achieve them. They must set the conditions for successful transition before the defensive battle is joined. The HBCT reorganizes after the battle, and then normally conducts one of two options—continue the defense or attack.

6-262. The period immediately after a successful defense can be a period of confusion and vulnerability for both enemy and friendly forces. This period is a contest for the initiative and control of the situation. Both forces will attempt to regain balance, reorganize, and resume coordinated operations. The HBCT normally attempts to exploit the situation through offensive action. The enemy will likely attempt to consolidate, hold gains, and defend. If the HBCT is able to attack prior to the enemy being able to consolidate, the enemy is kept off balance and reactive to the HBCT. But, if the HBCT is unable to consolidate and establish a defense, the enemy gains a significant tactical advantage. The force that ultimately gains the initiative and control of the situation is the one that reorganizes and acts the quickest. Therefore, it is imperative that the HBCT develops plans early in the planning cycle for exploiting success through immediate offensive action.

REORGANIZATION

6-263. The HBCT must quickly reorganize to continue the defense or transition into follow-on missions. Reorganization is all measures taken to maintain the combat effectiveness of the HBCT or return it to a specified level of combat capability. All units undertake reorganization activities during the defense, as the situation allows, to maintain their combat effectiveness. More extensive reorganization is normally conducted after the BCT defeats an enemy attack. Reorganization tasks normally include:

- Establish and maintain security.
- Destroy or contain enemy forces that still threaten the HBCT.
- Reestablish a coherent defense. This may include moving forces, adjusting boundaries, changing task organization, and coordinating with flank units.

- Replace or shift reconnaissance assets and observers.
- Reestablish the HBCT chain of command, key staff positions, and C2 facilities lost during the battle.
- Treat and evacuate casualties.
- Conduct emergency resupply operations.
- Recover and repair damaged equipment.
- Send relevant logistics and battle reports by FM voice and digital means (if so equipped).
- Process EPWs as required.
- Repair/emplace additional obstacles and construct additional fighting positions.

EXPLOIT

6-264. In a successful defense, the enemy reaches his culminating point within the MBA. The defensive plan must address missions following successful operations, and how the HBCT commander envisions the transition to the offense. The UEx's follow-on missions for the HBCT govern this plan. The staff must begin planning for future offensive operations as they develop defensive and obstacle plans. The commander and staff must develop maneuver plans, control measures, obstacle restrictions, and CSS plans that enable the HBCT to quickly transition to follow-on offensive missions.

6-265. Once minimum reorganization activities are completed, the commander orders his forces to attack key objectives that are the most damaging to the enemy and that posture the HBCT for future operations (see Figure 6-16). As the objective of the attack is reached, the HBCT consolidates and continues more extensive reorganization to prepare for future operations.

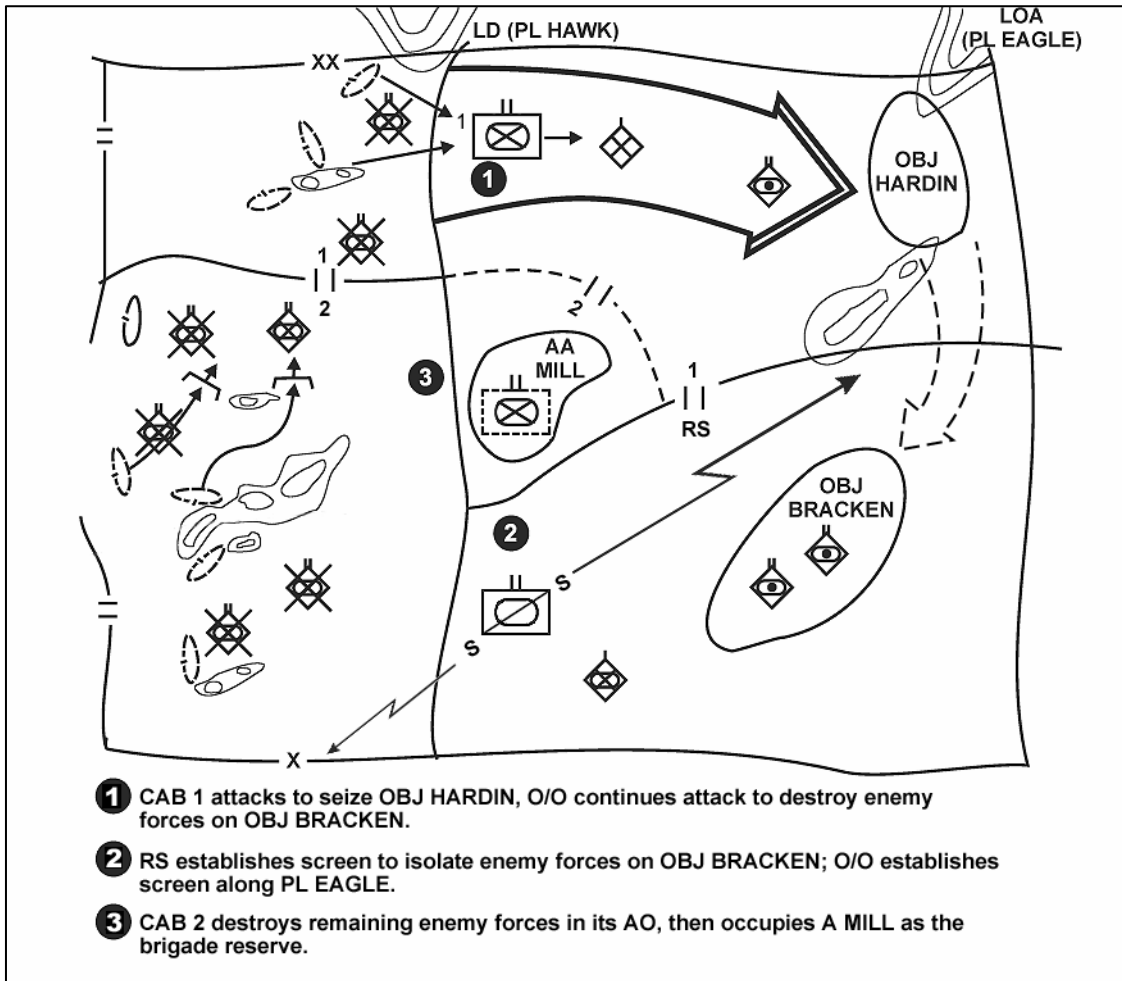


Figure 6-16. Exploiting Success

DEFEND

6-266. The HBCT continues to defend when follow-on enemy forces are continuing to attack or when the HBCT's strength prevents resumption of the offense. It may be necessary for the HBCT to reestablish its defense deeper in the AO or the HBCT may reestablish its defense along its original positions. The time available and condition of the HBCT normally dictate which defensive option the HBCT will employ. The commander (aided by his staff) develops branches and sequels during the initial planning process that prepare the HBCT for the eventuality of continued enemy attacks. The commander transmits the refined plan via a FRAGO, and the HBCT then consolidates, reorganizes, and prepares to continue the defense.

Chapter 7

Urban Operations

Urban environments include some of the world's most difficult terrain in which to conduct military operations. Urban terrain confronts commanders with a combination of difficulties rarely found in other environments. Cities vary immensely depending on their history, the cultures of their inhabitants, their economic development, the local climate, available building materials, and many other factors. This variety exists not only among different cities but also within any particular urban area. Although urban areas throughout the world possess similar characteristics, no two cities are alike. However, their societal characteristics contribute most significantly to their uniqueness and complexity. The urban environment, like all environments, is neutral and affects all sides equally. The side that can best understand and exploit the effects of the urban area has the best chance of success.

Throughout history, military planners have viewed cities as centers of gravity and sources of national strength. Cities are population centers; transportation and communication hubs; key nodes of industrial, financial, and information systems; seats of government; and repositories of wealth. Because the US has worldwide interests, which directly relate to global security, deployments into urban environments will most likely become more frequent to neutralize or stabilize extremely volatile political situations, defeat an enemy force which has sought protection afforded by urban terrain, or to provide assistance to allies in need of support. This chapter will provide the tools necessary for planning and executing missions in an urban environment.

SECTION I – HEAVY BRIGADE COMBAT TEAM ROLE IN URBAN OPERATIONS

7-1. Urban combat is a combined arms operation. Although the close combat phase of urban operations (UO) is infantry-centric, mounted forces operate as an integral force in both shaping and decisive operations. Heavy forces are the optimal force to isolate or prevent isolation during UOs. Secondly, mounted forces operate with infantry forces in the close fight by providing precise and overwhelming firepower and the ability to perform precision maneuver to gain positional advantage over the enemy. Also, mounted forces add protection to dismounted units engaged in the close fight.

ISOLATION

7-2. The key to victory in UOs is isolation. If the attacker fails to isolate the urban area, the defender can reinforce and resupply his forces protracting the operation and significantly decreasing the attacker's resources and will to continue. If the defender allows himself to be

isolated, the attacker seizes the initiative and forces the defender to take considerable risk (such as a breakout or executing a counterattack) to survive. Heavy brigade combat teams (HBCTs) are optimal for executing isolation operations, as they possess the speed, agility, firepower, and protection necessary to successfully shape the urban area for offensive or defensive operations.

CLOSE COMBAT

7-3. HBCTs in the close fight provide precision fires and shock effect to defeat the enemy and his will to resist. Historically, the close fight in urban combat has consisted of street to street fighting resulting in high casualties and high expenditure of resources. HBCTs possess the capability, with organic tank and mechanized infantry forces, to use precision fires and maneuver to gain positional advantage and seize the initiative away from the enemy. Combined arms forces use maneuver and SU, afforded by the speed and protection of mounted platforms, to position forces and destroy the enemy as he reacts to threats from multiple directions. Combined arms forces rely on maneuver, as opposed to attrition, as its primary means to accomplish assigned missions in urban environments.

SECTION II – FUNDAMENTALS OF URBAN OPERATIONS

7-4. UOs are among the most difficult and challenging missions an HBCT will undertake. To understand the complexity of the urban battlefield, the commander and staff apply the following tactical fundamentals.

CONDUCT AGGRESSIVE ISR OPERATIONS

7-5. In order for the commander and staff to develop an effective COA; aggressive ISR operations must be undertaken. UOs require significant HUMINT reconnaissance as sensors and other technological devices are not as effective in urban environments. ISR operations can take the form of stealthy surveillance teams, tactical questioning of noncombatants, and reconnaissance of key terrain and avenues of approach. Using ISR assets such as UAVs and satellite imagery, the staff can develop urban maps that include a common reference system (such as numbering buildings) to assist subordinate units' C2. Additionally, the HBCT must focus on information operations (IOs) to protect its information and information systems while influencing the enemy's information and systems.

UNDERSTAND THE HUMAN DIMENSION

7-6. The commander must carefully consider and understand how to influence the allegiance and morale of the civilian population that may decisively affect operations. The human dimension of the urban environment often has the most significance and greatest potential for affecting the outcome of UO. The commander assesses the attitudes, culture, and factional allegiances in determining his COA.

SEPARATE NONCOMBATANTS FROM COMBATANTS

7-7. Promptly separating noncombatants from combatants facilitates UOs by reducing some of the restrictions on firepower and enhance force protection. Using PSYOP, MP, and CA units, the HBCT can diminish some of the enemy's asymmetrical advantages. This important task becomes more difficult when the adversary is an unconventional force and can mix with the civil population. HBCTs should also consider coordinating with NGO if large numbers of refugees are expected. If noncombatants cannot be evacuated, then restricting their movement from the HBCT AO can assist in keeping combatants from moving freely from other areas into the HBCT's AO disguised as a noncombatant.

AVOID THE ATTRITION APPROACH

7-8. UOs that use linear and methodical COAs based on firepower normally result in high casualties and significant collateral damage. Enemy forces tend to encourage this approach to lengthen the operation, expend our resources, and challenge our will to sustain attritional engagements. Commanders should only consider this approach when attempting to gain contact or fix enemy forces as part of a larger operation.

CONTROL WHAT IS ESSENTIAL

7-9. Many urban areas are too large to be completely occupied or even effectively controlled by either friendly or enemy forces. The HBCT focuses its efforts on controlling only those areas that are essential to mission accomplishment. At a minimum, this requires control of key terrain whose possession or control provides a marked advantage. In the urban environment, key terrain may be determined by its functional, political or social significance. By controlling what is essential, the commander can concentrate the HBCT's combat power where it is needed. This implies risk in those areas where the HBCT chooses not to control in order to mass overwhelming combat power in other areas.

MAXIMIZE EFFECTS WITHOUT UNNECESSARY COLLATERAL DAMAGE

7-10. By conducting aggressive ISR operations, the commander develops situational understanding (SU) of the urban AO. Through use of SU and the COP, the commander and staff develop COAs that maximize the effects of its lethal and non-lethal fires without inflicting unnecessary collateral damage. The commander determines what firepower restrictions are necessary that will still allow for mission accomplishment, and then compensates for them through non-lethal effects or information operations.

CONDUCT CLOSE COMBAT

7-11. Closing with and defeating the enemy is required to be decisive in UOs. Close combat in UOs is resource intensive, requires properly trained and equipped forces, and has the potential for high casualties. Therefore, the HBCT must use close combat as its decisive operation only after shaping the urban area through aggressive ISR, isolation, and the use of precision fires and maneuver.

TRANSITION CONTROL

7-12. UOs are resource intensive and must be planned to accomplish assigned missions in the most expeditious manner. The end state of UOs is when control is transferred to civilian or other agency's control. The HBCT must thoroughly develop a transition plan to ensure restoration of peaceful conditions and avoid further disruption to the stability of the AO.

SECTION III – TACTICAL CHALLENGES

7-13. The HBCT will face a number of challenges during the planning and execution of UO. The most likely challenges are discussed below.

CONTIGUOUS/NONCONTIGUOUS AREAS OF OPERATIONS

7-14. Contiguous operations are operations that the HBCT conducts in an AO that facilitates mutual support of combat, combat support (CS), and sustainment elements. Contiguous operations have traditional linear features including identifiable, contiguous frontages and shared boundaries between forces. For HBCTs, contiguous operations are

characterized by relatively close distances between subordinate units and elements. In noncontiguous operations, subordinate units may operate in isolated pockets, connected only through integrating effects of an effective concept of operations. Noncontiguous operations place a premium on initiative, effective information operations, decentralized security operations, and innovative logistics measures. Noncontiguous operations complicate or hinder mutual support of combat, CS, and sustainment elements because of extended distances between subordinate units and elements. The HBCT must be prepared to conduct full spectrum operations in both types of situations. The HBCT may be required to C2 subordinate battalions and elements over extended distances, which may include deploying battalions individually in support of operations in the HBCT's area of influence or interest outside of the HBCT's AO.

SYMMETRICAL/ASYMMETRICAL THREATS

7-15. In addition to being required to face symmetrical threats, the HBCT must be prepared to face threats of an asymmetrical nature. Symmetrical threats are generally "linear" in nature and include those threats that specifically confront the HBCT's combat power and capabilities. Examples of symmetrical threats include conventional enemy forces conducting offensive or defensive operations against friendly forces. Asymmetric effects occur when the threat initiates operations against which friendly forces cannot respond effectively due to dissimilar values, organization, training, or equipment. These threats may use the civilian population and infrastructure to shield their capabilities from fires. Asymmetrical threats may also attack the HBCT and civilian population with WMD. Asymmetrical threats are most likely to be based in and target urban areas to take advantage of the density of civilian population and infrastructure. Examples of asymmetrical threats include terrorist attacks; electronic warfare (EW), to include computer-based systems; criminal activity; guerilla warfare; and environmental attacks.

MINIMIZATION OF UNNECESSARY COLLATERAL DAMAGE AND NONCOMBATANT CASUALTIES

7-16. During UOs, HBCT commanders will be required to minimize unnecessary collateral damage and noncombatant casualties. This must be balanced with mission accomplishment and the requirement to provide force protection. HBCT commanders must be aware of the rules of engagement (ROE) and be prepared to request modifications when the tactical situation requires them. Changes in ROE must be rapidly disseminated throughout the HBCT. Commanders and leaders must ensure that changes to the ROE are clearly understood by all soldiers within the HBCT.

TRANSITION FROM STABILITY OR SUPPORT OPERATIONS TO COMBAT OPERATIONS AND BACK

7-17. HBCT commanders must ensure that contingencies are planned to transition quickly from either stability operations or support operations to combat operations and vice versa. For example, it may be tactically wise for commanders to plan a defensive contingency with on-order offensive missions for certain stability operations or support operations that may deteriorate. Subordinate commanders and leaders must be fully trained to recognize activities that would initiate this transition. Commanders, staffs and soldiers must be aware that elements of the HBCT may be conducting offensive, defensive, stability, and support operations simultaneously within a small radius of each other. Actions in one unit's AO can affect a change in what type operation an adjacent unit is conducting. For example, an offensive operation may cause noncombatants to be displaced to another section of the city, creating a support operation for the unit in that AO.

SECTION IV – THREAT

7-18. The HBCT will most likely face threats that are supported by weak national economies, and infrastructures seeking to achieve regional objectives that challenge U.S. national objectives. Trends indicate an increasing availability and integration of more sophisticated technology and unorthodox operational approaches by potential opponents focused on the diversity and time sensitivity of humanitarian issues. Offsetting their inherent weaknesses, threat forces will seek advantage in urban and restrictive terrain to remain dispersed and decentralized, adapting their tactics to provide them the best success in countering a U.S. response. The threat may apply several key operational principles to oppose Army forces operating in urban environments. These principles include the following:

- Deny access into theater.
- Neutralize technological overmatch.
- Control the tempo.
- Change the nature of the conflict.
- Cause politically unacceptable casualties.
- Allow no sanctuary.
- Conduct dispersed and decentralized operations

7-19. These principles are discussed in detail in FM 3-06 [FM 90-10] and FM 3-06.11. The HBCT focuses on the tactical level of threat UOs. Threats, in addition to conventional forces, may consist of the following:

- Unconventional forces.
- Paramilitary forces.
- Militia and special police organizations.
- Organized criminal organizations.
- Local civilians.

THREAT TACTICS

7-20. While the active threats will vary widely, many techniques will be common to all (see Figure 7-1). The following paragraphs are sets of tactical tenets that may be used against U.S. forces in the urban environment.



Figure 7-1. Urban Threat Tactics

USE THE POPULATION TO THEIR ADVANTAGE

7-21. Threat forces will use the population to provide camouflage, concealment, and deception for their operations. Guerilla and terrorist elements will look no different than any other member of the community. Even conventional and paramilitary forces will often adopt a civilian look to confuse friendly forces. The civil population will also provide cover for threat forces, enhancing their mobility in proximity to U.S. positions. Threat forces will take advantage of U.S. moral responsibilities and attempt to make the civil population a burden on our logistical and force protection resources. The civilian population will also serve as a key intelligence source for threat forces. They will attempt to use civilians with access to U.S. bases or perimeters to gain information on dispositions, readiness, and intent.

WIN THE INFORMATION WAR

7-22. Threat forces will take advantage of the media presence to turn the sentiments of other countries against U.S. forces. Video cameras, media reporters, Internet websites, and cellular phones are examples of tools the threat will use to persuade popular opinion. Threat urban campaigns do not rely solely on tactical successes; they need only make the opposition's campaign appear unpalatable to domestic and world support and weaken legitimacy.

MANIPULATE KEY FACILITIES

7-23. Threat forces will identify and use key facilities to shape the AO in their favor. Telecommunication sites, water treatment plants, and power generation and transmission

sites are typical facilities threat forces will target to gain a position of advantage against HBCT forces. Media stations significantly improve the information operations abilities of the controlling force.

USE OF ALL DIMENSIONS OF THE PHYSICAL ENVIRONMENT

7-24. Threat forces will use all dimensions of the urban environment to attack the HBCT. Rooftops and tall buildings afford the threat with vantage points and ambush positions that exceed many weapons' maximum elevation. Top attack positions allow the threat to strike at vehicle vulnerable points and use enfilading fire against exposed, dismounted soldiers. Basement and other subterranean areas provide covered and concealed positions that allow access throughout the AO. Many positions will be below minimum depression elevations of vehicles.

EMPLOY URBAN-ORIENTED WEAPONS

7-25. Whether they are purpose-built or adapted, many weapons may have greater than normal utility in an urban environment while others may have significant disadvantages. Urban threat weapons are much like the nature of urbanization and the urban environment: inventive and varied. Small, man-portable weapons, along with improvised munitions, will dominate the urban environment. Figure 7-2 lists examples of threat weapons favored in UO.

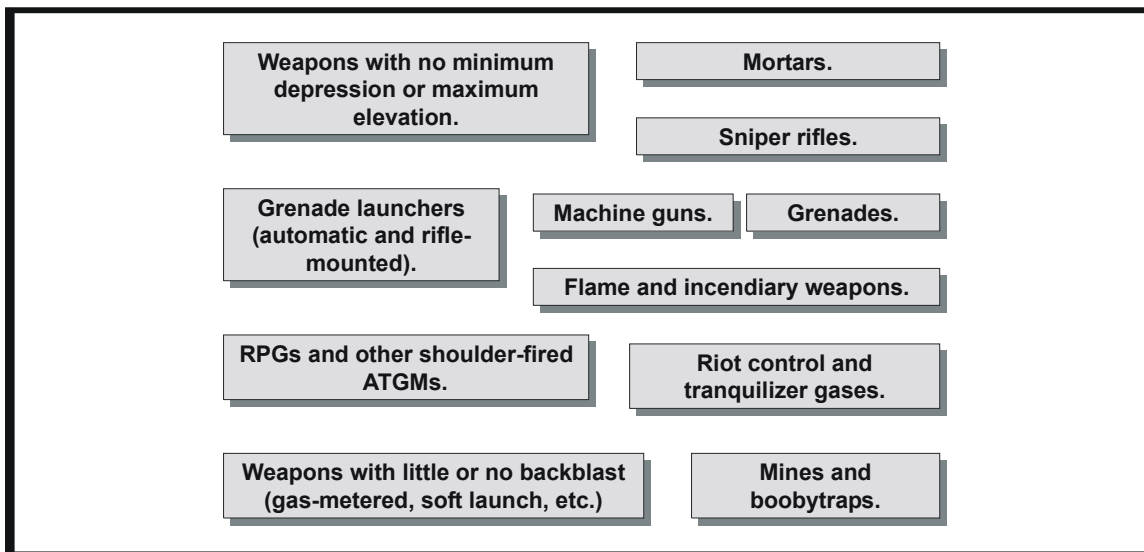


Figure 7-2. Favored Threat Weapons

ENGAGE ENTIRE ENEMY FORCE

7-26. Threat forces may "hug" HBCT forces operating in an urban area to avoid the effects of high-firepower standoff weapon systems. Additionally, they may attempt to keep all or significant portions of the HBCT engaged in continuous operations to increase their susceptibility to stress-induced illnesses. UO, by their nature, produce an inordinate amount of combat stress-casualties and continuous operations exacerbate this problem. Threat forces that employ this tactic often maintain a large reserve to minimize the psychological impacts on their own forces.

FOCUS ATTACKS ON REAR AREAS, ISOLATED GROUPS, AND INDIVIDUALS

7-27. Threat forces may prey on soldiers poorly trained in basic infantry skills. Ambushes may focus on these type soldiers conducting resupply operations or moving in poorly guarded convoys. UOs are characterized by the isolation of small groups and navigational challenges, and the threat may use the separation this creates to inflict maximum casualties even when there is no other direct military benefit from the action.

7-28. The most dangerous potential threats will remain those who have the capacity to prosecute full-scale combat actions. WMDs will be present and used where possible. Special operations forces (SOFs), state controlled terrorist organizations, paramilitary, and guerilla forces will be a part of a strategy of simultaneous, distributed operations both inside and outside of the AO. Mines and unexploded ordinance (UXO) will be used to demoralize and hamper US forces.

SECTION V – URBAN MAPPING

7-29. Prior to entering an urban environment, the HBCT requests, obtains, or develops urban maps to assist in C2. The HBCT should request detailed mission specific data sets or urban city graphic, maps, imagery, and geospatial information that provide detailed information of the urban area. This information may be obtained from the HBCT's topographic section in the engineer cell of the MAIN, UEx assets or the National Geospatial-Intelligence Agency (NGA). Urban maps, whether digital or sketched, should include a reference system to identify buildings and streets. The preferred system will be WGS 84. The HBCT and UEx terrain team can produce digital and paper urban mapping products. In addition, the HBCT and UEx terrain team can provide digital and paper urban mapping products. Also, the HBCT can use aerial photos and UAVs as sources not only to pinpoint key terrain and locations, but as another urban mapping source (see Figure 7-3). Naming conventions should be simple allowing for ease of navigation and orientation in the urban environment (odd number buildings on left side of street, even numbers on right side of the street). Street names should not be used as references as the signs can be missing or changed to confuse friendly forces. Initial map and aerial photograph reconnaissance are conducted to pinpoint key terrain and other important locations that can be identified in the AO. These areas are described below.

- Safe havens
 - Hospitals
 - Embassies
 - Other (friendly) facilities
- Hazardous areas
 - Construction sites
 - Dangerous intersections
 - Bridges
 - Criminal areas
- Major terrain features
 - Parks
 - Industrial complexes
 - Airports
 - Infrastructure
 - Transportation networks
 - Buildings
- Police

- Police facilities
- Jails and prisons
- Military facilities

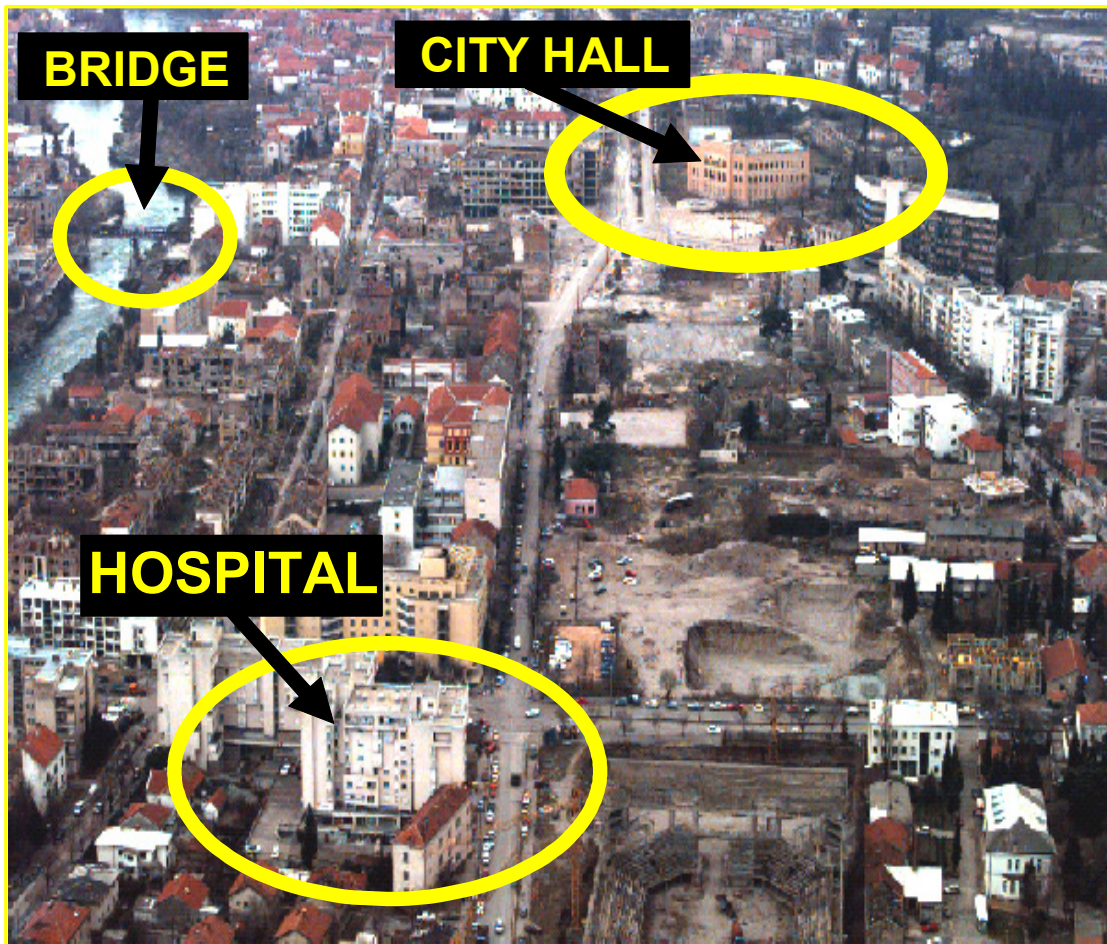


Figure 7-3. Initial Photo Reconnaissance of Urban Area of Operations

7-30. The urban map also facilitates control in tracking units with greater detail and obtaining precise location updates as digital systems (that produce the COP) may be affected by urban terrain. The HBCT uses ISR assets to confirm and update their urban maps. These maps are critical, as most do not provide the level of detail necessary to conduct tactical operations. Specifically, the HBCT assesses avenues of approach in the urban AO. Included with the maps are overlays that categorize sections of the urban area by ethnicity, religious affiliation, and other prevailing characteristics that could affect operations (see Figure 7-4 through Figure 7-7).

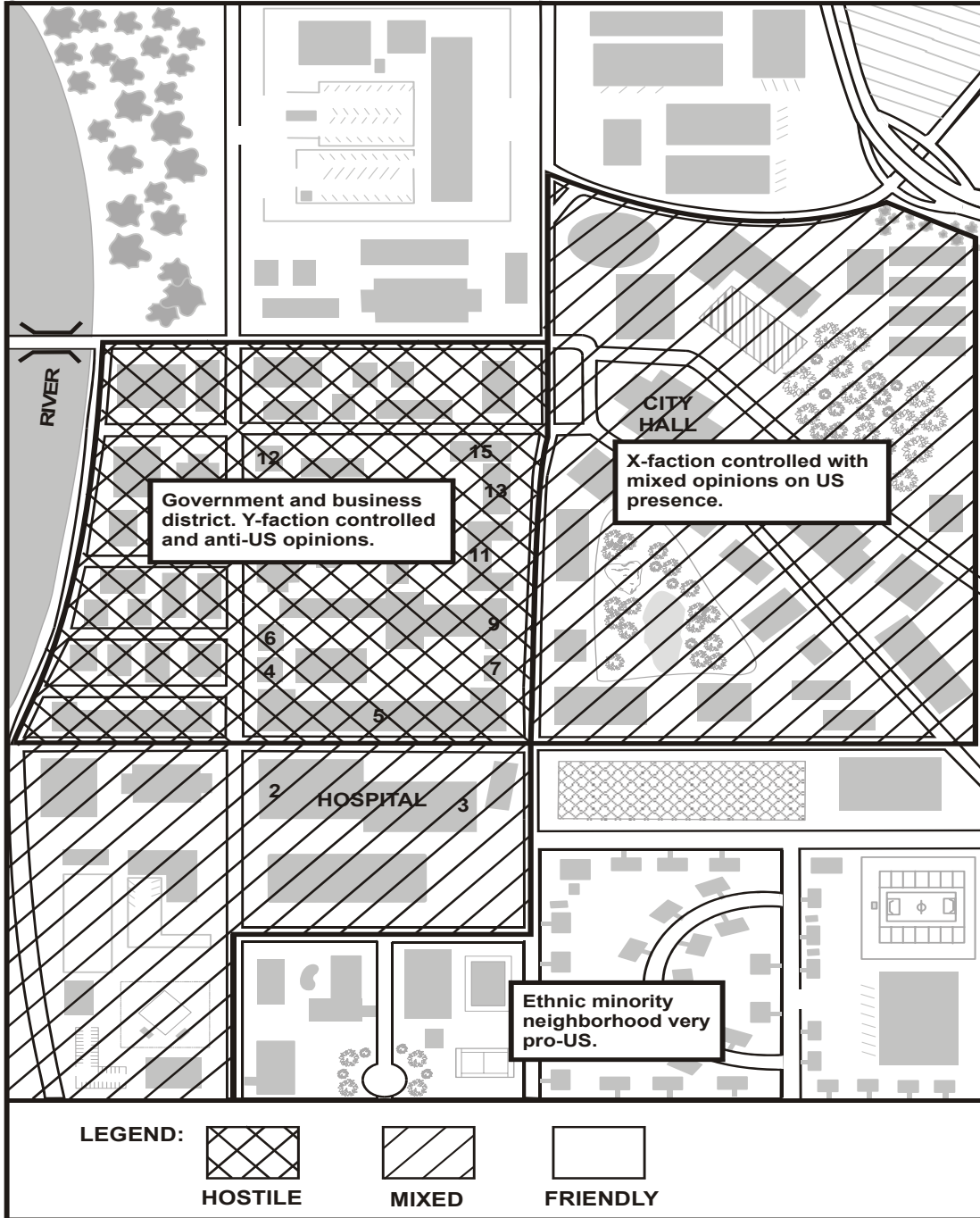


Figure 7-4. Example of Population Status Overlay

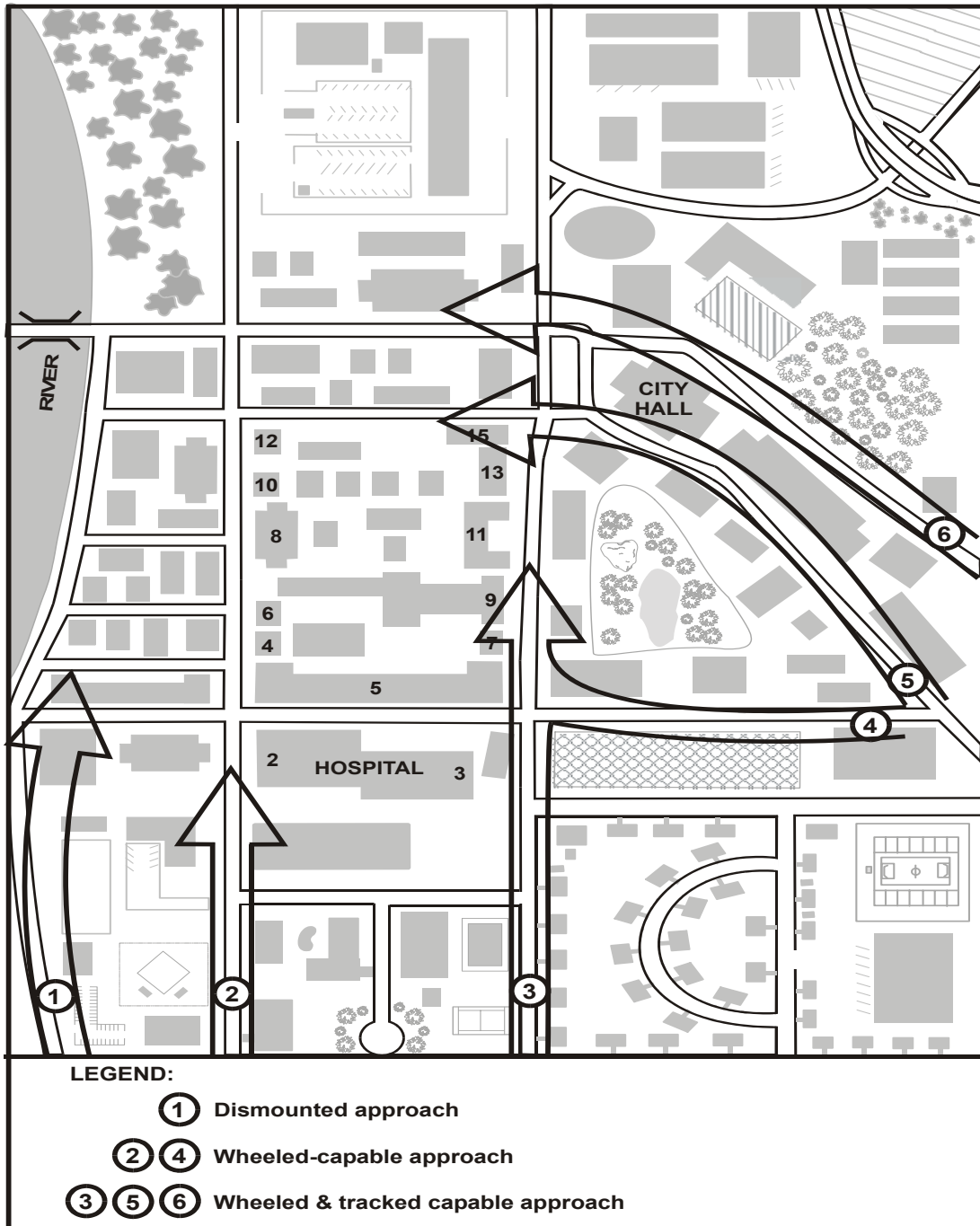


Figure 7-5. Avenues of Approach in the Urban Area

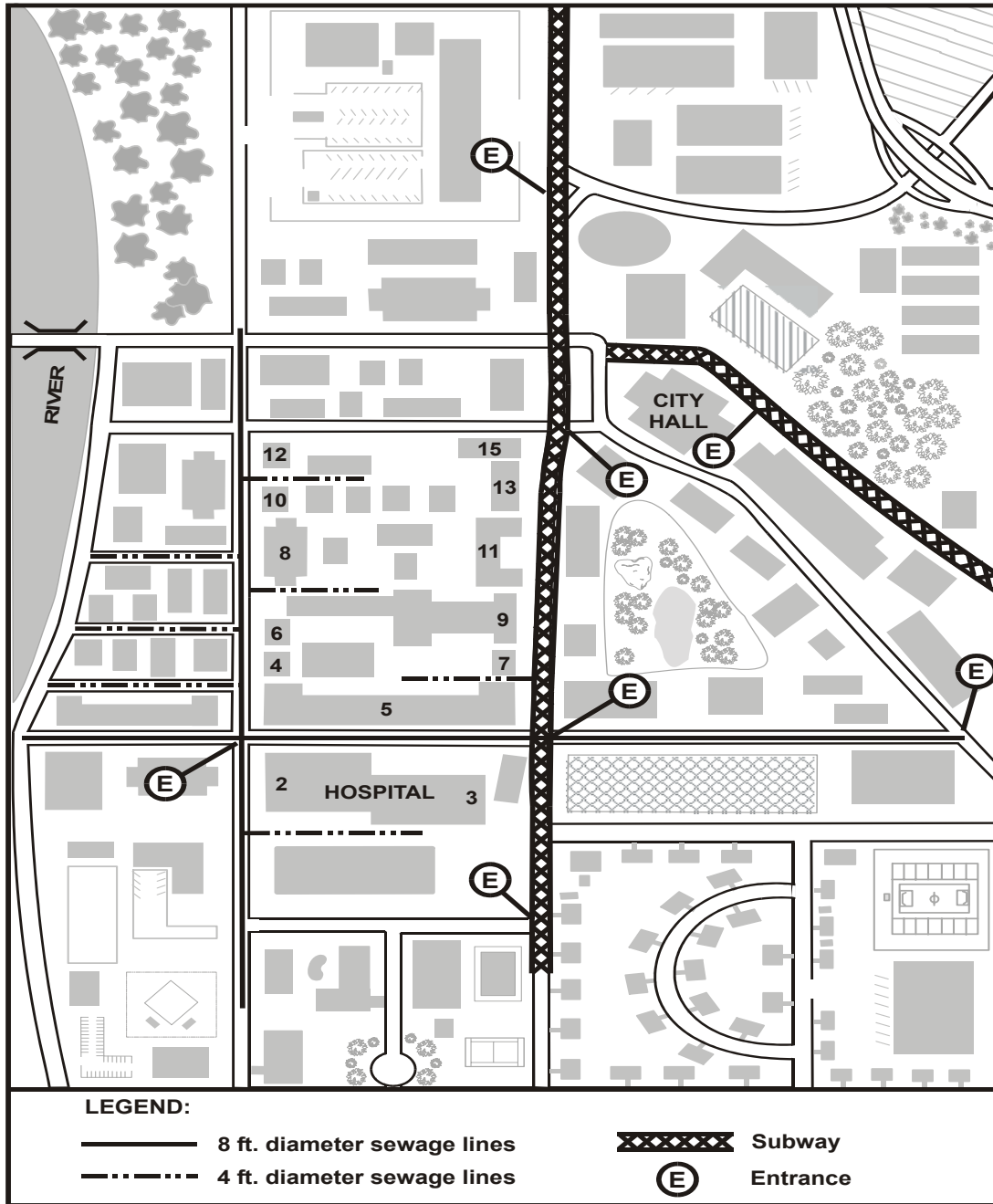


Figure 7-6. Sewer and Subterranean Overlay

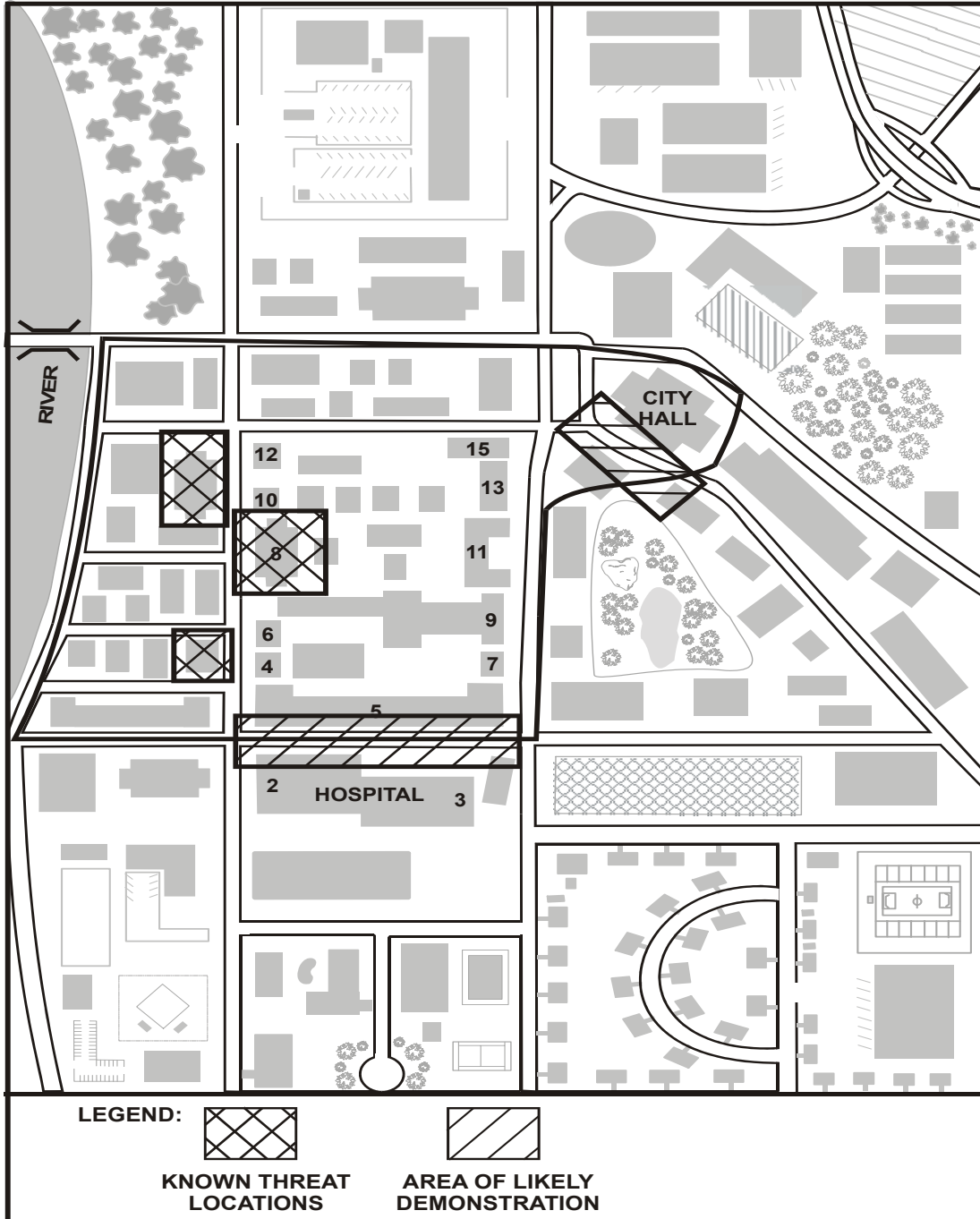


Figure 7-7. Threat Overlay

SECTION VI – FIRE SUPPORT

7-31. There are numerous factors that the HBCT must consider when coordinating and planning targets that will support operations in an urban environment. The most likely mission that must be planned for are targets that will support suppression or obscuration

from unexpected contact. The following are some fire support considerations for UOs: (they are by no means all inclusive)

- Who controls each fire support asset?
- Exchange fire plan and observer plan with adjacent units.
- Develop observer plan to include observation posts (Ops) in buildings, location of laser designators, and overwatch of trigger points and gun-target lines.
- Identify location of hazardous sites; both above and below ground fuel and industrial storage tanks, gas distribution lines, etc. and any other area where incendiary effects of detonating artillery and mortar rounds will start fires.
- Identify the general construction or composition of the buildings and road surfaces (may impact the type of munitions used).
- Where does building masking, overhead power lines, or towers degrade global positioning system (GPS) and compass functioning?
- Will use of obscurants and illumination favor friendly units or the threat?
- Will buildings or structures require fire support personnel to carry/use equipment not normally carried? Such as field expedient antennas, climbing rope, wire gloves, axes or sledgehammers?
- What are the requirements for radar coverage? Does there need to be radar zones established? If so, where? For how long?

7-32. Consideration must also be given to using artillery in the direct fire mode. In addition to the use of conventional munitions, precision-guided munitions (PGM) must also be carefully considered. A significant consideration for using PGMs is that laser or infrared (IR) designator equipment must be available. Consideration must also be given to minimum ranges and back blast from systems that are employed from within buildings or complex areas.

SECTION VII – COMMUNICATIONS

7-33. Communications in the urban environment requires detailed planning that will allow units freedom of movement while maintaining C2 at the HBCT. Terrain is identified along the approach route and in the urban AO that supports LOS communications. Retransmission (Retrans) sites, digital or FM, are then established on supporting terrain or structures to facilitate C2 during units' initial entry into the urban area.

7-34. The HBCT must plan for redundant communications because of the effects of urban terrain. Manmade structures can create problems for single-channel radios and digital systems. These structures inhibit LOS radio communications by absorbing or reflecting transmitted signals. However, the urban environment may have exploitable advantages such as the availability of electrical power and commercial telecommunications networks. Electrical power generation stations and other emergency power systems are normally found in protected structures and are probably usable. Enclosed areas offer excellent concealment and protection of communications and other C2 support equipment. Extensive commercial communications networks composed of miles of underground protected cable connecting central telephone exchanges are likely to be available, as well as a multitude of public service radio nets (such as police, fire, civil defense, taxi). These systems have existing antennas and retransmission stations. To communicate effectively and continuously, leaders must minimize limitations imposed by the urban environment and maximize the advantage of existing civil communications.

TRAVERSING URBAN AREAS

7-35. There are many times the HBCT must move around (bypass) or through built-up areas in order to accomplish a mission elsewhere. Whenever possible, the HBCT seeks to avoid built-up areas. The following paragraphs provide basic techniques the HBCT may use to traverse a built-up area.

BYPASSING URBAN AREAS

7-36. A bypass is a movement around an urban area. Battalions and companies will often bypass strip areas and villages as a part of normal operations. Towns and small cities normally require a coordinated HBCT level operation to execute a secure and rapid bypass. The technique used is mainly driven by the known or potential threat posed by enemy forces within the urban area. When enemy contact is not expected from the urban area or the threat is within the capabilities of a single maneuver battalion or smaller unit to handle, the HBCT selects an axis of advance that avoids the urban area. Subordinate forces use organic assets to establish security (screen or guard missions) along their flanks that are exposed to the urban area (see Figure 7-8). It may be necessary for the commander to direct a small combat unit to maintain security around the urban area to protect the HBCT's sustainment and LOCs once the HBCT's main body has passed the area.

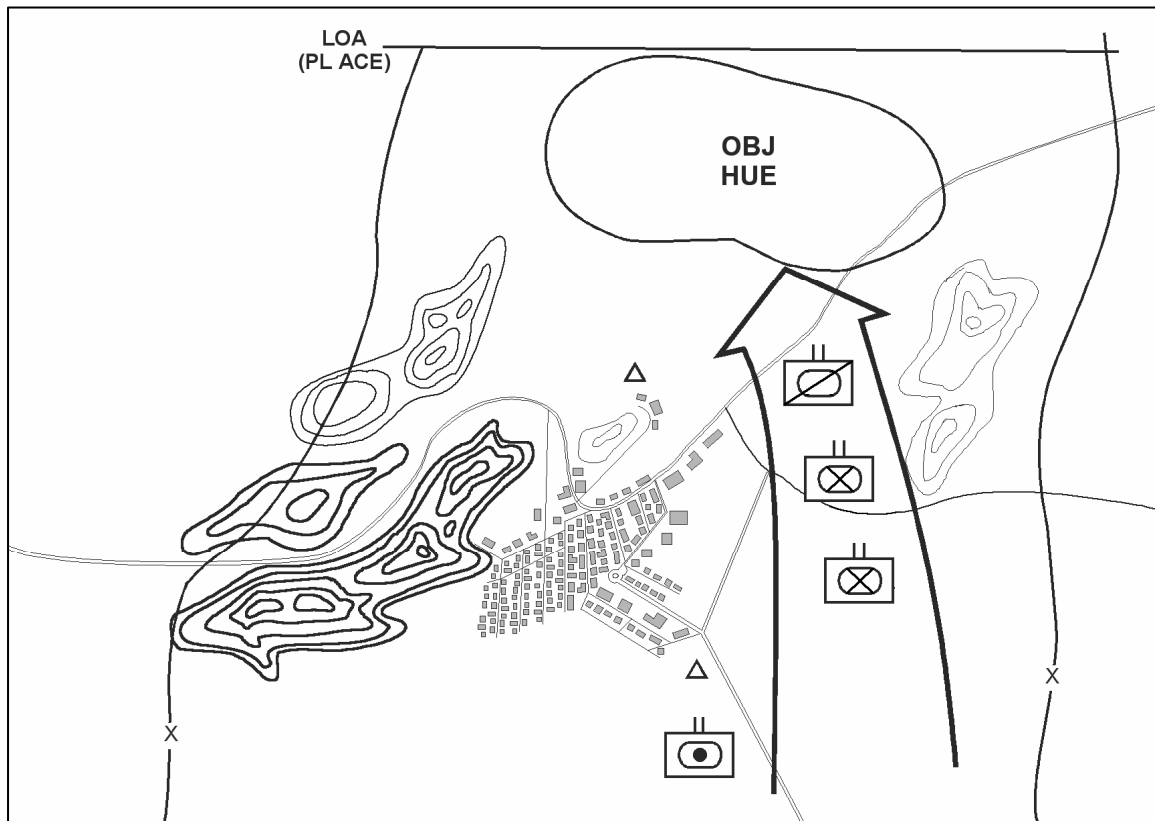


Figure 7-8. Brigade Bypass of an Urban Area

7-37. When a significant threat is posed from within a built-up area, the commander directs a subordinate unit to establish security around the built-up area to protect the movement of the HBCT. In this case, the HBCT conducts ISR operations to gather information about the enemy within the urban area and to identify approaches out of the urban area. Two techniques are normally available to the HBCT. They differ on how the RS and CABs are

employed in security roles versus continuing forward with the advance. Figure 7-9 depicts the technique of using the RS (augmented with aviation support if available) to screen the flank of the HBCT as it bypasses the urban area. The other alternative is for a CAB to establish a guard around the urban area. The remainder of the HBCT, to include the RS, moves around and continues toward the objective. The commander may have the security forces follow the HBCT once the bypass is completed, leaving a smaller security force to protect LOCs. The commander may need to maintain the entire task force in its security role until the HBCT's mission is completed or follow-on forces relieve the task force.

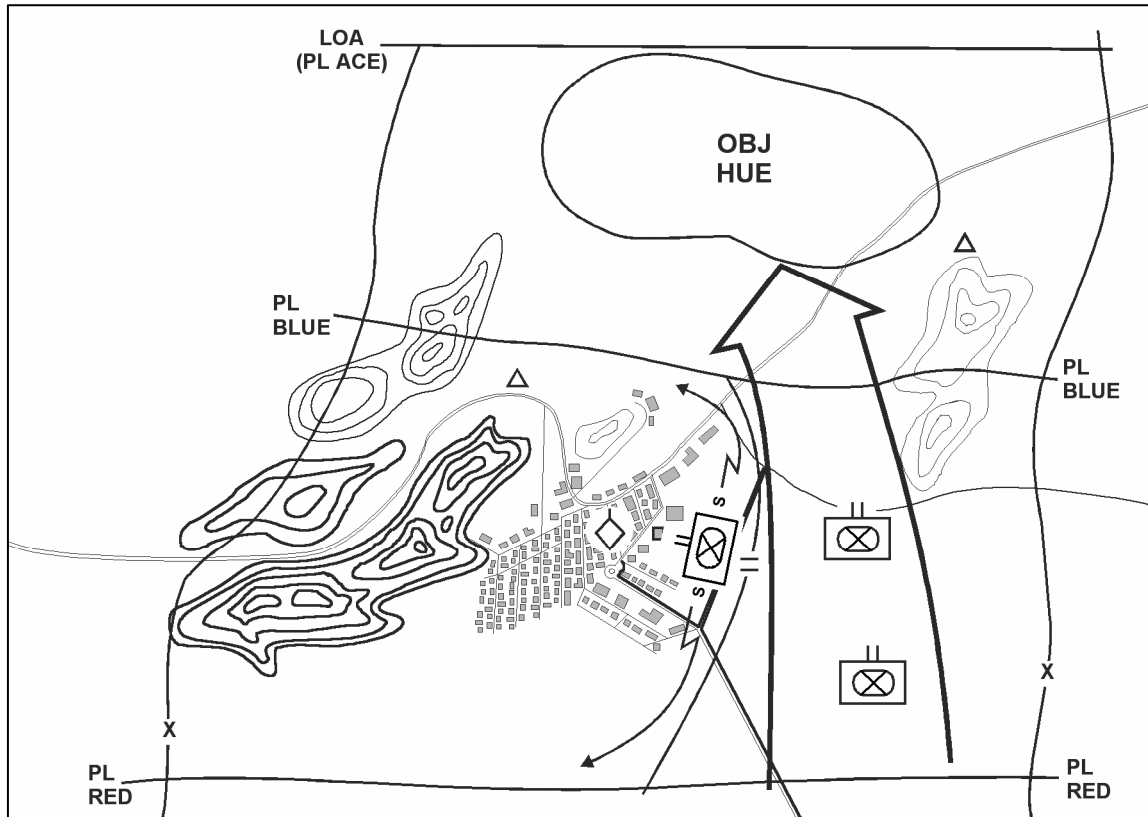


Figure 7-9. Brigade Bypass of a Defended Urban Area

MOVE THROUGH AN URBAN AREA

7-38. Often, an urban area cannot be avoided forcing the HBCT to move through it to complete an assigned mission. The enemy situation, time available, and depth of the urban area normally drive the technique used to move through the area. When enemy contact is not expected and the urban area is relatively narrow, the HBCT moves through the area without an intentional pause to prepare for the movement. The lead CAB or the RS (normally augmented with engineers) normally establishes and initially secures lanes through the urban area for the remainder of the HBCT to use (see Figure 7-10). In Figure 7-10 the HBCT elected to not use the RS for the security mission (due to planned RS missions beyond the urban area), and uses the lead CAB to secure lanes. A technique is to send one or more small combined arms units into the urban area ahead of the HBCT to establish lanes for the movement. This force may be a maneuver company task organized with scouts, engineers, CA, and MPs. Each lead maneuver battalion will require at least two lanes. Also alternate lanes should be identified to divert traffic should a primary lane become blocked. The commander must also determine how much and to what degree buildings along the

lanes must be secured. Depending of the depth of the urban area and amount of securing required, each lane may require a company or more to establish it. This initial entry force is responsible for the following tasks:

- Identify and mark each lane.
- Restrict and control civilian movement.
- Clear obstacles, obstructions, and debris from the lanes.
- Quickly search for and eliminate any enemy forces from immediate vicinity of the lanes.
- Establish security for the lanes as required by the situation.
- Position MPs and traffic control elements.

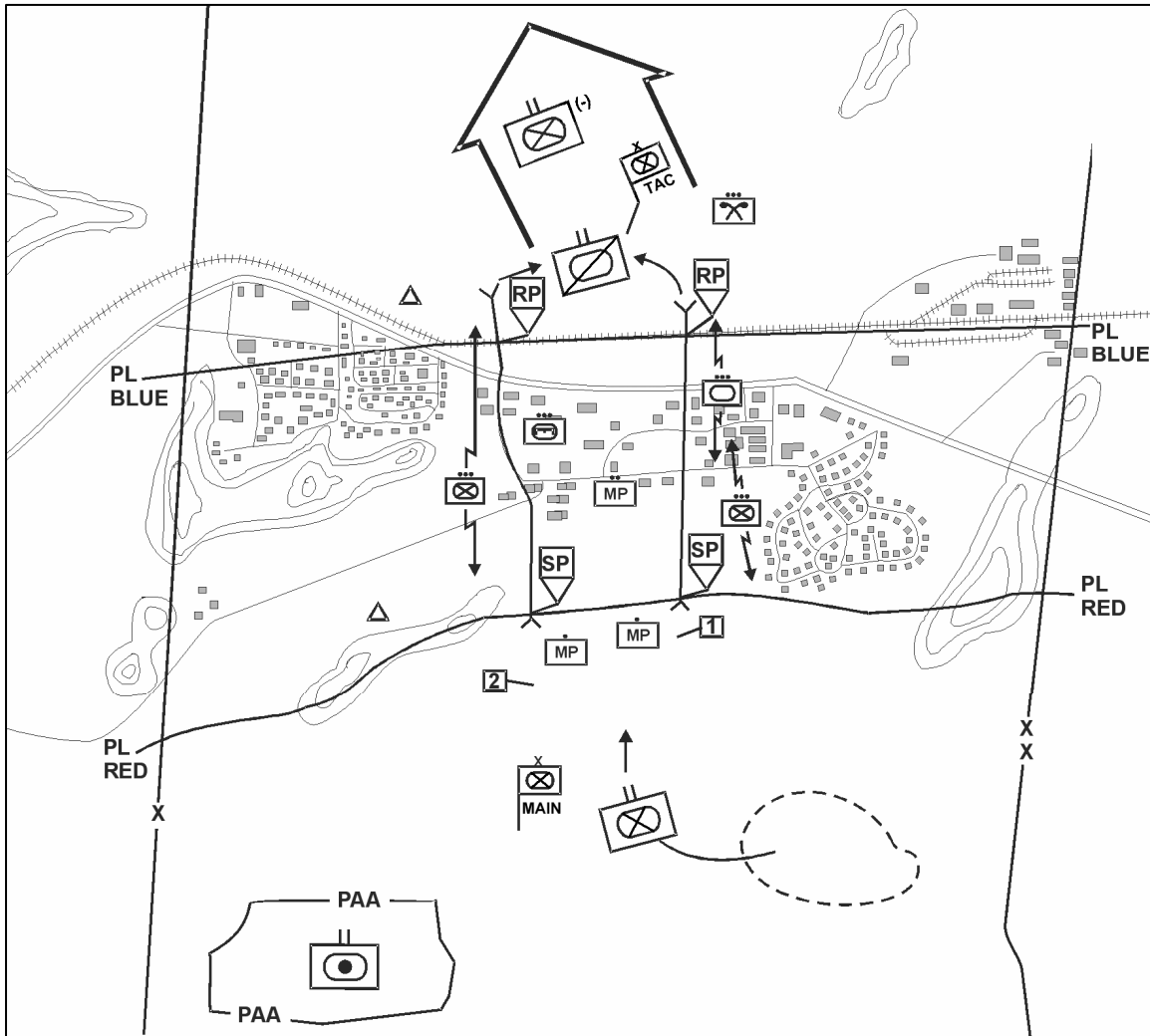


Figure 7-10. Moving through an Urban Area

7-39. The commander and staff plan routes, lanes, TCPs, and PLs to control the movement of forces through the area. Ideally, the initial entry force moves far enough ahead of the HBCT main body to have the lanes establish so that the momentum of the HBCT is not slowed while waiting for the lanes to be established. However, assault positions or holding areas are planned and used as needed to position forces outside the area. When possible, maneuver forces should occupy positions on the flanks of the lanes. This provides them a flanking

position to attack any enemy forces threatening the lanes. The MAIN controls the movement of forces through the lanes. Once the TAC is established on the far side, the MAIN hands over control of the passage and moves through the urban area. The sequence of forces through the lanes is planned for in advance and updated as required with FRAGOs during execution. The HBCT may also position recovery assets, engineers, and other support assets along the lanes to maintain and protect the movement of forces. When moving through the lanes, forces must be prepared to react to enemy contact such as snipers, ambushes and small unit attacks. As the main body exits the urban area, the BTB CP accepts responsibility for maintaining, controlling, and securing the lanes. Additional forces may need to remain at the lanes to assist with support and security for the lanes.

7-40. When enemy contact is expected or enemy forces are located within the urban area, the HBCT must fight its way through the city, establish a secure movement corridor, and then continue the mission. This action must be planned as a critical phase of an operation. In this case, the HBCT attacks through the urban area by assigning one or more maneuver battalions the responsibility to secure an adequate maneuver corridor through the urban area. The commander must also consider the need to secure maneuver space on the far side of the urban area to allow exiting forces space to assemble prior to continuing the mission. The operation may also require shaping operations such as a feint or demonstration against the enemy, seizing limited objectives, follow and supporting the entry task force, attacking to fix the enemy, or isolating portions of the urban area. Figure 7-11 shows an example of the control measures used to control a movement through an urban area.

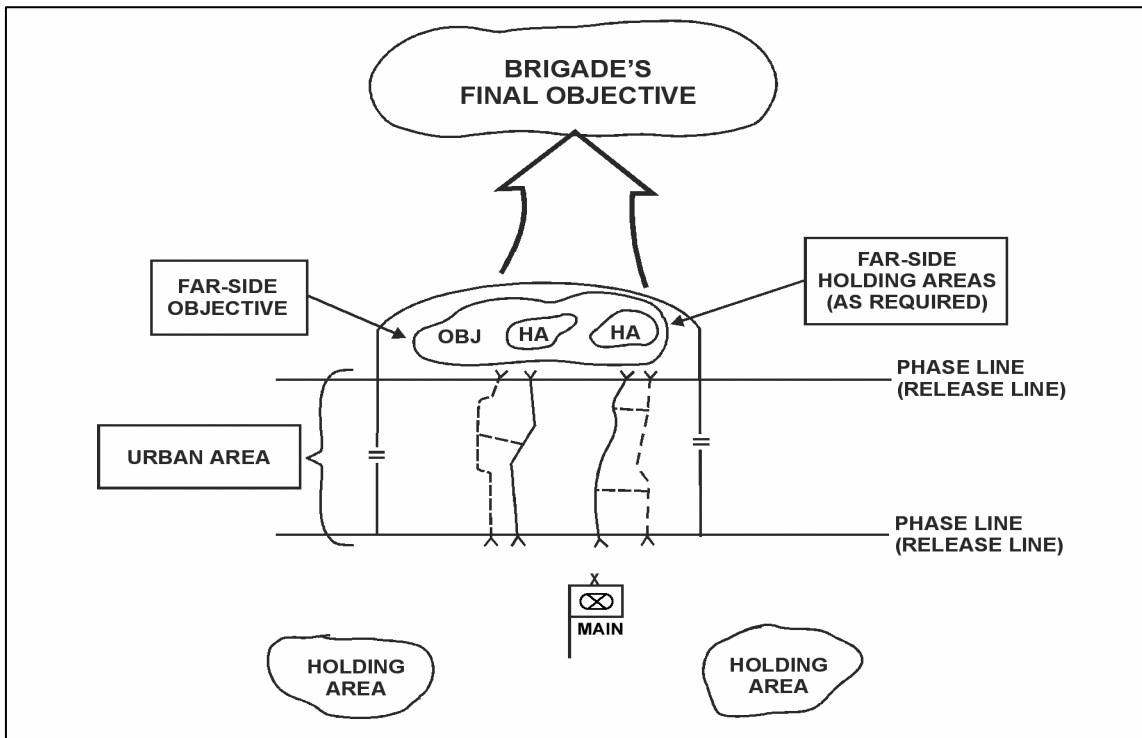


Figure 7-11. Example Control Measures for Moving through an Urban Area

7-41. Figure 7-12 is an example of an attack through an urban area. In this example the RS is used in an economy of force role in the western side of the HBCT sector. The entry CAB attacks and seizes a foothold in the urban area and secures adequate lanes for the HBCT (see Figure 7-12). The task force must expand the corridor to allow for adequate depth to establish security (normally a guard) along the lanes. Depending on the depth of the urban

area and the enemy situation, the CAB may also secure a far side objective beyond the urban area. The maneuver battalion conducts clearing operations only as required along the immediate area adjacent to the lanes. Movement of forces through the lanes is controlled by the MAIN and then transferred to the BTB CP as the main body exits the area. Unless the enemy within the urban area is defeated in detail, the entry task force must continue to maintain security until the mission is completed or follow-on forces relieve it.

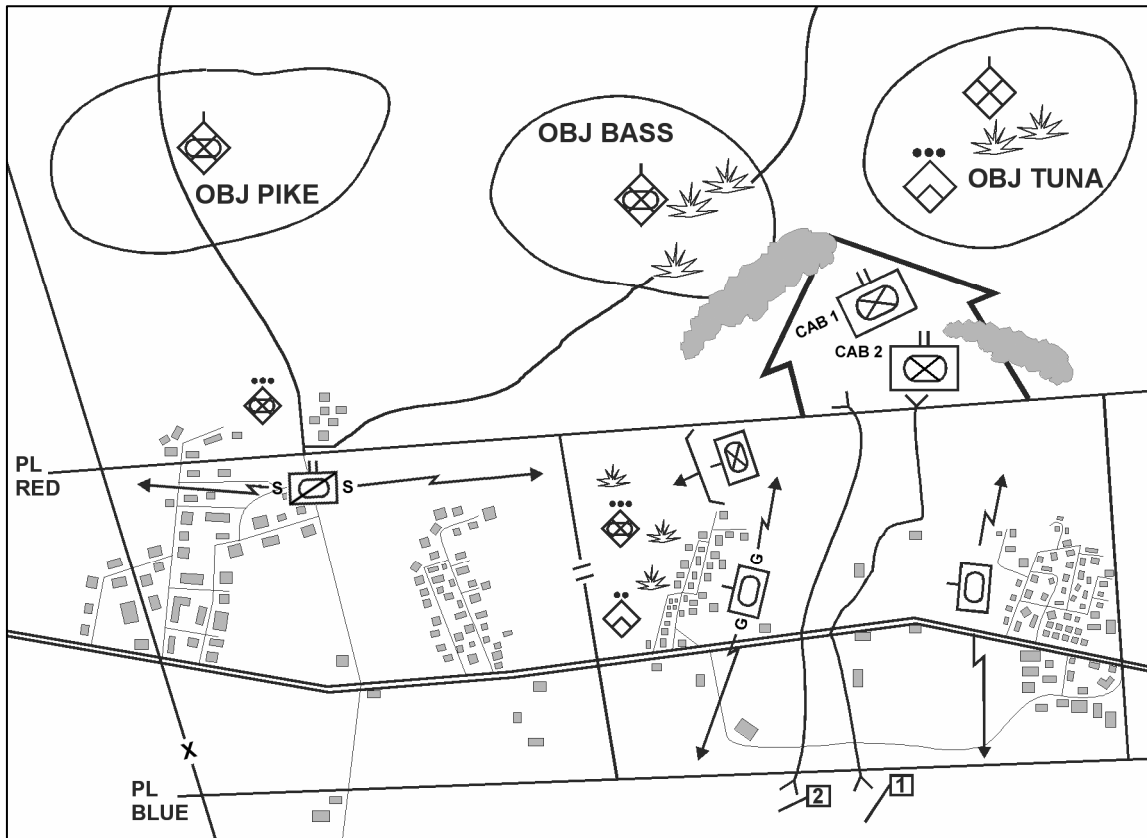


Figure 7-12. Fighting through an Urban Area

SECTION VIII – OFFENSIVE OPERATIONS

7-42. UEx and above headquarters plan the operational level of UOs and have the primary responsibility of setting the conditions for tactical success. A framework used to visualize and conceptualize UOs is:

- Assess
- Shape
- Dominate
- Transition

7-43. HBCT commanders can also use this methodology to plan their tactical UOs. Whenever possible, close combat by maneuver units is minimized and HBCTs attempt to move from assess to transition. The elements of offensive operations are not phases. There is no clear line of distinction that delineates when the HBCT moves from one element to another. Properly planned and executed actions will involve all four elements. They may be conducted simultaneously or sequentially, depending on the factors of METT-TC. During offensive operations, the HBCT commander seeks to:

- Synchronize precision fires (lethal and non-lethal effects) and information operations.
- Isolate decisive points.
- Use superior combat power to destroy HPTs.
- Use close combat, when necessary, against decisive points.

ASSESS

7-44. HBCTs primarily assess the urban environment by conducting IPB to determine what is decisive. IPB is combined with the following:

- UEx or JTF reconnaissance efforts and other shaping operations.
- Aggressive ISR effort by HBCT units.
- Analysis of existing intelligence and results of previous operations that impact current operations.

7-45. Urban IPB will involve numerous agencies, some of which are not only external to the Department of Defense, but to the U.S. Government as well as International Agencies, and NGOs. The HBCT must have the technical capability and operational expertise to use multi-source information and intelligence fusion, rapid analysis, and dissemination down to the lowest possible level in the chain of command. The HBCT identifies all relevant forces, their strengths and critical vulnerabilities, and be able to identify the critical nodes of the urban areas that may provide leverage if controlled. The IPB process must also take into account special considerations of the urban components, such as cultural mapping of the population and the location of sites that may pose hazardous materials (HAZMAT) implications in addition to WMD. Aerial and space sensors will prove vital in this effort, however there will be extensive requirements for HUMINT to determine or corroborate information.

7-46. Urban IPB must consider the impact of the noncombatants, whose presence in the urban area may be substantial and dynamic. Determining the ethnic and religious composition of the population, and if possible their intent—to flee or remain in the urban areas—may prove crucial. Early consideration may be given to the establishment of a limited civil-military operations center (CMOC) to plan and prepare to deal with noncombatants, NGOs, and International Agencies. Human behavior is difficult to control on a mass scale; to do so with persons of a different culture under the strains of conflict can be nearly impossible. The HBCT will rely heavily on their HUMINT to assist in sorting out combatants and noncombatants.

7-47. The ability of the HBCT commander to understand the battle space and accurately assess information regarding the terrain and the presence of friendly, threat, and noncombatant personnel is vital in developing the HBCT's COA. The considerations to develop PIR and IR will be unique in the urban environment and place greater demand on HUMINT and IMINT sources. The HBCT must weigh the IOs assigned to the time available to accomplish the mission in developing its plan. PIR and IR such as the following requires the HBCT to focus all ISR assets available:

- Where are the threat's critical C2 nodes located?
- What is the threat's most likely/dangerous COA?
- What is the status of the key lines of communication (LOCs) leading into and within the urban area (both above ground and underground)?
- Where are the diplomatic embassies and missions located within the urban area?
- Would isolation cause the threat to withdraw from the urban area?
- What is the location and status of tunnels within the urban area?
- Has the deployed threat force had any training on UOs?
- What are the likely threat withdrawal routes and chokepoints?

- What are the potential vulnerabilities to the infrastructure facilities?
- Where are the cross-mobility corridors within the urban area located?
- Where are the cultural, political, or symbolic facilities located?
- How many American citizens and Third Country Nationals need to be extracted?
- Are any American citizens or Third Country Nationals being detained against their will? If so, where?
- How do locals (by faction) view us?
- What is the availability of maps and charts for the AO or area of interest (AI)?
- What are the locations and status of hospitals and key personnel?
- Are there obstacles impeding movement along the routes to and from assembly areas?
- How will the national criminal enterprise oppose us?

7-48. The example IOs listed demonstrate the need for detailed information collection planning. The majority of information will come from HUMINT. The key to successful urban reconnaissance is gathering information from outside the urban area and refining objectives as the HBCT approaches the AO. Developing the intelligence assessment of the urban area, though time consuming, will significantly increase the ability to gain SU while reducing potential threats to HBCT forces.

SHAPE

7-49. HBCTs normally shape the AO through isolation. Isolation is defined as a tactical task to seal off (both physically and psychologically) an enemy from his sources of support, to deny an enemy freedom of movement, and prevent an enemy unit from having contact with other enemy forces. HBCTs are normally assigned the task of isolating the periphery of urban areas. The goal is to eliminate the enemy's ability to maneuver within the urban area, either to reinforce or to withdraw forces in contact. An infantry-centric combined arms team usually accomplishes isolation of objectives within the city. The HBCT commander must carefully determine the extent and the manner in which his forces can isolate the outlying urban AO. The majority of forces are concentrated in decisive areas while sensors and reconnaissance forces are used to isolate in less likely avenues of approach. The commander must weigh the decision to completely isolate the AO, denying reinforcement and resupply, or to allow the enemy an avenue to escape and avoid fighting to the last man. The decision will be based on the mission and situation, but all units must understand the commander's intent for isolation.

7-50. When the division assists in shaping operations, the HBCT commander and staff must determine whether the shaping efforts of higher headquarters are sufficient for the HBCT to accomplish its mission(s) or whether additional shaping efforts are required. Additionally, the HBCT commander and staff must assess whether the shaping efforts of higher headquarters permit them to move directly to domination and or transition.

PSYCHOLOGICAL ISOLATION OF THE OBJECTIVE

7-51. Isolation begins with the efforts of the HBCT, UEx and UEy PSYOP and CA operations to influence enemy and civilian actions. Psychological operations are conducted to change a target audience's behavior. PSYOP executes a series of products and actions to support theater and the supported commander's objectives. These actions must be coordinated with the overall PSYOP plan for the theater and must not sacrifice surprise. By itself, PSYOP is seldom decisive. They take time to become effective and often their effects are difficult to measure until after the actual attack, but they have usually proven to be successful. Under some METT-TC conditions, they have achieved results far outweighing the effort put into them. Additionally, using CA teams can greatly enhance the commander's

ability to influence the population, such as in determining whether noncombatants will seek sanctuary or remain in the urban area.

SENSORS AND RECONNAISSANCE UNITS

7-52. One of the more common methods of isolation involves the use of a combination of sensors and reconnaissance units along avenues of approach to detect enemy forces as they attempt to enter or leave the urban AO. The HBCT can engage these enemy forces with indirect fires, aerial fires, or a combination of the two, consistent with the ROE. This technique may be effective in detecting and stopping large enemy units from entering or leaving, but the cover and concealment the urban area provides will make it very difficult to totally seal off the urban AO. To be successful, this technique requires skillful reconnaissance units and responsive fires.

COMBINATION OF ASSETS

7-53. The most effective method of isolating urban AOs is by the use of a combination of sensors, reconnaissance elements, and maneuver forces. The HBCT can direct battalions to move platoons and companies into positions where they can dominate avenues of approach with observation and direct fires. Smaller urban areas with clearly defined boundaries will make this method easier to accomplish. Larger urban areas may prevent a maneuver force from gaining access to a position from which to stop enemy movement into the objective area.

USE OF FIRES AND SMOKE

7-54. In some instances, where the ROE permit, indirect and aerial fires may be the only available or appropriate method of isolation. This is the most destructive technique; it demands large amounts of ammunition, and it may only last for short periods of time. HBCT fire support planners can improve the effectiveness of this technique by careful selection of HPTs and use of precision munitions. Mortar and light artillery fires falling onto large buildings are not as effective in preventing enemy movement as fires falling into open areas. Targeting them against larger avenues, parks, and other open areas will force the enemy to move within buildings. Artillery and aerial fires can be directed against buildings that the enemy is using for movement and observation. This will slow and impede enemy movement, but not stop it. It can also hinder enemy supply efforts and make it difficult to reinforce units under attack. Targeting obvious choke points, such as bridges or main road junctions, can also assist in the isolation effort. Smoke can be used to isolate the objective(s) from enemy observation, but it is difficult to predict what smoke will do in an urban area.

NOTE: Multiple flat polished surfaces in an urban area may degrade laser use. Close coordination must occur between maneuver and fire support planners in order to obtain the desired effects of laser-guided precision munitions. Also, obscuration rounds may cause uncontrolled fires in the city and must be carefully planned.

7-55. Isolating an urban defending force has significant psychological and physical effects. The enemy is forced to react as he realizes the significance of isolation. The defender chooses between denying isolation by allocating resources and counterattacking or by conducting a breakout. If the defender chooses to deny isolation, the HBCT commander may determine that the bulk of enemy resources are concentrated outside of the urban area rather than defending the city. Among the determinations the commander must make are:

- The number of forces required to effectively isolate assigned AOs.
- The allocation of augmentation to achieve penetration and seizure of objectives to take advantage of enemy dispositions within the urban area.

- The subsequent actions the enemy commander will take once he is successfully isolated.
- Effects of isolation on the urban population, either as direct effect or as response of the enemy force being isolated.

DOMINATE

7-56. The HBCT uses all combined arms to dominate the urban environment (which consists of terrain, infrastructure, and society) consistent with the ROE, to defeat or destroy the enemy at decisive points and achieve the desired end-state of the mission. Domination is achieved when all mission requirements are achieved and preeminent military control over the enemy, geographical area, or population is established. The HBCT seeks to dominate the enemy through well-planned isolation, aggressive ISR operations, and skillful use of combined arms. The HBCT commander seeks to minimize the amount of street-to-street and house-to-house fighting that must be performed by battalions. FM 3-21.30 describes several techniques for conducting urban offensive operations such as:

- Search and attack technique
- Attack on a single axis
- Attack on multiple axes
- Cordon and attack
- Fix and bypass
- Multiple nodal attacks

7-57. Through the use of SU and the COP, HBCTs employ precision fires and effects to deny the enemy the ability to maneuver within the urban area and to destroy the enemy when he attempts to maneuver. The HBCT employs forces in positions of tactical advantage to engage the enemy with direct and indirect fires as he is forced to react and withdraw unexpectedly. When the enemy exposes himself by moving unexpected, he no longer has the protective advantages afforded by the urban environment and defeats his ability to leverage a coherent defense.

7-58. The commander builds on the shaping effects of isolating the urban area by attacking decisive points from multiple directions. Commanders can also attack multiple decisive points simultaneously or in a systematic and synchronized manner. These actions exploit the enemy's lack of SU and further complicate his decision-making.

TRANSITION

7-59. During transition, the HBCT continues to use all CS and sustainment assets consistent with the mission end state and ROE to move from combat operations to stability and/or support operations in order to return the urban area back to civilian control. During this step, the roles and use of SOF, CS, and sustainment units, such as CA, PSYOP, medical, and MPs become more important with the requirements to maintain order and stabilize the urban area. The HBCT must plan and consider actions to deal with significant numbers of noncombatants and dislocated non-combatants. Integrating NGOs and private volunteer or international organizations is vital to successful transition operations. Subordinate maneuver battalions and other HBCT units will be consolidating, reorganizing, conducting area protection and logistical missions, and preparing for follow-on missions. The HBCT staff must prepare to transition from being a "supported" force to being the "supporting" force. Chapter 8 discusses stability operations and support operations.

SECTION IX – DEFENSIVE OPERATIONS

7-60. Urban defense is conducted to protect political institutions, urban populations, economic infrastructures, dominate LOCs, control transportation hubs or ports, or to shape conditions for decisive operations. The defender can conduct the full range of defensive operations within a single urban area or in an AO that contains several small towns and cities. The defender may integrate villages, strip areas, and small towns into an overall defense (mobile or area), based on higher headquarters' constraints and applicable ROE (see Figure 7-13). These urban areas can be used as BPs or strongpoints. The most common type of urban defense is one that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright. UO defenses often works effectively to exhaust enemy resources and shape conditions for a transition to offensive operations.

7-61. A defense in an urban area or one that incorporates urban areas normally follows the same sequence of defensive operations and is governed by the same principles contained in Chapter 6. The most common type of urban defense is an area defense that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright. The area defense often works effectively to exhaust enemy resources and shape conditions for a transition to offensive operations. Mobile defenses are rarely used except as part of larger operations.

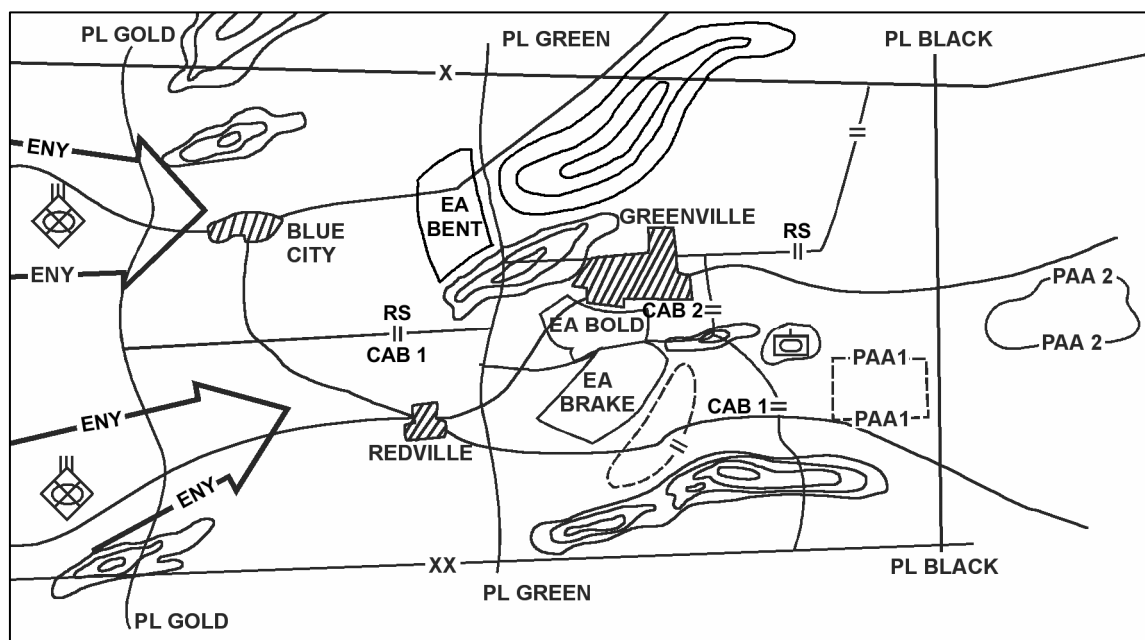


Figure 7-13. Integrating Urban Areas into a Defense

7-62. Heavy forces play a significant role in defending urban areas. Heavy forces are initially employed on the edge or flanks of the urban area to maximize its stand off weapons capability. They provide overwatch for obstacles and mounted avenues of approach. The goal of heavy forces initially is to destroy enemy reconnaissance and cause the enemy to use combat forces to conduct reconnaissance of the urban area. By doing so, indirect fires and CAS can be placed on the enemy as he deploys his isolation forces or awaits information from his reconnaissance or combat forces. Heavy forces are also allocated to augment infantry battle positions (BPs), however, the commander maintains a reserve and counterattack force. The counterattack force is used to regain key positions, block enemy penetrations, protect

the flanks, or overwatch disengaging elements. As the fight develops, mounted forces move into prepared BPs that allow for rapid repositioning and commencement of defense within the urban area. The characteristics of a successful urban defense as described in FM 3-06 (FM 90-10) are preparation, security, disruption, massing effects, and flexibility.

- *Preparation.* The physical characteristics of urban terrain naturally enhance the combat power of defending units. The presence of many structurally significant buildings within the urban area can create considerable obstacles to maneuver. With deliberate preparation of fighting positions in depth using existing urban terrain, a formidable defense is developed.
- *Security.* The physical aspects of the urban environment are assessed in planning security operations. The compartmented nature of urban terrain limits observation and may cause additional forces or sensors to be allocated to ensure that mounted and dismounted approaches are adequately observed to prevent infiltration. The presence of civilians further complicate security matters for the commander as the enemy can operate among noncombatants or coerce them into giving information on composition and disposition of HBCT forces. An aggressive information operation within the urban AO can identify and neutralize these threats.
- *Disruption.* Urban terrain assists defending forces to disrupt the enemy's attack. It does this through compartmentalization, inhibiting C2, and facilitating counterattacks. The physical aspects of urban terrain forces the enemy to attack with little or no mutual support, limited communications, and difficulty maintaining synchronization of its elements.
- *Massing effects.* The urban environment facilitates the defender's requirements to mass effects to protect his decisive points. Using SU, the HBCT can plan EAs throughout the AO that is flexible enough to allow repositioning of assets in a timely and protected manner to mass their effects against the threat. The enhancing effect of the terrain enables the positioning of relatively few defenders to achieve massed defensive firepower.
- *Flexibility.* As described above, defensive flexibility results from detailed planning in the form of branches and sequels that include alternate and subsequent positions and counterattack options. The urban area permits rapid covered movement on interior lines allowing movement to and occupation of defensive positions with little or no preparation. By developing SU and a COP, the commander can exploit enemy weaknesses developed during the fight and seize the initiative to attack vulnerable or decisive points through counterattack.

7-63. When defending large urban areas, the commander must consider that the terrain is more restrictive due to buildings that are normally close together. This requires a higher density of troops and smaller AOs than in open terrain. The density of buildings and street patterns will normally dictate a task force AO with a frontage of 6 to 10 blocks and a depth of 4 to 8 blocks. The HBCT normally assigns maneuver battalion AOs and may use PLs or other positions to reposition forces in depth. As in offensive operations, the commander may use the assess, shape, dominate transition framework to visualize and direct his defensive plan.

ASSESS

7-64. In assessing the urban AO for defense, the commander conducts aggressive ISR operations to determine the composition and intentions of the enemy. The enemy may intend to seize objectives within the city using speed and firepower to overwhelm defending forces or begin by isolating the urban AO and its defenders. This assessment determines whether the commander's primary concern is preventing isolation, and if so, the allocation of forces necessary to defeat the enemy's isolation force. Additionally, the commander assesses the

defensive qualities of the urban environment. His assessment is based on the analysis of terrain (using OAKOC), population, and infrastructure. The commander uses his assessment to focus the staff's COA development and defensive preparations. In planning a defense within an urban area, the staff must identify the following:

- Positions and areas that must be controlled to prevent enemy infiltration.
- Sufficient covered and concealed routes for movement and repositioning of forces.
- Structures and areas that dominate large areas.
- Areas such as parks and board streets that provide fields of fire for tanks and antiarmor weapons.
- Position areas for artillery assets.
- C2 locations.
- Protected areas for sustainment activities.
- Suitable structures that are defensible and provide good protection for defenders.

SHAPE

7-65. The goal of urban defensive shaping operations is to prevent isolation and set the conditions for separating attacking forces in space and time. The commander develops COAs that employ lethal and non-lethal fires and effects to force the enemy to commit considerable resources and time in attempting to isolate the AO. If the enemy attempts to attack before isolation, then the HBCT disrupts and separates attacking forces to destroy him piecemeal as they arrive in the urban area.

7-66. Units defending in urban areas must prepare their positions for all-around defense. Units employ aggressive security operations that include surveillance of surface and subsurface approaches. Measures such as mining or sealing subterranean passages are critical to avoiding infiltration by enemy reconnaissance or snipers. Units must constantly patrol and use OPs to maintain effective security. Special measures are taken to control possible civilian personnel who support the enemy or enemy combatants who have intermixed with the local population. Also, the commander should consider the need to monitor or control civilian communications such as television, telephone, and cellular phone systems.

DOMINATE

7-67. Dominating the urban area in a defensive operation requires decisively defeating the enemy's attacks. Domination translates into denying the enemy efforts to control the vital functions and critical infrastructure of the urban area. The HBCT employs precision direct and indirect supporting fires synchronized with fires from covered positions oriented against selected avenues of approach and EAs. The combat power of the HBCT augmented by the effects of its shaping operations culminates the enemy attack. When the attacking forces have culminated, mounted forces counterattack to isolate the enemy from reinforcement and then destroy him in detail.

TRANSITION

7-68. At the conclusion of a successful defense, the HBCT consolidates and reorganizes in preparation for offensive operations. The same considerations for transition that were discussed in offensive operations apply to transition in the defense.

Chapter 8

Stability Operations and Support Operations

The primary purpose of the HBCT is to fight and win engagements using maneuver firepower and shock effects as a combined arms force. However, when ordered, HBCTs must be versatile and flexible to conduct stability operations and support operations. The HBCT conducts these operations in environments that may not involve traditional combat missions. An HBCT may be called upon to quickly transition from a traditional warfighting mission to conduct a stability operation or support operation. When assigned a stability operation, a well-trained HBCT must be able to rapidly shift its focus from war fighting to stability and then from stability operations back to war fighting. During a stability mission, the HBCT performs numerous activities through the execution of tactical missions and tasks.

An HBCT normally operates as a part of a UEx. During stability operations, the HBCT may employ joint assets and work with multinational and joint forces. Understanding the nature of joint operations and the culture of our allies is critical to our ability to accomplish this mission. The HBCT's success relies on the legitimacy provided by international agreements and its ability to remain impartial while executing its assigned tasks.

It is essential that stability operations are not confused with support operations, as these two actions have differing types of missions and tasks. While the tasks are unique, they are not mutually exclusive and often overlap. The stability operation that the HBCT will most often perform is peace operations. It is probable that many of the other types of stability missions will be integrated into peace operations to include combat missions and nontraditional tasks (see FM 3-07).

SECTION I – STABILITY OPERATIONS

8-1. Stability operations employ Army forces outside the U.S. and territories to promote and to protect U.S. national interests by influencing the threat, political, and information dimensions of the operational environment through a combination of peacetime development, cooperative activities and coercive actions in response to crisis. The overarching purpose of stability operations is to promote and sustain regional and global stability. These operations may complement or reinforce offensive, defensive and support operations or they may be the decisive operation. Stability operations may take place before, during, or after offensive, defensive and support operations. During hostilities, stability operations help keep armed conflict from spreading and encourage committed partnerships while securing the support of civil populations in unstable areas. Forces engaged in a stability operation may have to conduct offensive or defensive operations to defend

themselves, or destroy forces seeking to prevent accomplishment of the stability mission. Following hostilities, the brigade may conduct stability operations to provide a secure environment for civil authorities as they accomplish their missions. Some of the many purposes for which Army forces are employed to conduct stability operations are as follows:

- Protect national interests.
- Deter aggression and promote peace.
- Satisfy treaty obligations or enforce agreements and policies.
- Reassure allies, friendly governments, and agencies.
- Maintain or restore order.
- Protect life and property.
- Demonstrate resolve.
- Prevent, deter, and respond to acts of terrorism.
- Reduce the threat of arms and weapons of mass destruction (WMD) to regional security.
- Promote freedom from oppression, subversion, lawlessness and insurgency.
- Promote sustainable and responsive institutions.

8-2. There are six considerations to assist the brigade in developing concepts and schemes for executing stability operations. These considerations are:

- *Leverage JIM cooperation.* Unity of effort is paramount in conducting successful stability operations. Without securing mutual cooperation from all participants in stability operations, the effort will surely fail.
- *Enhance the capabilities and legitimacy of the host nation.* Army forces must enhance host nation creditability and legitimacy through the demonstration of respect for the host nation government, police and military. Within their capability, allow the host nation to take the lead in developmental and security activities.
- *Understand the potential for unintended consequences of your actions.* The actions of individuals and small units can have dramatic consequences on the execution of stability operations. Soldiers and leaders who are disciplined, trained and knowledgeable of their responsibilities can mitigate the risk of negative consequences of unintended acts.
- *Display the capability to use force in a non-threatening manner.* Army forces must be ready to execute combat operations, but your preparedness should not provoke potential adversaries.
- *Act decisively to prevent escalation.* The nature of stability operations normally constrains forces in the manner available to accomplish military objectives. However, when committed; act with speed, determination; and initiative when necessary to pursue objectives; and apply military power forcefully when required.
- *Apply force selectively and discriminately.* Commanders must ensure their units apply force consistent with assigned objectives. Combat power is applied only in accordance with assigned missions and prescribed limitations.

TYPES OF STABILITY OPERATIONS

8-3. Stability operations may complement the offense, defense, and support; or they may themselves constitute the main operation. The following paragraphs define the types of stability operations. Table 8-1 identifies the types of stability operations and the type of missions the brigade may conduct.

Table 8-1. Types of Stability Operations

TYPES OF OPERATIONS	TYPES OF MISSIONS
Peace Operations	Peacekeeping and peace enforcement
Foreign Internal Defense	Advise host nation forces conducting combat operations
Security Assistance	Provide material, military training, and defense related services
Humanitarian and Civic Assistance	Provide basic services and support
Support to Insurgencies	Provide logistical and training support
Support to Counterdrug	Advisors, reconnaissance, intelligence, and logistical support
Combating Terrorism	Counterterrorism and antiterrorism
Noncombatant Evacuation	Secure, guard, defend, and transport noncombatants
Arms Control	Seize and destroy weapons, monitor arms inspections
Show of Force	Deployment and demonstration of operational capabilities

PEACE OPERATIONS

8-4. Peace operations are the most common stability operation the brigade executes. Peace operations encompass peacekeeping operations and peace operations. The HBCT, as part of a UEx or higher headquarters, is normally responsible for monitoring and enforcing the military aspects of a peace agreement within a designated area of operations (AO). The U.S. will normally participate in peace operations under the sponsorship of the United Nations (UN) or other multinational organization. Peace operations may incorporate other types of stability and support tasks such as arms control, show of force, and humanitarian assistance. During peace operations, the HBCT will conduct either peacekeeping or peace enforcement activities (see FM 3-07).

8-5. *Peacekeeping*. Peacekeeping operations focus on monitoring and facilitating the implementation of truce agreements, and supporting diplomatic efforts to reach permanent political settlements. They take place with the consent of all major belligerent parties. Units conducting peacekeeping operations must not use or threaten the use of force to accomplish your mission. The use of force is only applied in cases of self-defense or as a last resort. An HBCT does not rely on the use of its warfighting capability, but the perception that it has the ability to conduct its warfighting mission in the event of an escalation. Peacekeeping operations ordinarily encompass one or more of the following operations:

- Supervision of truce agreements and verification of disarmament/demobilization

- Reporting and monitoring of events and activities of disputing parties
- Negotiating and mediation
- Conducting liaison within the operational area
- Investigation of alleged cease-fire violations, boundary incidents, and complaints

8-6. There are many subtasks performed during peacekeeping operations. Company size and smaller units often perform these subtasks. These tasks are often decentralized in nature. The HBCT must ensure adequate logistic support systems are in place, combat support (CS) elements such as civil affairs (CA), engineers, and military police (MPs) are task organized to the executing element, and aggressive information gathering is accomplished prior to execution.

8-7. The HBCT must be ready to immediately transition from a peacekeeping mission to peace enforcement. To ensure the HBCT can quickly accomplish this transition, the HBCT takes preparatory actions to ensure the force is task organized and trained to respond to a contingency plan requiring an increased application in the use of force.

8-8. *Peace enforcement.* Peace enforcement is the actual or threatened application of military force to compel compliance with generally accepted resolutions or sanctions designed to maintain or restore peace and order. Peace enforcement maintains or restores peace and supports diplomatic efforts to reach a long-term political settlement. Since peace enforcement may include offensive and defensive operations, missions must be clear with defined end states. Typical peace enforcement missions include the following:

- Forcibly separation belligerents
- Disarm belligerents
- Collection of arms and ammunition
- De-mining and explosive ordnance disposal (EOD) activities
- Establish and supervise protected zones
- Enforce sanctions and exclusion zones
- Deny and guarantee rights of movement
- Protect humanitarian assistance operations

COMBATING TERRORISM

8-9. Terrorism is the calculated application or threat of application of unlawful violence to induce fear. In order to coerce or intimidate governments in pursuit of political, religious or ideological goals, terrorist attacks employ a wide array of tactics to include arson, hijacking, maiming, sabotage, hoaxes, bombing, seizure, assassination, hostage taking, kidnapping, raids, and use of nuclear, biological, chemical (NBC) attacks. Combating terrorism includes offensive operations (counterterrorism) and defensive measures (antiterrorism).

8-10. Counterterrorism includes offensive measures such as strikes and raids against terrorist organizations and facilities to prevent and deter terrorism. The HBCT will not normally participate in counterterrorism. In exceptional situations, a brigade may conduct operations in support of the lead federal agency (Department of Justice for domestic terrorism, Department of State for terrorism outside the U.S.).

8-11. Antiterrorism includes all defensive measures taken to reduce the vulnerability of personnel, installations, facilities, and equipment from attack. Antiterrorism measures are a critical part of force protection. Antiterrorism measures must be taken during all forms of stability operations. The greatest threat to the brigade is usually from a terrorist-like attack from belligerents. Information gathering and force protection measures are critical in combating terrorist attacks.

COUNTERDRUG OPERATIONS

8-12. When authorized by law, Army elements may be tasked to support other Federal agencies in supporting a counterdrug operation. The HBCT may be called upon to support counterdrug operations but it is prohibited from engaging in combat operations or law enforcement operations. Examples of possible support missions include detection and monitoring, host nation support, intelligence planning and sustainment support. Soldiers will not accompany law enforcement agencies in field operations or where hostilities are imminent.

NONCOMBATANT EVACUATION OPERATIONS

8-13. Noncombatant evacuation operations (NEO) relocate threatened U.S. and Allied civilian noncombatants from locations in a foreign nation to secure areas. NEOs are ordinarily conducted when the situation in an area deteriorates to the point that there is a political, military, or natural disaster that directly threatens noncombatant lives. The HBCT may take part in NEOs by defending and relocating noncombatants or supporting departure area activities. The HBCT commander may not have the authority to use military measures to preempt hostile actions, yet he must be prepared to protect evacuees and defend the force. NEO may be conducted prior to or during combat operations in either a permissive, uncertain, or hostile environment.

ARMS CONTROL

8-14. The HBCT normally conducts arms control operations to support arms control treaties and enforcement agencies. HBCT forces can assist in locating, seizing, and destroying WMD to include escorting deliveries and materials to preclude loss or unauthorized usage. The arms control effort within the AO assists in force protection, reducing the probability of escalation, and providing security for the local populace.

FOREIGN INTERNAL DEFENSE

8-15. Foreign internal defense (FID) is usually a Department of Defense (DoD) mission used to support the host nation's programs to free and protect its population from subversion, lawlessness, and insurgency. It promotes stability by helping a host nation establish and preserve facilities that support the peoples of the host nation. FID operations usually entail a commitment of U.S. Forces to either provide indirect support, direct support not involving combat operations or full-scale combat operations supporting the host nation.

SUPPORT TO INSURGENCIES

8-16. Army forces support insurgencies that oppose regimes that threaten U.S. interests or regional stability. This mission is normally conducted by Special Operations forces and will not normally be executed by the HBCT

SHOW OF FORCE

8-17. This type of operation is designed to demonstrate the U.S.' resolve through the deployment of military forces. An HBCT could expect to participate in a show of force as part of a permanent forward deployed force, by conducting a combined training exercise, a temporary buildup in a specific region, or as a demonstration in an increased level of readiness status. The commander must be prepared for a show of force to escalate to combat operations.

HUMANITARIAN AND CIVIC ASSISTANCE

8-18. Humanitarian and civic assistance (HCA) programs provide assistance to the local populace in conjunction with military operations and exercises. Such assistance must fulfill unit-training requirements that incidentally create humanitarian benefit to the local populace. In contrast to humanitarian and disaster relief, HCA are planned activities with specific limitations. Typical assistance activities under HCA include: medical, dental, and veterinary care in rural areas; construction of surface transportation systems; well drilling and basic sanitation facilities; and detection/clearance of UXO. Various laws in a given situation may limit the brigade's mission, but its role may include assisting civil authorities in restoring basic services, providing logistical support, and meeting possible manpower requirements. Under most circumstances, HBCT involvement in HCA activities will be limited to selected missions by support and sustainment elements able to provide specific types of requested support; the remainder the HBCT will normally continue with training or other operations.

SECURITY ASSISTANCE

8-19. Security assistance refers to groups of programs that support U.S. national policies and objectives that provide material, military training, and other defense related services to foreign nations. Army forces can support security assistance activities through the deployment of training teams, maintenance support personnel, and related actions such as humanitarian de-mining activities.

ORGANIZATION

8-20. The HBCT task organizes for stability operations similarly to combat operations. The HBCT allocates organic and attached forces to subordinates, assign missions, and establish AOs for their subordinate units. The HBCT may organize the AO for contiguous or noncontiguous operations. The HBCT may see an increased logistic support package dependent upon the type of mission. In all instances with the exception of humanitarian and civic assistance, the HBCT must be prepared to conduct combat operations.

SEQUENCE OF ACTIONS

8-21. Generally, all stability operations follow the sequence of:

- Deployment and movement into the AO
- Establishment of a base of operation
- Conduct stability operations
- Termination of operations

DEPLOYMENT AND MOVEMENT INTO THE AREA OF OPERATION

8-22. The commander and staff plan, synchronize, and control the movement of forces into the AO to maintain the proper balance of security and flexibility. The commander decides the sequence in which his forces will enter the AO. The HBCT must consider the number of suitable routes or lift assets available for the brigade's movement requirements. Other considerations include the following:

- Road/route improvement and maintenance
- Construction of routes
- Clearance of obstacles
- Repair of bridges and culverts
- Bridging rivers or dry gaps
- Establishment of security along routes

- Traffic control to permit freedom of/restrict civilian movements along routes
- Communications architecture

8-23. There may be a need to deploy an advance party heavy with logistical and engineering support into the AO initially if the AO does not have the infrastructure to support the HBCT. In other circumstances, it may be necessary for the commander and a small group of specialized key personnel such as CA, public affairs, or the HBCT staff judge advocate to lead the initial entrance of the HBCT. These personnel will set the groundwork for the rest of the force by conducting face-to-face coordination with local civilian or military leaders. Show of force operations will most likely necessitate that the commander send a large contingent of armor vehicles and combat forces to act as a deterrence and to ensure initial security. In all cases, a well-developed movement order is essential.

ESTABLISHMENT OF A BASE OF OPERATIONS

8-24. The HBCT establishes a base of operations to provide a secure operating and logistics foundation for HBCT forces to conduct stability operations. Security of the force is the primary concern for the HBCT as the base of operations is established. The initial security forces should have the means necessary capability to deter any hostilities.

8-25. Several factors must be considered during the establishment of a base of operations. These factors include, but are not limited to the following:

- Force protection measures
- Necessity of base camps and their location within the AO
- Security of main supply routes (MSRs)
- Coordination with other organizations in the area
- Reconnaissance and information gathering
- Human intelligence (HUMINT)
- Communications architecture
- Logistical support

8-26. The HBCT may need to execute critical missions simultaneously with the establishment of a base of operations. These critical missions could include the following:

- Emergency humanitarian and environmental assistance
- Quelling of civil disturbances
- Immediate engineer support such as clearance of mines, repair of airfields, or roads
- Actions providing initial stability

CONDUCT STABILITY OPERATIONS

8-27. Once the HBCT has moved into its AO and established a base for future operations, the HBCT begins to execute its' stability operation. To successfully execute the mission, commanders at all levels must clearly understand the root causes of the conflict. This knowledge enables the commander to prioritize tasks and begin stability operations. Such tasks as establishment of zones of separation, combat operations including raids, checkpoints, patrols, reconnaissance, support to the host nation, security operations, and logistic sustainment are conducted during this phase. The HBCT maintains its war fighting capability through sustainment training.

8-28. *Supervise and enforce agreements.* A possible mission the HBCT may execute during stability operations will possibly be the supervision and/or enforcement of international agreements. These agreements provide the framework that the HBCT operates within. The HBCT will be given legitimacy through these agreements and will maintain its legitimacy through the compliance with the rules of engagement (ROE). The following represents

several activities or tasks that the brigade may conduct while supervising/enforcing agreements:

- Establish buffer zones/zones of separation
- Supervise a cease-fire
- Supervise withdrawal/disengagement
- Monitor demobilization activities
- Monitor boundaries/borders disputes
- Monitor prisoner of war (POW) exchange
- Conduct arms control measures

8-29. *Establish Buffer Zones/Zone of Separation.* A buffer zone or zone of separation is a defined area controlled by a peace operations force from which the disputing or belligerent forces have been excluded. A buffer zone is formed to create an area of separation between disputing or belligerent forces and reduces the risk of renewed conflict. Figure 8-1 depicts an example of an HBCT zone of separation operation. In the example shown, the HBCT is augmented with an infantry battalion either from the UEx or another national contingent. The HBCT may also have used the RS in this role, or retained it for missions (e.g., NAI coverage, area security, route security, etc). Because the goal of peace operations is to eventually enable the host country to stabilize itself and become self sufficient, the zone should not become an area where there is no freedom of movement. The populace will need to move across the zone to reestablish and rebuild their nation. Planning considerations are designation of areas of responsibility for task forces, size of lodgment areas, visibility, and critical locations for the establishment of checkpoints. Success will rely heavily on the ability of the commander to bring together local leaders to ensure compliance with established agreements. In peace enforcement, this will become more difficult since there is not an agreement between all warring factions. However, the ability to negotiate a settlement or establish compliance becomes very important.

8-30. The commander must ensure the HBCT displays complete impartiality. All peace force actions must appear neutral to all host nations. The appearance of supporting one side over another will degrade the efforts of the peace force. The establishment of a zone of separation begins with an understanding of the peace agreement if one exists and the ROE. Initially, a Joint Military Commission (JMC) should be coordinated to achieve compliance with separated forces and to ensure there are understandings between former warring factions (FWF) of the role the brigade and the location of the zone of separation. This time, differences and disagreements can be resolved. The HBCT also coordinates authorized movement routes through the zone of separation and ensures FWFs understand where these routes are located. Areas of responsibility are assigned to task forces. Positions along the zone of separation are occupied to control and monitor movement. Routes and/or the boundaries of the zone of separation may need markings, which require extensive logistic support and manpower. FWFs actions are relocated out of the zone of separation and unauthorized checkpoints are abolished. The HBCT should monitor all activities within the buffer zone around the zone of separation. Once the zone is clear of belligerents, the HBCT can monitor the zone, regulate movement, and enforce arms control.

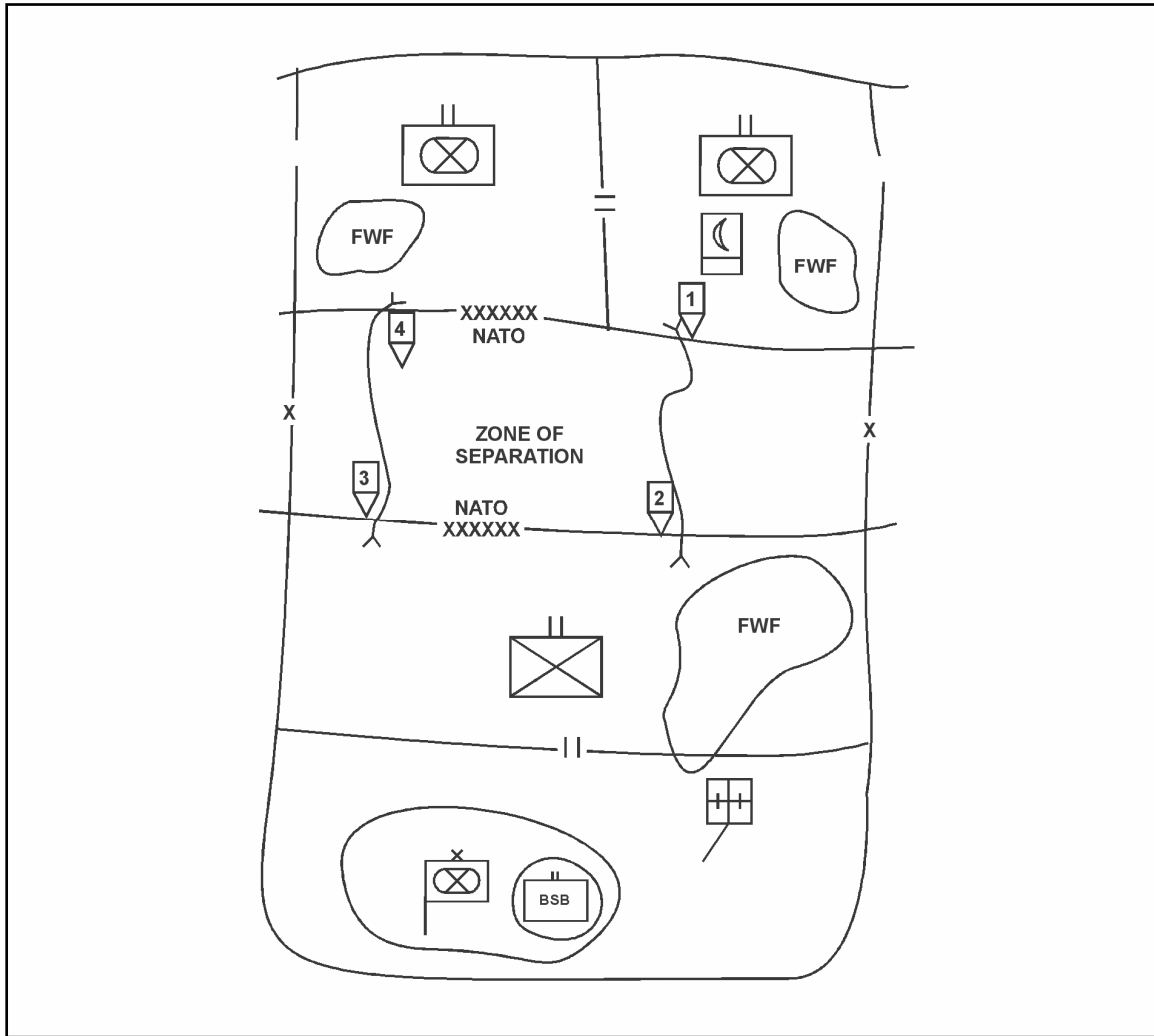


Figure 8-1. Zone of separation

8-31. Area security focuses on the actions the HBCT takes to ensure force protection and the enhancement of law and order. The HBCT accomplishes this by:

- Establishing a presence of force
- Locating visible, but secure lodgment areas throughout the AO
- Securing critical facilities and LOCs
- Providing protection for threatened civilians
- Placing checkpoints in locations where traffic can be controlled and monitored
- Employing patrols throughout the AO
- Planning and conducting all the movement of troops and supplies as tactical operations
- Maintaining the capability to respond quickly to a crisis
- Enforcing arms control
- Maintaining OPSEC
- Establishing guidelines for force protection

8-32. *Establish bases/lodgment.* Bases are critical to the functioning of the HBCT. Well-established bases assist the HBCT in performing daily tasks and allow it to maintain flexibility. The following are several techniques the HBCT can use in the establishment of a base area:

- A base cluster, which is a collection of bases geographically grouped for mutual protection that lacks a defined single perimeter
- A single brigade base with a defined, defensible perimeter
- Several smaller bases, each with a defined, defensible perimeter

8-33. The brigade support area (BSA) will most likely be established similar to that during conventional operations. Its location should facilitate the movement of sustainment elements, centrally located where the entire AO can be serviced and located on defensible terrain.

8-34. The commander and his staff will determine how to organize and post the command posts (CPs). They can be separated in a manner similar to other tactical operations or combined into a single operating base. The location of the CPs will vary depending on the type of stability operation the HBCT is performing.

8-35. Other considerations in the establishment of bases include the following:

- Clear visibility to establish the forces presence
- Appropriate size to facilitate smooth flow of traffic
- Security (large bases are normally more difficult to secure)
- Unit locations within bases area
- Security measures such as entry and exit points, observation posts (Ops), bunkers, fighting positions, patrols, and CPs
- Defensive planning and location of bases or base clusters
- Ability to communicate with higher headquarters via AM, FM, UHF, and digital means
- Distances from urban areas
- Facilitates a quick response to supported areas
- Size, composition, and location of reserve forces
- Location of possible landing zones (LZs) and pickup zones (PZs)
- Sustainment considerations
- Mess areas, showers, latrines and storage bunkers
- Site selection in regards to ability of the terrain to support structures and traffic
- Maintenance and refueling areas
- Medical treatment facilities
- Contracted services
- Condition of existing facilities
- Proximity to structures and roadways

8-36. *Employ reserve forces.* Like other military operations, the HBCT maintains an appropriately sized reserve force to quickly respond to unforeseen events. The size and composition of the reserve is mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC) dependent and could be made up of combat, CS, and sustainment elements that are able to:

- React to unforeseen circumstances
- Provide additional security as needed
- Provide the brigade commander a viable force at his immediate disposal

8-37. *Conduct negotiations and mediation.* Individuals at all levels may be involved with some type of negotiating process. The ability to manipulate a combination of military power, political power, special interests, cultural values, personalities, and perceptions is critical in successful negotiating. The commander is the primary communicator of the HBCT's intentions. The commander's ability to set the tone for the HBCT and for local civil and military leaders will establish the foundation from which all units within the AO will function. One technique the commander can employ to communicate his intentions is through the JMC.

8-38. Leaders will often find themselves in the role of a negotiator, mediator, and even arbitrator at the point of confrontations. Generally, negotiations will reduce the unnecessary loss of life and offer the best long-term prospect for a final settlement. Negotiations are not always successful because agreements are difficult to achieve between all parties. Negotiations are time consuming and frustrating so commanders at all levels may not see immediate results from negotiations. Additionally, the belligerents may negotiate in bad faith and attempt to twist issues, prolong negotiations and violate the meeting's intent. In all cases, a trusted and accomplished interrupter is a valuable asset to the commander.

8-39. As a negotiator, you must be firm, fair, and polite. Keep all discussions to the issue at hand and remain patient. You must remain neutral and impartial and not allow yourself to be used by either of the parties. Keep the "big picture" in mind at all times and remain focused on the objective of the negotiations. Be insistent without being belligerent yourself by being familiar with the problem. You must collect all known information or evidence, determine the history of the problem, find out if any previous agreements or understandings existed previously, and you must be certain of the force's policy on the problem. When preparing for the negotiation, select and prepare a meeting place acceptable to both parties, arrange for adequate interpreters, and secure the meeting area and delegates from possible attack. Ensure all negotiations are recorded and keep your higher headquarters informed of any results. Do not commit the U.S. government to agreements that may be binding under international law or that obligate U.S. funds. Seek review by a Judge Advocate (JAG) and the approval of higher headquarters.

8-40. During the conduct of the negotiations, ensure you exchange salutations and courtesies to all participants and make introductions to all members. Open the negotiations with small talk to set the stage before moving into formal discussions. Allow each side to state their case without interruption and without premature judgments. Record the issues of each side and be ready to produce evidence or proof to establish the facts. If there is a preferred solution, present it and encourage both sides to accept it. Close the meeting with what has been agreed upon and what is expected of all parties. Put the results of the negotiation in writing and obtain signatures of all participants. Remember that the measures of a successful negotiation are the prevention of any future escalation or reoccurrence, the resolution of the conflict by securing an agreement from both parties on a specific topic.

~~8-41.~~ *Conduct Joint military commission.* The JMC enables local representatives of all parties in the conflict to meet under the supervision of the brigade. At the JMC, disputes can be resolved, intentions clarified, parameters of assistance delineated, and consent and cooperation of local leaders secured. JMC serves a critical role in the peace process and set the stage for lasting stability within the AO. Much of the initial groundwork can be laid at brigade-level JMCs. This initial coordination is also essential for the battalions and lower level negotiations and plans.

8-42. The JMC has specific functions. The functions are as follows:

- Advise the commander on procedures and problems that impact on brigade operations

- Receive reports and agree on specific COAs to ensure compliance with military aspects of the peace agreement
- Assist the commander in determining and implementing local cooperative and transparent measures between the parties
- Coordinate operations of all liaison efforts with factional forces
- Coordinate with all other staff sections and organizations for information

8-43. The media will cover JMC objectives emphasizing the legitimacy and authority of the JMC. Other JMC media objectives include the following:

- Reinforcing the JMC's binding nature
- Underscoring the consequences of noncompliance
- Improving the effectiveness of the JMC

8-44. Prior to conducting the JMC, the HBCT makes preparations to ensure an effective and result oriented meeting occurs. These actions include the following:

- Invite all designated attendees.
- Determine an agenda coordinated with both parties prior to the meeting.
- Plan for interpreters.
- Prepare the meeting room layout and seating arrangements.
- Develop a transportation plan to ensure all participants arrive safely to the JMC location safely and on time.
- Develop a security plan that addresses antiterrorist actions, local security, and actions if the JMC is brought under fire.
- Develop a media plan to invite the press, seat them in designated areas and have a press release afterwards.
- Identify the desired outcome of the meeting by prioritizing issues.
- Anticipate (war game) how to handle surprise issues, handle breakdowns and defuse tensions.
- Ensure all subject matter experts available while presenting a consistent message among all JMCs.
- Positively shape the atmosphere with easy to agree upon issues initially before moving on to harder subjects.
- Be deliberate in your presentation/discussion.
- Record all conversations and agreements.
- Take breaks or interject small talk to break tensions.
- Do not minimize someone else's interest.
- Maintain cultural awareness and understanding.
- Know when to end the meeting.
- Restate the agreed issues, expectations and remaining points of contention the require resolution.
- Establish the date, time, and location of the next meeting.

8-45. *Develop media plans.* The following discussion focuses on aspects of media operations pertinent to stability operations and support operations. It supports the guidance provided in Appendix D (Media Operations) to this manual. The media plays an important role in stability operations. The brigade must have a plan to facilitate media operations. The objective of media operations is to ensure that military operations are put in the proper context for the American public and audiences around the world. Public affairs play a vital role in ensuring the media reports correct information that does not interfere with the HBCT's mission. Units must develop standard operating procedures (SOPs) that explain proper procedures for handling media personnel. Most importantly, all soldiers must be

trained in how to talk to the media and must clearly understand the limitations of what they can and cannot say. The HBCT can take an active role by including the media in preplanned events. The brigade should also be prepared to provide information for press releases to their higher headquarters in a timely manner to avoid incorrect information being published. In addition, they should also be prepared to correct erroneously published information with information collected from subject matter experts. Much of the global community derives its perceptions based on what the media portrays. The HBCT's role is to ensure that what is reported within their AO is correct and establishes a positive image to the worldwide audience.

8-46. When dealing with the media, the HBCT planners must understand that the media representatives are interested in providing stories for their news agencies. Some media realities the HBCT must face are:

- Media messages can change policy. The media has the ability to influence the public—positively or negatively.
- Public affairs office (PAO) cannot control the media messages or stories.
- The media will be everywhere looking for unique stories and angles. Often, the media will want to accompany front line patrols and other operational missions to get a story.
- All operations will be covered in real time.
- The media may resist HBCT efforts to manage and escort correspondents.
- Media representatives require constant fresh stories every day.

8-47. The HBCT must maintain the advantage on what is reported to the public both in the U.S. and to the host nation. The commander influences and shapes the environment to the brigade's benefit by gaining access to all sources of information. Examples of various sources include:

- Neutral parties
- Former warring or warring factions
- Civil populace
- Other agencies working in the AO
- Media and information passed from organic and nonorganic assets
- Local newspaper, media, and websites

8-48. There are many considerations the commander and PAO representatives must understand prior to dealing with the media. You must prepare and anticipate for the needs of the media. Aggressively counter inaccurate information with subject matter experts to avoid incorrect perceptions. Always respond quickly (within 24 hours) to breaking events with authoritative briefings by commanders or operators. The commander must balance his time with the media neither ignoring the media nor being over exposed. Ignoring the media will not make them go away—it only forces the media to contact alternate sources for their stories. Balance your unit's need for operational security (OPSEC) with the public's right to know.

8-49. The media will want to conduct interviews with the leadership of the brigade to get current information, and the media will also want to interview soldiers for "hometown interest" stories. You should always allow an interview with a soldier when:

- The interview or answering of questions will not hurt the mission
- He/she is familiar with the area to be discussed
- An escort is present
- The soldier has no objections

8-50. Before the interview begins:

- Ensure the media is credentialed and escorted.
- Conduct a practice media interview with the soldiers to practice interview skills. Allow soldiers the opportunity to speak and express opinions on areas and matters in which they are familiar.
- Remind soldiers about OPSEC but do not interfere with the free exchange of information.

8-51. How can the interviewee best tell the Army story:

- Relax and be yourself.
- Ignore the cameras and talk to the reporter.
- Be brief and concise using simple language, not military jargon.
- Use appropriate posture and gestures.
- Answer one question at a time making positive points.

8-52. Just as there are several things to accomplish to support successful media operations, there are several rules that you must not violate. These guidelines are:

- Do not discuss political or foreign policy matters.
- Do not address specific operational capabilities or future plans.
- Do not talk about classified information.
- Do not allow the media to videotape recognizable landmarks nearby, sensitive equipment, or permit them unescorted access inside the HBCT CP.
- Do not use the expression “No Comment”. Instead say that “We do not comment on future operations” or “That information is classified” or “I’m not qualified to talk about that matter”. If you do not know the answer to a question, tell them that you do not know.
- Never lie to the media, make “off the record” comments, or get angry with the media.

~~8-53.~~ *Riot control.* Because of the sensitivity involved during peace operations, the commander cannot expect total compliance by all individuals in the host nation. You can expect small belligerent parties and gangs to start civil disturbances and riots. The HBCT MPs are very useful in quelling small disturbances. Often, a show of force will dissipate a rioting crowd. However, when there is no compliance, the use of increased force must be applied with caution and conform to applicable ROE. The ability to apply just the right amount of force while limiting collateral damage and injuries to the local populace will send a message to the host nation that the brigade has the power to quell such disturbances while reducing resentment among the populace because of unnecessary damage, injury, or death. Host nation officials, CA, and psychological operations (PSYOP) are critical assets to the commander. During disturbances, CA or PSYOP teams can reduce tension and reach agreements between fighting groups.

8-54. The violence associated with a civil disturbance can be either a spontaneous emotional eruption or a planned event. If the violence is a planned event, often it’s purpose is to draw away soldiers or other local law enforcement from the central area permitting the lawbreakers an opportunity to conduct other acts of violence. The violence at a civil disturbance is characterized by excitement and violence; both are highly contagious permitting the violence to quickly escalate. The objective of reacting to a civil disturbance is to restore order with the minimal application of force. You can accomplish this by disrupting the crowd’s unifying influence and reorient the participants to concerns for their personal vulnerability and welfare. Dealing with civil disturbances requires the:

- Isolation in time and space the trouble spots from outside interaction.
- Dominate the situation through force presence and control of information.

- Establishment of a common situational understanding (SU) throughout all units through reporting.
- Multidimensional, multi-echelon actions from the lowest level involved through the higher headquarters all focused on the same objective at the same time.

8-55. The principles involved with controlling a disturbance are similar to that of conducting normal operations. You must remain flexible in your planning and execution to adapt to changing situations, conduct rehearsals prior to execution, have the appearance of overwhelming force, and control the action by positioning forces and presenting an image of dominance. Keep the crowds off balance by employing surprise and speed in deployment.

TERMINATION OF STABILITY OPERATIONS

8-56. The HBCT can terminate stability operations in several ways. It can hand over the stability mission to a follow-on force. This force could be another U.S. brigade, a UN force, or a nonmilitary organization. The situation could become stabilized and not necessitate the continuance of operations. In this case, the host nation or domestic community will assume responsibility of stability. The HBCT could be redeployed with no follow-on forces and without the area being stabilized. A condition such as this would place the HBCT in a vulnerable situation. Security must be intense and the protection of the force during their exit must be well planned and executed. Finally, the HBCT could transition to combat operations. The commander must always ensure the HBCT maintains the ability to transition quickly and forcefully.

8-57. *Transition to combat operations.* If the stability operations are unsuccessful, the HBCT may be ordered to transition to tactical combat operations. The commander and staff must always keep in mind that the pendulum can shift from a stability operation to warfare at any time. An escalation to war is a clear indicator that the peace enforcement failed. In fact, any large-scale combat operation should be avoided if possible. However, the HBCT must always retain the ability to conduct offensive and defensive operations. Preserving the ability to transition allows the HBCT to maintain the initiative while providing force protection. In addition, the perception that the force is a viable presence is dependent on how much combat power the HBCT possesses and the perception that it will employ its power if necessary. This perception is the primary means the brigade will use to deter an escalation to war. The commander must plan for contingency operations that factor in what actions the HBCT will do if war cannot be averted. In addition, how the HBCT is task organized and how the AO is designed must support an expeditious transition. A balance must be achieved between the mindset of peace operations and the mindset of war fighting. Soldiers cannot become too complacent in their warrior spirit, but also they must not be too eager to rely on the use of force to resolve conflict. This balance is the essence of PE and the fundamental aspect that will enable the brigade to perform its mission successfully and avoid an escalation to war.

PLANNING CONSIDERATIONS

8-58. The following section examines several important considerations that influence planning and preparation for a stability operation.

ENVIRONMENT

8-59. To understand the environment, the commander and his staff must consider several aspects. Just as the commander must know his enemy, he must also know the culture and people within the nation that the stability operation is being conducted. Special factors that must be considered to clearly understand the situation are:

- Political, economic, military, and geographical situation in the AO
- Local customs and cultures, religions, ethnic makeup, and tribal factions

- Current legal environment and ROE
- Civil populace attitude toward U.S. soldiers
- Perceptions of U.S. operations
- Belligerent's intent and capabilities (if any)
- Threat to U.S. forces (conventional and unconventional) including NBC events
- Current military potential of the host nation
- Available resources of the host nation
- The AO (such as size, location, terrain, and weather) and physical considerations (such as minefields, bridges, road conditions, and existing infrastructure)
- Any political or peace agreements determining the scope of the operation

8-60. The commander must have a complete SU of the situation. He must be attentive to the attitudes of local leaders. The ability of the commander to sense his battle-space is critical to ensuring tense situations do not escalate.

8-61. Stability operations involve numerous legal, religious, and cultural issues. The HBCT Staff Judge Advocate, Chaplain, PSYOP, and CA officer will play key roles in all planning and execution of stability operations. The HBCT Staff Judge Advocate as well as the commander must know and understand the ROE, as it is critical to understand the legal environments the brigade is operating in to ensure there are no breaches of conduct that could have a negative effect. The Chaplain plays an important role, as he is aware of any possible religious implications of your operation. The CA officer and his cell assist the commander to understand and exploit the cultural tendencies of the belligerent parties. The PSYOP officer advises the commander on psychological operations actions (PSYACTs), PSYOP enabling actions, and targeting restrictions. The PSYOP officer also advises the commander on influencing attitudes and behavior to obtain compliance or noninterference with military operations.

8-62. Stability operations may be conducted with varying levels of host nation support and political stability. The health and infrastructure conditions may vary from excellent to extremely poor. The potential for violence, crime, theft, escalation, and further destabilization is always present. Also, the potential for shifts in the perceptions and attitudes of the local populace is always present. All commanders must keep these factors in mind when planning for and executing these types of operations. In many operations, a brigade may be a supporting organization to the lead governmental agency requiring additional efforts in coordinating operations (see Appendix A). The HBCT must quickly adapt to the more fluid and restrictive nature of support operations and stability operations.

DEVELOPING PLANS

8-63. Stability operations are normally long-term endeavors requiring the commitment of forces and resources to achieve a lasting success. To account for this, the commander must develop a vision for the operation from initiation to the desired end state. The commander must guard against a tendency to expand the stated mission in an effort to accomplish more than is appropriate. The commander and staff should not expand their mission, unless the accomplishment of additional tasks is critical to accomplishing the stated mission and achieving the desired end state.

8-64. The commander and his staff analyze the current political and socioeconomic situation in the AO, the friendly situation, and the higher headquarters' order to determine the HBCT's mission and requirements. The commander develops and articulates a desired end state in terms of the military and political socioeconomic conditions that have the greatest potential for lasting stability in the area. The commander and his staff determine the required sequence of tasks and objectives that must be accomplished to meet the end state. The most critical tasks that normally provide at least a temporary suspension of violence,

suffering, and chaos are undertaken immediately. These often include actions that separate the warring factions, restore basic security, and provide immediate relief to suffering people. Other critical actions include moving into the AO and the establishment of a base of operation and sustainment base for the HBCT. As the immediate situation stabilizes follow-on actions are taken to restore order, assist local governments, assist in repairing infrastructure, remove weapons, disarm factions, and enforce specified military aspects of political agreements. The commander and staff assign objectives and AOs to subordinate forces. They allocate forces and establish control measures for subordinate forces to accomplish their missions.

8-65. To maintain focus during this type of long-term operation, it is vital that the commander and his staff develop a concept of the operation that establishes objectives and time lines that meet the desired end state. The concept should cover the entire duration of the operation from deployment to the end state, defining how the brigade will accomplish its assigned mission. Fragmentary orders (FRAGOs) and subsequent operation orders (OPORDs) are used to control execution of each phase of operation and various missions as required.

NONGOVERNMENTAL ORGANIZATIONS AND UN RELIEF AGENCIES AND INTERNATIONAL ORGANIZATIONS

“What’s the relationship between a just-armed military force and the NGO and PVO that might have been working in a crisis-torn area all along? What we have is a partnership. If you are successful, they are successful; and, if they are successful, you are successful. We need each other.”

General John M. Shalikashvili,
USA, Chairman of the Joint Chiefs of Staff

8-66. The commander and his staff coordinate the HBCT's actions with the higher headquarters, adjacent units, and governmental and NGOs in the AO to ensure a unified effort. The effective use of liaison officers (LNOs) is vital for this requirement.

8-67. *The role of NGOs.* NGOs may range in size and experience from those with multimillion dollar budgets and decades of global experience in developmental and humanitarian relief to newly created small organizations dedicated to a particular emergency or disaster. The professionalism, capability, equipment, and other resources and expertise vary greatly from one organization to another. NGOs are involved in such diverse activities as education, technical projects, relief activities, refugee assistance, public policy, and development programs.

8-68. Some examples of NGOs are:

- American Council for Voluntary International Action
- American Friends Service Committee
- Americares Foundation
- Baptist World Alliance
- CARE
- World Vision

8-69. *CMOC.* Conceptually, the civil-military operations center (CMOC) is the meeting place of NGOs and the population. Although not a new concept, the CMOC has been effectively employed as a means to coordinate CMO and plays an execution role. The organization of the CMOC is theater and mission dependent, and flexible in size and composition. A commander at any echelon may establish a CMOC to facilitate coordination with other agencies, departments, organizations, and the host nation (see Figure 8-2).

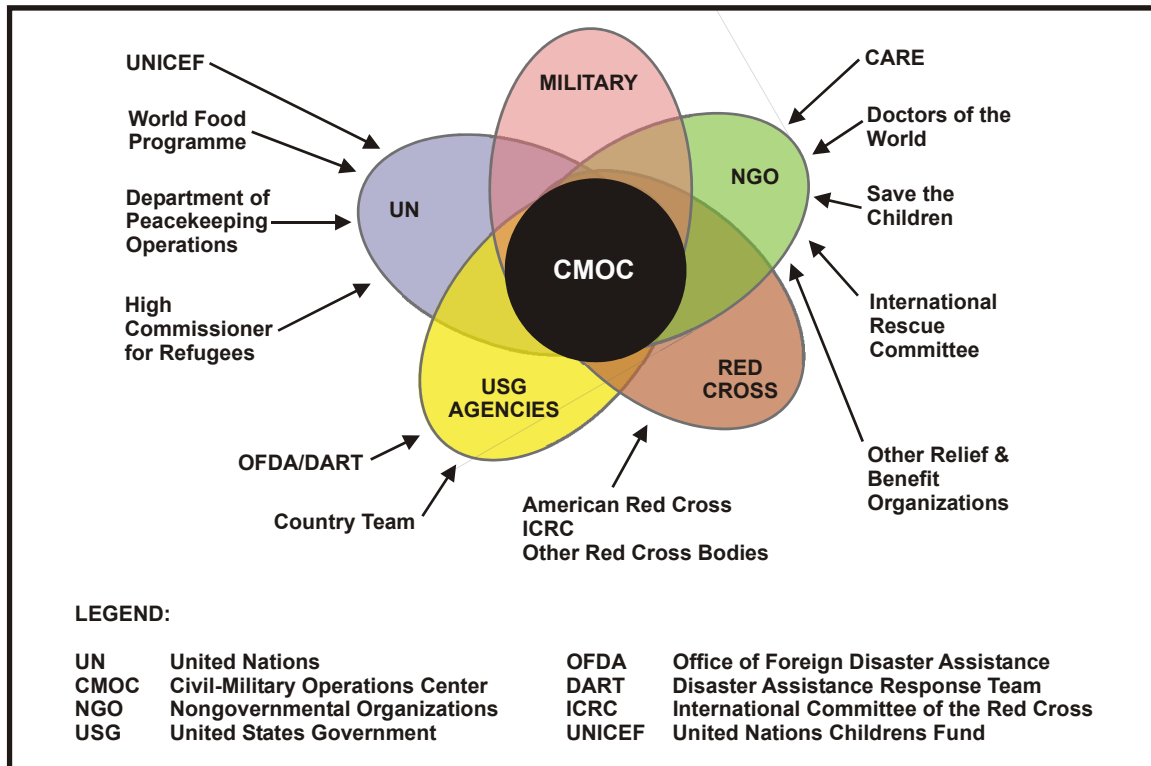


Figure 8-2. Sample composition of a civil military operations center

8-70. You may form a CMOC as the action team to provide the following:

- Carry out guidance and institute decisions regarding CMO.
- Perform liaison and coordination between military capabilities and other agencies, departments, and organizations to meet the needs of the populace.
- Provide a partnership forum for military and other engaged organizations.
- Receive, validate, and coordinate requests for support from the NGO and regional and international organizations. Many of these organizations consider the CMOC as a venue for interagency discussions, but not as an interagency forum.

NATURE OF STABILITY ACTIONS

8-71. Stability operations by nature are often decentralized in execution. Subordinate units (often at the company and platoon level) carry out the vast majority of critical tasks and must possess a complete understanding of the commander's intent. The HBCT must maintain the ability to conduct coordinated small-scale operations over great distances quickly and securely. Subordinate units may conduct a wide range of tasks including, but are not limited to:

- Offensive tasks such as attacks, search and attack, and ambushes
- Defensive tasks such as area defense
- Cordon and search operations
- Humanitarian and environmental assistance
- Security operations such area security or convoy escort missions
- Reconnaissance operations
- Controlling civil disturbances

- Show of force exercises

8-72. Due to the multiple and unique demands of these operations, supporting forces such as engineers, logistics, and medical personnel must remain responsive and flexible. Task organization of CS and sustainment units will often change many times during the course of the operation. The brigade must ensure adequate support for its subordinate units and take active measures to create the conditions for its subordinates to succeed. The HBCT focuses the majority of its efforts towards coordinating and supporting subordinate actions, assigning subordinate objectives and responsibilities that support the concept of operations, and controlling all efforts to ensure they are working towards the brigade's objective.

8-73. In stability operations, there are many situations that may involve the use of force. The level of force and procedures for applying force must be adequate to stabilize the crisis and must comply with applicable ROE. The ROE may include procedures for warnings and the employment of lethal and nonlethal force. It is imperative that all subordinate units understand and completely comply with the ROE. When faced with a crisis, subordinate leaders and soldiers must assess the situation quickly, determine the required action based on METT-TC to resolve the crisis, consider the level of force necessary and ROE, and then make a decision. All commanders must recognize that the decisions and actions of their subordinates down to the soldier level may have significant strategic or international impact.

FIRE SUPPORT

8-74. The use of fire support is usually very restricted and limited in stability operations. The commander integrates fire support into his tactical plan in accordance with the ROE. The establishment of clear guidance and clearance of fire procedures is critical and dependent on the stipulations outlined in the ROE. Because the intent is to limit collateral damage, area fire weapons are used with discretion. Additional considerations in the employment of fire support include:

- Development of procedures for the rapid clearance of fires
- Increased local security for firing positions of indirect weapons
- 360 degree firing capability
- Close coordination with host country officials in the AO
- Establishment of communications with host country forces and area control centers
- Understanding of the restrictions on the use of dual-purpose improved conventional munitions (DPICM) and area denial antipersonnel mine/remote anti-armor mine system (ADAM/RAAMS); and an increased dependence on precision munitions to limit the amount of collateral damage and risk to civilians of unexploded munitions
- Fire support plans that are continuously updated in regard to changing civil-military situation, force protection, and viable threats
- Understanding the effects of illumination rounds to defuse belligerent's night activities

INTELLIGENCE

8-75. Accurate and timely intelligence is absolutely critical to the success of the HBCT's mission. The concept of the operation provides the structure for information gathering. Information gathering is a constant process and the HBCT achieves this by using the reconnaissance squadron, CAB scouts, MPs, CA, PSYOP, CI, public affairs personnel, maneuver battalion elements, and soldiers on OPs and at checkpoints. Except for those few persons who must maintain their neutrality, every individual (soldier or civilian) in the AO is a part of the information collection effort for the HBCT. HUMINT sources may be your most useful source of information in stability operations. HUMINT is the means the HBCT will use to understand the attitudes and perceptions of the local populace. These attitudes

and perceptions will have serious implications for the commander and how he uses force or does not use force to achieve his objectives. Table 8-2 identifies some of the actions the staff accomplishes during IPB for stability operations.

Table 8-2. IPB for Stability Operations

<p>Define the Battlefield Environment</p>	<p>Identify legal mandate, geographic boundaries and other limitations upon both friendly and belligerent forces. Identify pertinent demographic and economic issues to include living conditions, religious beliefs, cultural distinctions, allocation of wealth, political alliances, and social status. Identify any third nation support to the belligerents or other outside influences.</p>
<p>Describe the Battlefield Effects</p>	<p>Determine what are the roots causes of the conflict. Identify legal limits of friendly use of power. Determine the indicators of continued/increased hostile activities. Identify how demographics allow for, encourage, and/or discourage belligerent COAs. Identify which friendly COAs will be tolerated, encouraged or discouraged given the demographics of the area. Conduct OAKOC analysis to determine where the terrain lends itself to offensive and defensive operations by belligerents.</p>
<p>Evaluate the Threat</p>	<p>Identify all belligerent groups and their relationship to each other. Determine the political, cultural, and economic allegiances between groups. Identify the leadership links between groups. Determine the discipline and training of belligerent groups. Identify all the capabilities of the belligerents. Recommend EEFI.</p>
<p>Determine Threat COAs</p>	<p>Template or describe possible belligerent actions that prevent peace or other desired end states. Describe supporting functions associated with belligerent groups for logistics, movement and populace support. Identify likely responses of belligerent groups to U.S. actions.</p>

8-76. *Reconnaissance.* The HBCT employs reconnaissance efforts to determine the disposition, activities, and intentions of the civilian populace (hostile and neutral), multinational forces, NGOs, and threat forces. Reconnaissance is a continual process throughout the operation to determine where and when to apply combat, CS, and sustainment resources.

8-77. *PIR.* Priority intelligence requirements (PIR) for stability operations differs only slightly from offensive and defensive operations. In combat operations, the major emphasis is usually on the enemy’s military capability. Intelligence collection in stability operations may require a focus on aspects of the AO people, culture, politics, religion, and related factors. Generally, in offensive and defensive operations, PIR are answered and targets are

attacked and destroyed. In stability operations, collection and production to answer PIR may be ongoing tasks.

8-78. *Intelligence synchronization.* In addition to organic assets, intelligence collection managers must synchronize their collection efforts with a broad range of internal and external collection assets. Often times, the collection manager will have little or no control over the focus and timing of CI and HUMINT collection teams under the control of another agency. The SIGINT and IMINT collectors under the control of the JTF or other sources belonging to the host nation or coalition force may provide valuable information to the brigade.

8-79. *IPB.* The Intelligence preparation of the battlefield (IPB) process is a vital component of the planning process for stability operations. The traditional IPB process remains the same for stability operations, but IPB must consider and integrate many different environmental and demographic factors (see FM 2-01.03 , Chapter 6 for IPB and how it applies to stability and support operations). The primary difference between IPB for conventional operations and stability operations is the focus, degree of detail, and the demand for demographics analysis required to support the decision-making process. IPB in stability operations is modified due to the following:

- Nature of the threat
- Considerations for the civilian populace
- Cooperation between U.S. forces and the host nation or civilian/military agencies

8-80. When defining the battlefield environment, HBCT intelligence planners must consider the politics, economics, and social structures of the area and peoples. Also, look at the historical and current geographic boundaries as well as the infrastructure supporting the populace when conducting your IPB. The staff planners need to completely understand the background history of the dispute before looking at the threat military organization and terrain. When the S2 describes the battlefield effects, he should consider the impact of the following:

- Terrain, weather, and geography from both an enemy and friendly perspective
- Demographics, politics, media, and available resources
- Root cause of the conflict
- Population distribution including ethnic divisions, religious beliefs, language diversity, tribal loyalties and political sympathies, and possible subversive threats

8-81. Terrain analysis must include the following:

- Villages and towns in which the threat can blend or gain influence over the population
- Agricultural areas providing support to the threat and other sources of subsistence
- LOCs
- Medical facilities and supplies
- Logistical/transportation hubs and networks used to move personnel and supplies

8-82. Intelligence overlays include the following:

- Population overlay depicting political dispositions, ethnic diversities, religious affiliations, and languages spoken
- Cover and concealment overlay showing vegetation patterns, restricted terrain, town, villages, and other urban areas
- LOC overlay identifying all road and trails, railroads and waterways, avenues of approach to key facilities, and any known/suspected underground passageways

- Logistics sustainability overlay showing all water sources, ranches, farms or other agricultural bases, medical facilities and clinics, and all sources of petroleum products.

8-83. Key facilities and target overlay should depict the following:

- Likely threat targets in the area
- Key power generation, communication and manufacturing facilities
- Threat goals and objectives based upon past trends and patterns of activity
- Terrorist groups within or with access to the area

8-84. When evaluating the threat, the S2 planner should determine potential threats by identifying of all groups operating within the area providing information on the threat's ideology, strategy, doctrine, tactics, and all past activities. Carefully consider his organizations, equipment, support structure, traits, and habits when developing possible vulnerabilities and capabilities.

MOBILITY/COUNTERMOBILITY/SURVIVABILITY

8-85. The employment of engineer resources and assets during stability operations are normally extensive in nature. It is highly probable that the brigade will conduct stability operations in an AO that has poorly developed or significantly damaged road systems, installations, facilities, and airfields across the AO. The size and type of engineer units required to support the brigade is based on the scope (number, type, and complexity) of anticipated engineer missions in the AO. The factors include the following:

- Tactical/threat situation
- UXO, mines, booby traps, and obstacles
- Status of infrastructure in the AO
- Size of force being supported
- Duration of the operation
- Environmental considerations
- Water supply and location
- Existing sewage and garbage facilities
- Existing power facilities
- Host nation fire fighting capability
- Basic country infrastructure (road, bridge, rail, airfield, and port capability)
- Availability of contracted engineering support

8-86. To accomplish the numerous engineering tasks, additional engineer assets from UEx, UEy, and possibly contracted engineer support often augment the HBCT. Engineers within the HBCT perform the full range of engineer functions (mobility, countermobility, survivability), general engineering, and geospatial engineering. General engineering includes repair and construction of infrastructure and facilities required to sustain brigade operations. In addition, engineers will initially help establish force protection in base camps, OPs, checkpoints, and other facilities. Other engineering missions normally include road construction and repair, construction of temporary structures or base camps, reconnaissance fixed bridges, aid in civic action, and location of potable water sources. Combat engineering must also emphasize reducing the unexploded ordinance (UXO) and mine threat that soldiers may face during operations. Mobility can be significantly impaired if the AO is littered with mines. In addition, combat engineers will clear key routes of obstacles.

8-87. There will never be enough engineers to perform all the required missions. The commander must prioritize the engineer effort by task organizing. All units must be able to construct their own fortifications and assist with other engineer tasks not requiring special

skills. The logistical requirements for the engineering efforts are normally quite extensive. The HBCT must accomplish detailed engineer planning before entering the AO.

8-88. *Mapping, charting, and geodesy.* This responsibility is a shared responsibility across several staff functions. Map coverage of the AO while conducting stability operations may become a significant problem. In many cases, there may not be sufficient or accurate mapping products available to the force. Standardization coverage between the maps of the brigade and other elements will be a possible problem.

DEFENSE

8-89. A hostile force employing only limited air assets can make it difficult for the HBCT's initial entry into the AO and during the conduct of stability operations. When planning for the usage of air defense artillery (ADA) assets, use a similar planning process to that of fire support. The commander should place an increased emphasis on the security of shoulder fired ADA weapons. The theft of Stinger missiles is a prime target for threat forces. Soldiers must be trained on visual aircraft recognition and the ROE due to the possibility that like aircraft may be flown by more than one of the forces involved.

COMBAT SERVICE SUPPORT

8-90. The capability of the HBCT to sustain itself is a function of the theater's maturity, the sustainment structure, and the flow of forces into the AO. Logistics support for stability operations is unique and more complex due to physically dispersed unit locations, lack of adequate infrastructure, nontraditional demands by the CMO, and the burden caused by displaced civilians.

8-91. General principles to consider when conducting Sustainment operations in this type of environment include the following:

- Flexibility to support varying task organization of the brigade
- Indigenous support through the use of contracting and local purchase of supplies, facilities, utilities, services, labor/manpower, and transportation support systems
- Existing indigenous facilities such as LOCs, ports, airfields, and communications systems
- Development or improvement of the indigenous capabilities for self-support for the eventual transfer of responsibilities to the supported nation
- Economy of resources
- Availability and employment of FHP

8-92. Additionally, the indigenous authorities may have diminished capabilities. Sustainment elements may provide support for coalition, U.S. governmental agencies, and civilians when authorized by law. Commanders should submit requests for review by a JAG and higher headquarters approval. The brigade must consider the security of supply convoys and of their MSRs, route clearance and repair, and the location of sustainment activities in relation to supported forces.

8-93. Contracting is an effective force multiplier. It augments existing sustainment capabilities by providing additional support. Because logistic services and deliveries of food and water are often contracted, hostilities can cause interruptions in their deliverance. HBCT sustainment planning must address this possibility. Plan for increased consumption of Classes I, III, IV, and VIII supplies.

FORCE PROTECTION

8-94. Force protection is critical with emphasis placed on extensive security measures. During the planning process, the commander must ensure that the force is large enough to

defend itself and can establish a visible presence. This includes a structure that can provide sufficient mobility and flexibility to concentrate forces in response to a local threat. It is the capacity for decisive combat that often prevents escalation. The transition from stability and support to war must be trained for. The inability of a force to successfully transition rapidly and decisively will have devastating consequences. Part of this ability is to develop contingency plans that address what the brigade will do in the event of escalation to war.

8-95. Protection of the force is one of the highest priorities for the commander. Soldiers may be subject to severe provocation or the threat of attack from the most unlikely sources and at the most unlikely times. Because the nature of the conflict requires restraint in the use of force, restrictions on the conduct of operations and the use of force must be clearly explained and understood by all levels within the HBCT. Once the relationship between ROE and force protection is determined, the commander can ensure appropriate security measures are implemented. These measures need to be designed that reduce the force's vulnerability. Key force protection measures include:

- Establishment of checkpoints
- Effective base camp security procedures
- Aggressive use of patrols
- Establish and constantly refine security procedures
- Security operations
- OPSEC
- Identify and reduce hazards such as minefields
- Intelligence reporting and dissemination
- Protective shelters in defensive positions such as base camps and checkpoints

FIELD DISCIPLINE

8-96. Field discipline guards the soldier from the physical and psychological effects of the environment. Hostile environments can quickly sap soldier strength and morale far more quickly than enemy actions. Soldiers can adapt themselves to the point that they outperform their fully acclimatized opponents native to the region. This mastery stems from thorough pre-deployment preparations, enforcement of training standards, and the command oversight of field craft activities. The HBCT must take all possible measures and precautions to keep their soldiers healthy and maintain high morale. Commanders ensure systems are emplaced providing adequate health service support, the quick return of minor casualties, and preventive health maintenance. Commanders must take care of their soldiers basic health needs and prevent unnecessary exposure to debilitating injuries.

PREDEPLOYMENT TRAINING

8-97. Although many individual, collective, and unit tasks in stability operations are commonly trained in support of a unit's mission-essential task list (METL). Some tasks are unique, and certainly the environment in which they are conducted is unique. Additional training for subordinate units and soldiers are normally required. Understanding the ROE is one of the most important factors for success. Predeployment training must focus on teaching soldiers the ROE and providing training for them to use the ROE, especially the use of force. The proponents of the ROE should conduct the training whenever possible. A realistic and aggressive training program is invaluable in preparing for these types of operations.

8-98. In addition, subunits must have the opportunity to train with other organizations that are not habitual relationships. They must also train for the unique tasks associated with their mission. In addition, the HBCT's C2 system must be prepared to operate in this unique environment. All C2 procedures and techniques should be reviewed and modified to meet the demands of the environment and decentralized operations. Mission planning, information

tracking and management, controlling operations, negotiations, coordination, and integration of specialized units are key areas of emphasis.

8-99. Rehearsals are also a significant aspect of preparing the force. Soldiers are trained to fight and destroy the enemy. This mentality is not always the best during stability and support operations. Soldiers must understand the sensitivity of the environment that they operate in and that negotiating and having patience is an important quality to possess. The ability to find solutions to crisis without using force is an ability that will preserve the nature of the stability or support operation and the perceptions of U.S. forces on the ground.

SECTION II – SUPPORT OPERATIONS

8-100. Support operations use Army forces to assist foreign or domestic civil authorities to prepare for or respond to crises and relieve suffering. In all cases, the military is not in charge of the support operation but rather, works for a designated Federal agency. During support operations, the HBCT provides essential supplies and services to help civil authorities deal with situations beyond their capabilities. Support operations help civil authorities deal and respond to situations beyond their control. Forces conduct support operations to save or protect lives, reduce suffering, recover essential infrastructure, improve the quality of life, and restore situations to normal. Support operations usually involve actions that help civil authorities and nongovernmental organizations provide relief and support to the affected population. The HBCT may provide relief or assistance directly when necessary, but generally the overall support effort is directed by another agency such as the Federal Emergency Management Agency (FEMA) or the UN for overseas operations (see FM 3-07, FM 3-90).

8-101. Support operations differ from stability operations in many areas the same process of visualization, decision making, and troop-leading procedures remain the same. There are four broad considerations will assist the brigade in developing plans for support operations. These considerations are:

- Provide essential support to the largest number of people
- Coordinate all actions with other agencies
- Establish measures of effectiveness
- Hand over to civilian agencies as soon as feasible

SUPPORT OPERATION CHARACTERISTICS

8-102. Support operations are usually nonlinear and noncontiguous requiring leaders to be adaptive and creative in the application of the operational framework and METT-TC to fit each situation. The conditions of support operations will require the commander to recognize a different definition of the enemy, centers of gravity, COAs and the desired end state. In support operations, the adversary is often disease, hunger, or the consequences of disasters. Like conventional military operations, the commander will designate the decisive, shaping, and sustaining operations necessary for conducting successful support operations.

FORMS OF SUPPORT OPERATIONS

8-103. The two types of support operations are Domestic Support Operations (DSO) and Foreign Humanitarian Assistance (FHA). DSO are conducted within the borders of the U.S. while FHA operations are conducted outside the U.S. and territories. In all cases of support operations, the military forces remain under the military chain of command.

- *Domestic support operations.* Domestic support operations supplement the efforts of state and local governments and NGOs operating within the U.S. and its territories. During DSO, the U.S. military always responds in support of another

agency. DoD may provide assistance to communities with programs that improve the community, infrastructure, and ability to serve the local population. DSO requires extensive liaison and coordination between active and reserve components, interagency, Joint, and multi-jurisdictional entities. In all DSO operations, military forces remain under the military chain of command.

- *Foreign humanitarian assistance.* In foreign humanitarian assistance operations, Army forces supplement the efforts of the host nation that have primary responsibility for providing assistance. FHA is usually limited in scope and duration and focuses on prompt solutions to an immediate crisis. Army forces generally participate as a part of a JTF by providing support in accordance with approved agreements, treaties, and policies.

8-104. The HBCT may participate in support operations employing a combination of maneuver or CS/sustainment forces. During DSO, Army forces perform relief operations; support to chemical, radiological, nuclear or high yield explosive incidents; support to civil law enforcement agencies; or provide community assistance. In Foreign Humanitarian Assistance, the HBCT normally conducts relief operations but may assist with WMD after effects and community assistance. Each type of support operations share the same forms of support and differ primarily only in where we conduct the operation. These two types of support operations share four common forms:

- *Relief operations.* Relief operations are the most common form of support operation that could involve the brigade. After a disaster, state/local and host nation authorities are responsible for restoring essential services to the community. To support their efforts, Army forces assist in the recovery of critical infrastructure. Disaster relief focuses on recovery of the critical infrastructure after a natural or man-made disaster. Possible brigade missions include emergency flood control, assisting in search and rescue, food distribution, water purification, temporary shelter, transportation and medical support.
- *WMD.* WMD incidents are events involving NBC, or radiological weapons producing catastrophic loss of life or property. Army forces may assist civil authorities in protecting U.S. territory, population, and infrastructure before or after an attack. When directed by DOD, the HBCT may deploy and assist in recovery efforts. Potential actions include: CASEVAC, explosive ordinance disposal (EOD) support, linguist, mortuary affairs, air/ground transportation, and public affairs.
- *Support to civil law enforcement agencies.* Support to domestic civil law enforcement involves activities related to counterterrorism, counterdrug, and military assistance during civil disturbances and general support (GS). Army support primarily involves providing resources, training and augmentation to law enforcement agencies. The HBCT will always remain under the military chain of command while supporting civil law enforcement. The Army assists civil law enforcement agencies by providing personnel, equipment, training, and advice within the limits of the *Posse Comitatus Act*.
- *Community assistance.* Community assistance is a broad range of activities that provide support and maintain a strong bonding connection between military and civilian communities. Community assistance activities provide an effective means of projecting a positive image of the military, provide training opportunities for soldiers and build a lasting relationship between the Army and the American public. The HBCT may be called upon to assist the local community through search and rescue, firefighting traffic control, snow removal, or temporary shelter for the displaced.

8-105. Table 8-3 shows typical mission/tasks associated with each form of action.

Table 8-3. Forms of support operations

FORM	MISSION/TASKS
RELIEF OPERATIONS	Search and rescue, emergency flood control, food distribution, water production/purification, temporary shelter, transportation, medical assistance, sanitization, and communications.
WEAPONS OF MASS DESTRUCTION	Security of local areas, transportation, chemical decontamination, radiological survey teams and other tasks similar to relief operations.
SUPPORT TO CIVIL AUTHORITIES	Casualty and medical assistance, imagery and linguistic support, mortuary affairs, PA, ground/air transportation, EOD, and communications.
COMMUNITY ASSISTANCE	Air ambulance support, search and rescue, firefighting, EOD, safety and traffic control, emergency snow/ice removal, temporary housing for the displaced.

8-106. Relief operations respond to and mitigate the effects of natural or man-made disasters. They maintain or restore essential services and activities to decrease the damage, loss, hardship and suffering of the population. Relief is a state, local, or host nation responsibility. To support the efforts of local authorities, the NCA can employ Army forces before, during and after an event to save lives, protect property, and the lessen the general effects of the disaster. Disaster operations normally include:

- Response operations focus on those life-sustaining functions required by the population.
- Recovery begins the process of returning infrastructure and services that satisfies the needs of the people.
- Restoration is a long process that returns the community to pre-disaster conditions.

8-107. WMDs are deliberate or unintentional events involving an NBC radiological weapon or large conventional explosives that produce catastrophic loss of life or property. WMD incidents generally require specialized decontamination and medical support readily found in military forces. The military has a key-supporting role in WMD incidents and can react quickly when authorized. Army forces may be called upon to support WMD incidents during crisis management, consequences management, or for technical operations.

- Crisis management includes measures taken to identify, acquire, and plan the use of resources needed to anticipate, prevent and/or resolve a threat or act of terrorism.
- Consequence management measures act to protect the public health and safety, restore essential government services and provide emergency relief to governments, businesses and individuals affected by the consequences of WMD.
- Technical operations include actions to identify, assess, dismantle, transfer, dispose of or decontaminate personnel and property exposed to explosive ordnance or WMD.

8-108. Support to civil authorities activities include those actions taken to support and cooperate with civilian law enforcement agencies.

- Support to counterterrorism by military forces is always authorized by the President and only involves the providing support to the lead federal agency during crisis or consequence management of a terrorist incident.

- Support to counterdrug operations allows the army to make significant contributions to support federal, state and local drug enforcement agencies. Army forces provide operational support, intelligence, reconnaissance, analysis, linguists, engineering, training, and planning support.
- Support to civil disturbances by active military forces is very strict and direct in the types of activities they can perform. The role of the state National Guard, as a state organization, responds to the governor in accordance to state laws. Federal Army forces assist civil authorities in restoring law and order when the magnitude of the disturbance exceeds the capabilities of local and state law enforcement agencies, including the National Guard.

8-109. Community assistance applies the skills, capabilities, and resources of the Army to the needs and interests of America and local communities. Supporting and participating in events and activities that benefit the Army and civilian community build on a long tradition of America’s Army helping American communities. Typical activities include speakers, community liaison, band, and color guard support to local activities as well as exhibits and displays of military equipment showing the Army in a positive light.

INTELLIGENCE

8-110. Similarly to stability operations, the HBCT staff conducts intelligence preparation of the battlefield (IPB) for support operations. Table 8-4 shows some considerations.

Table 8-4. IPB for support operations

<p>Define the Battlefield Environment</p>	<ul style="list-style-type: none"> • Identify legal mandate, geographic boundaries and other limitations upon both friendly forces. • Identify pertinent demographic and economic issues to include living conditions, religious beliefs, cultural distinctions, and allocation of wealth, political alliances, and social status within the region.
<p>Describe the Battlefield Effects</p>	<ul style="list-style-type: none"> • Determine what are the roots causes of the disaster/relief effort. • Conduct a thorough terrain analysis to support friendly efforts. • Analyze the weather for possible impacts on further operations. • Consider the influence of weather on transportation, logistics, and the populace you are supporting.
<p>Evaluate the Threat</p>	<ul style="list-style-type: none"> • Identify any political or religious beliefs that may impact on the operation. • Identify all other supporting factions operating in the area. • Identify possible resistance to the support effort. • Identify potential actions by resistance groups impacting on the force. • Recommend EEFI.
<p>Determine Threat COAs</p>	<ul style="list-style-type: none"> • Template or describe possible belligerent actions that prevent peace or other desired end states. • Describe supporting functions associated with belligerent groups for C2, logistics, movement, and populace support. • Identify likely responses of belligerent groups to U.S. actions.

LOGISTICS

8-111. Because of the nature of humanitarian assistance and domestic support, the brigade can expect additional strains on its logistical system and other assets such as engineers, transportation, communications, and MPs. Support operations rely on a partnership with other relief agencies. Liaison with these agencies and between local governments is critical. Regardless of the positive relationships built, force protection always remains a top priority. The HBCT may organize for contiguous or noncontiguous operations. Because of the nature of humanitarian and domestic support, the HBCT can expect additional strains on its CS and sustainment systems. Not only will you provide logistical and life support to the entire HBCT, but you will also assist in the support of stability operation. The organization should focus on maintaining CS and sustainment flexibility. The brigade can expect to receive additional assets and will likely use contracted services to execute many of the needed services. Numerous other governmental and nongovernmental relief agencies will be operating in and around the HBCT AO. The HBCT must conduct detailed and continuous close coordination with all of the agencies to ensure there is no overlap or shortfall of support. All of this coordination will rely heavily on the use of LNOs.

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Chapter 9

Tactical Enabling Operations

Tactical enabling operations encompass a wide range of special purpose operations undertaken routinely during all operations. They are transition operations that lead to the active prosecution of one of the types or forms of operations. At the HBCT level, these enabling operations include security and reconnaissance operations, passage of lines, relief in place, river crossing operations, breaching operations, linkup operations, and troop movement. With the fielding of the ABCS, units are able to more effectively share friendly and enemy information and plans; share a COP; and more rapidly transition operations via efficient coordination without collocation or physical contact.

SECTION I – PASSAGE OF LINES

9-1. A passage of lines is an operation in which a unit moves through another unit's position with the intent of moving in or out of enemy contact. It involves the transfer of responsibility for fighting an enemy force from one unit to the other. Passages of lines occur in the offense and defense and under two basic conditions. A forward passage of lines occurs when a unit passes through another unit's position while moving towards the enemy. A rearward passage of lines occurs when a unit passes through another unit's position while moving away from the enemy. As part of division operations, the HBCT may be a stationary unit assisting the passage of another force or the HBCT may be the moving force conducting the passage through another force. As part of HBCT operations, the HBCT may be the controlling headquarters for the passage of lines between two subordinate forces. Digital enablers such as the FBCB2 and the COP allows BCTs to rapidly share and disseminate information vice the traditional collocation of CPs. Digital enablers/tools allow us to adapt the traditional TTP for Passage of Lines and to economize collaborative planning and coordination measures. Assured communications enhances this process and allows a more rapid and common understanding of the passage during execution.

9-2. The moving force and stationary force conduct the following tasks in preparation for a passage of lines:

- Exchange plans and liaison personnel.
- Conduct coordination and reconnaissance.
- Issue orders for the passage, either as part of an OPORD or as a FRAGO.

9-3. In a passage of lines, the controlling headquarters is responsible for designating subsequent missions for both forces.

- When and under what conditions passage of command takes place.
- Start and finish times for the passage.
- Contact points, PPs, and other control measures between the units involved.
- Passage lanes or gaps.
- Concept of fires, to include where and when priority of fires shift.

- Actions planned to protect the passage of lines such as diversionary attacks, fires, situational obstacles, or deception.

GENERAL CONDERATIONS

SEQUENCE OF PASSAGE

9-4. A forward passing unit's order of march is generally reconnaissance and security forces (may include an advance guard) first, followed by artillery and CS units needed to support the lead maneuver force. Remaining combat units follow next (usually the main body), followed by remaining CS units, sustainment units, and rear security forces. A rearward passing unit's order of march is generally sustainment units and unnecessary CS units first, followed by artillery. Combat units are next, beginning with uncommitted forces and transitioning to lead maneuver and security forces.

CONTROL MEASURES

9-5. Control measures associated with a passage of lines are generally restrictive in nature to prevent fratricide. As a minimum, they include assembly areas, attack positions, BHL, contact points, passage lanes or gaps, routes, and PLs. The controlling commander may also include SPs, RPs, fire control measures, and other control measures that he thinks are necessary to conduct the passage. Unless the controlling headquarters establishes the graphical control measures, the stationary unit establishes them for the passage. Participating units coordinate and confirm the actual location of the control measures. Any recommended changes are forwarded to the controlling commander for a decision.

PASSAGE LANES

9-6. The passing unit prefers to move through gaps in the stationary unit's positions and obstacles rather than through a lane that traverses the stationary unit's position. This reduces the vulnerabilities of both forces. When gaps are not available, at least two passage lanes are needed for each maneuver battalion in a forward passage. In a rearward passage, at least one passage lane is needed for each battalion. In both cases, a HBCT needs at least one additional lane for its CS and sustainment units. Alternate routes and lanes are designated for use if a primary lane is blocked or for use by contaminated units.

TRAFFIC CONTROL

9-7. The passing unit normally has priority for use of routes to and within the stationary unit's AO. Clearance and maintenance of routes up to the BHLs are the responsibility of the stationary force. The stationary force forms a traffic control cell in the MAIN CP to control all traffic with the AO.

DECEPTION

9-8. Deception techniques such as the use of smoke or feints may be employed to enhance security during the passage. Passages of lines are best conducted during periods of limited visibility.

ENEMY CONSIDERATIONS

9-9. The passing unit's S2 coordinates with the stationary unit's S2 to exchange the latest enemy information. With current digital enablers, this may not be a physical contact vice a collaborative process via digital tools. The S2s jointly consider the likely actions that the enemy may take to interdict the passage of lines. This analysis becomes the basis for developing contingency plans for actions on enemy contact during the passage.

RESPONSIBILITIES

9-10. The stationary and passing unit has specific responsibilities during the passage. Common responsibilities include:

- Collocate C2. Traditionally, the participating units should collocate at least one of their CPs together. The main CPs are normally collocated. Again, digital enablers/tools may enable this process to be done collaboratively from a distance without collocating.
- Coordinate the passage of lines and battle handover.
- Position fire support assets to provide support throughout the operation without having to redeploy during critical stages of the battle.
- Coordinate and provide air defense for the passage of forces. The passing force is the priority of air defense protection.
- Establish redundant communications means between both forces. This may include the use of FM radio nets and mobile subscriber equipment.
- Exchange liaisons as required.

9-11. Table 9-1 outlines the responsibilities of the stationary and passing force.

Table 9-1. Stationary and passing forces responsibilities

STATIONARY FORCE	PASSING FORCE
Clears lanes or reduces obstacles along routes.	May assist with reducing obstacles.
Provides obstacle and friendly units' locations.	Provides order of movement and scheme of maneuver.
Clears and maintains routes up to the BHL.	May assist with maintaining routes.
Provides traffic control for use of routes and lanes.	Augments the traffic-control capability of the stationary unit as required.
Provides security for the passage up to the BHL.	Maintains force protection measures.
Identifies locations for the passing unit to use as assembly areas and attack positions.	Reconnoiters from its current location to its designated assembly areas and attack positions.
Provides the passing unit any previously coordinated or emergency logistics assistance within its capability.	Assumes full responsibility for its own Sustainment support forward of the BHL.
Controls all fires in support of the passage.	Positions artillery to support the passage.

FORWARD PASSAGE OF LINES

9-12. The purpose of a forward passage of lines is to conduct an operation such as an attack. When the HBCT conducts a forward passage, subordinate maneuver and support battalions reconnoiter from their current locations to designated assembly areas then attack positions. Designated liaison personnel move forward to linkup with guides and confirm coordination information with the stationary unit. Guides then lead the passing elements through the passage lanes. While executing the passage, the passing unit's security forces reconnoiter forward of the passage points (PPs) and establish a screen. The stationary unit continues to conduct aggressive security operations throughout the passage. Subordinate battalion CPs collocate to coordinate and control the passage of their forces. The passing HBCT MAIN CP collocates with stationary BCT CPs. The stationary forces' CP controls the movement of forces from HBCT assembly areas through the passage lanes. If necessary, forces are redirected to alternate assembly areas or along alternate routes to avoid congestion. Any preparatory fires or covering fires should coincide with the passing unit's movement from the attack positions to the passage lanes. After responsibility is passed to the passing commander, he coordinates all fire support. Support by the stationary force ends when the combat elements of the passing force have moved beyond direct fire range. However, artillery and air defense may remain in support to the passing unit until previously designated events occur or the higher headquarters directs it (see Figure 9-1). The BCTs digital tools allow modification of this standard TTP. Given the COP shared by units, the task to collocate is not required due to the ability of the units to share information and plans collaboratively and "to see" via FBCB2 where each of the BCT's forces are located to execute the forward passage of lines. Digital enablers allow the HBCT to rapidly transition and to coordinate with the stationary unit via shared situational awareness and understanding of the current situation via the COP.

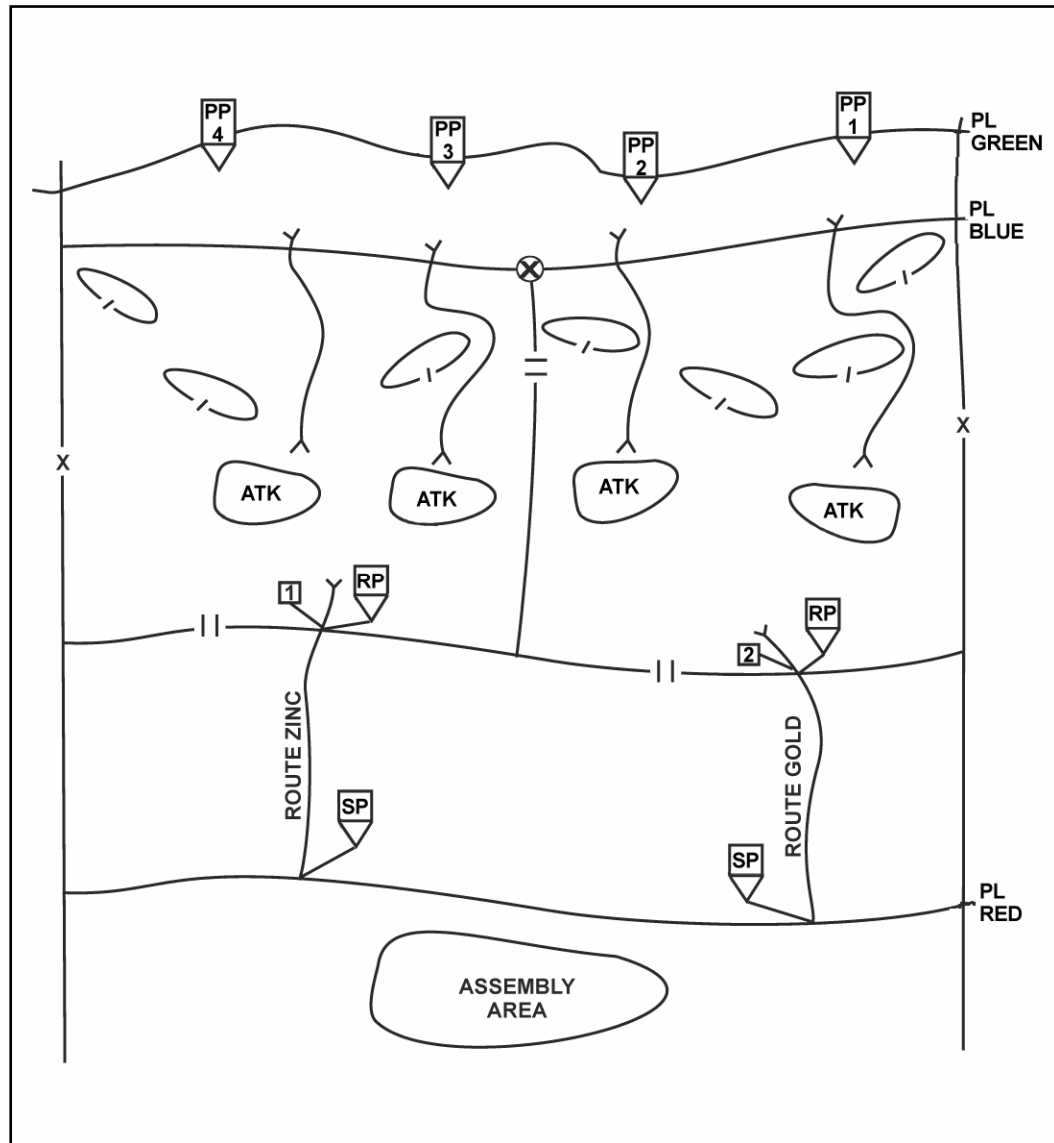


Figure 9-1. Forward passage of lines

REARWARD PASSAGE OF LINES

9-13. A rearward passage of lines is similar to a forward passage of lines. It continues a defense or retrograde operation. It maintains enemy contact while allowing the recovery of the forward force. This operation may or may not be conducted under enemy pressure.

9-14. Upon receipt of the order, the stationary and passing units begin coordination and establish communications with each other. The commanders of these units coordinate the same details as outlined previously. The stationary unit identifies multiple routes through its AO and across its rear boundary to assembly areas. The passing unit begins reconnaissance of these routes as soon as possible. The stationary unit physically shows all obstacle lanes, routes, and gaps to the passing unit. It also provides guides to support the passage. As the passing unit moves closer to the BHL it begins displacing sustainment, fire support, C2, and unnecessary CS units behind the PL.

9-15. Pivotal to the success of the rearward passage is the provision for fire support by the stationary unit to the passing unit. This is especially important in covering the withdrawal of elements left in contact during a delay. The stationary unit's fire support assets provide fire support until the passing unit completes its passage. Once the passing unit hands over control of the battle to the stationary unit, the stationary unit controls and clears all fires forward of its location. This also applies for air defense. The stationary unit's engineer assets provide support to the passage by maintaining lanes and providing mobility support. They close obstacle lanes, execute reserve obstacles, and emplace situational obstacles behind the last element of the passing unit. The stationary unit also provides sustainment as previously coordinated. The stationary unit normally supports the passing unit with emergency medical, recovery, and fuel support. The passing unit positions its sustainment assets to support the rearward passage of its forces through the passage lanes. Other sustainment assets are positioned in the unit's assembly areas to support reconstitution activities. Figure 9-2 shows an example of the placement of sustainment activities in support of a rearward passage of lines.

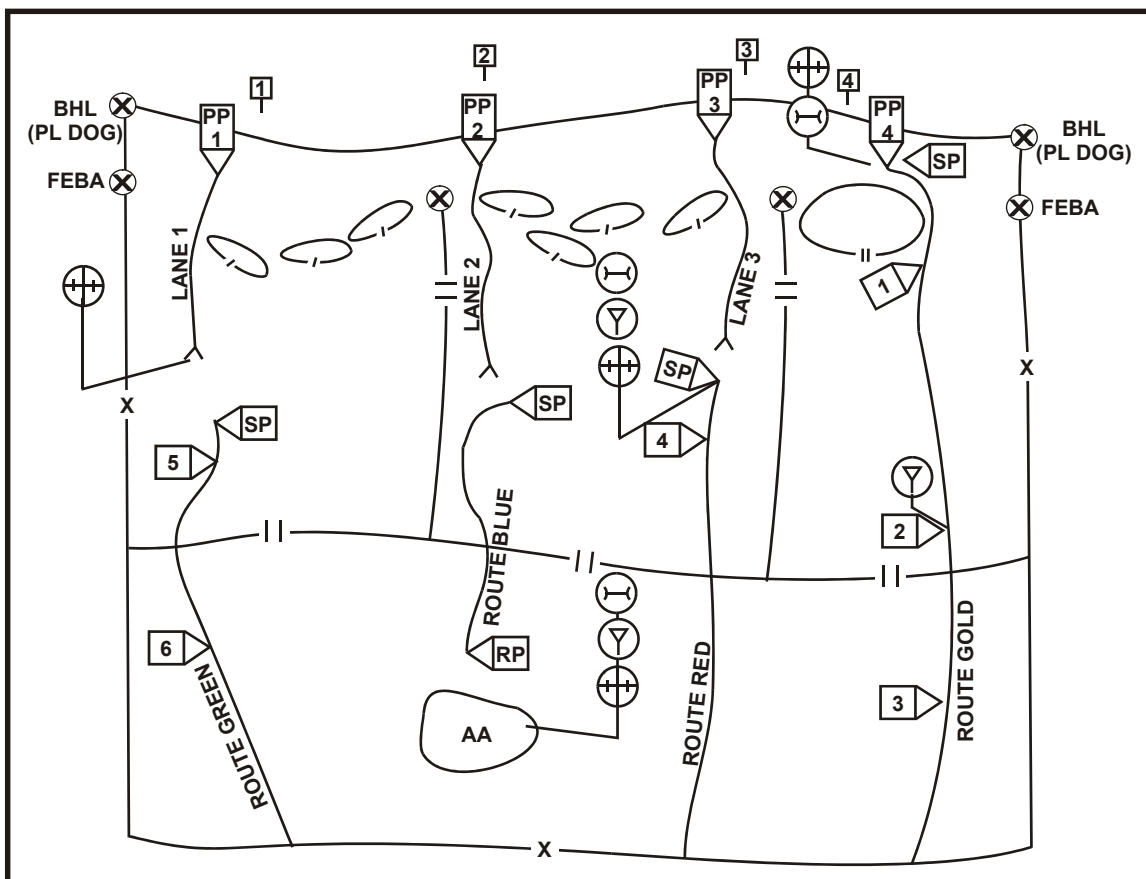


Figure 9-2. Combat service support plan for rearward passage of lines

SECTION II – RELIEF IN PLACE

9-16. A relief in place is an enabling operation in which, by direction of the higher headquarters, all or part of a unit is replaced in an area by an incoming unit. The directing authority transfers the responsibilities for the mission and the assigned AO from the relieved unit to the incoming unit. A relief in place is conducted as part of a larger operation primarily to maintain combat effectiveness of committed units or to cycle a committed BCT

to execute replenishment operations. The higher headquarters directs when and where to conduct the relief and establishes appropriate control measures. Normally, the unit relieved is defending. When possible, the relief in place should be conducted under limited visibility. Figure 9-3 shows an example of two BCTs conducting a relief in place.

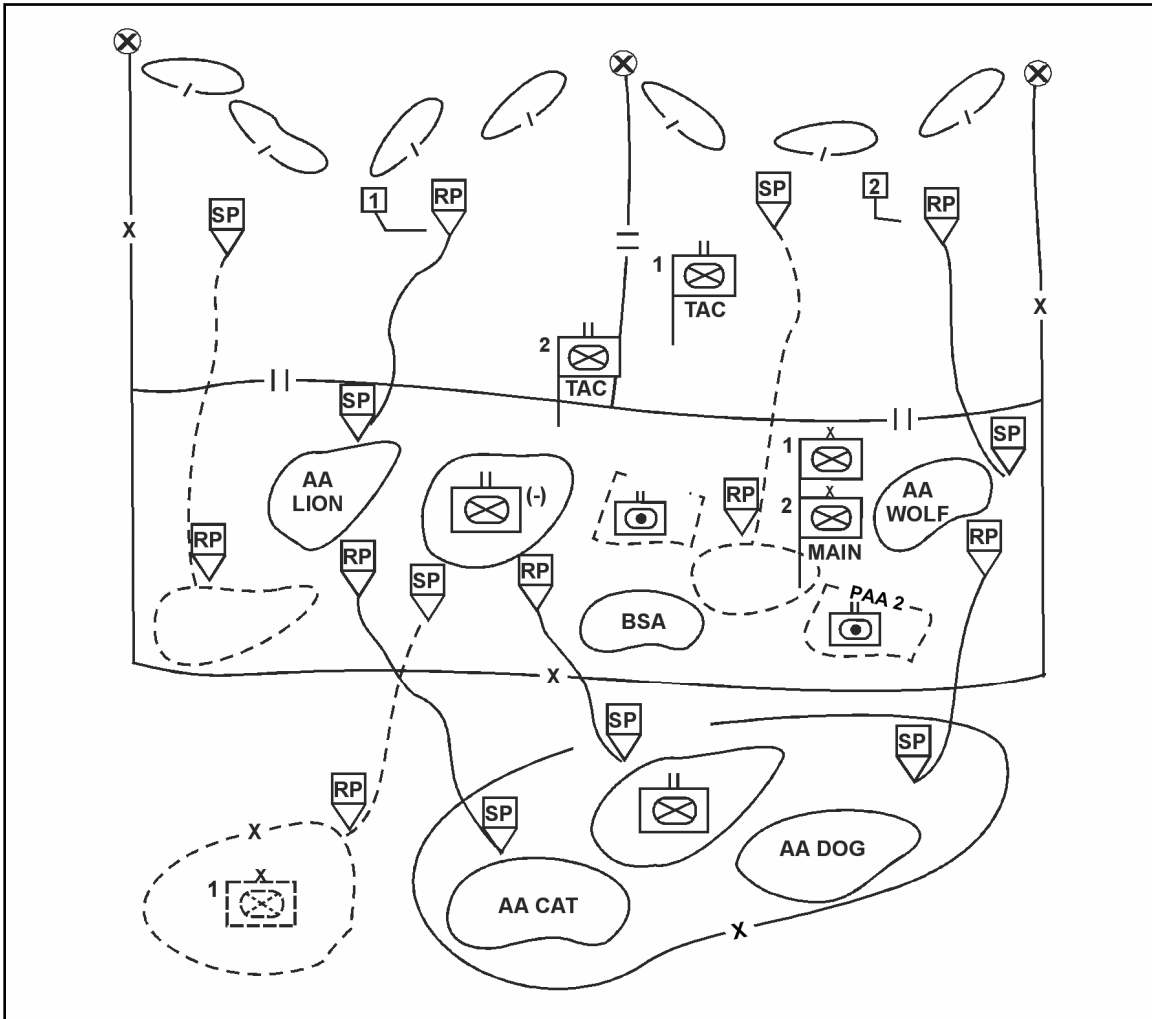


Figure 9-3. Example of a relief in place

PLANNING CONSIDERATIONS

9-17. In planning for a relief in place, the commander and staff take the following actions:

- Issue a fragmentary order (FRAGO) immediately.
- Use an advance party composed of key leaders to conduct reconnaissance and coordination. Also issue guidance to maneuver battalions for their advance party operations.
- Determine the technique to use for the relief and the order in which subordinate forces are to be relieved.
- As the relieving unit, adopt the outgoing unit's normal pattern of activity as much as possible.

- As the relieving unit, determine when the BCT assumes responsibility for the outgoing unit's position.
- As the relieving unit, collocate C2 headquarters with the relieved unit's headquarters.
- Maximize operational security (OPSEC) to prevent the enemy from detecting the relief operation.
- Plan for the relief of combat support (CS) elements after combat elements are relieved.
- Plan for the transfer of excess supplies to the incoming unit. This may also include the transfer of equipment or the exchange of weapon systems.
- Control movement of forces through a detailed traffic control plan.

COORDINATION

9-18. The incoming and outgoing commanders normally meet to exchange tactical information. They normally conduct a joint reconnaissance of the AO. Likewise, maneuver battalion commanders and other subordinate commanders meet to coordinate the operation at times established by the BCT. This process will normally include coordination of the following information via digital means or in person:

- Location of all subordinate forces, control measures, and routes
- Locations of reconnaissance and security forces
- Exchange of tactical plans and graphics
- Enemy situation
- Fire support coordination, including the time and procedures for relief of artillery units
- Time, sequence, and technique of relief
- Traffic control plan
- Obstacle, plan, and information
- Supplies and equipment to be transferred
- Limited visibility considerations
- Deception plans
- Security plans and contingency plans for an enemy attack during the relief

SECURITY

9-19. The incoming and outgoing units must prevent the enemy from learning that a relief operation is taking place. In addition to conducting relief operations at night, the following security measures should be considered:

- Enforce restrictions on the size of advance parties and leaders' reconnaissance groups.
- Conduct communications during the relief on the frequencies of the outgoing unit until the relief completed.
- The relieved unit should maintain normal patterns of activity and the incoming unit should conform to this pattern until the relief is completed.
- Radio traffic of the relieved unit should remain normal with no reference to the relief.
- Replace outgoing units with similar type units as much as possible. For example, relieve a tank-heavy task force with another incoming tank-heavy task force.
- Consider the use of deception to include feints, demonstrations, smoke, and indirect fires.

MOVEMENT CONTROL

9-20. The two unit's main CPs also collocate and form a single traffic control cell that coordinates the movement in and out of the AO. The staff carefully develops primary and alternate routes, assembly areas, and holding areas for the movement of forces. The staff must consider the routes and assembly areas required for all company-size forces within the AO. Traffic control points (TCPs) are established to guide traffic and prevent congestion. Reconnaissance, military police (MPs), and other forces are used as guides. All units have an implied responsibility to reconnoiter their assigned routes and assembly areas prior to use. Engineers assist in maintaining routes; decontamination assets are pre-positioned along the routes; air defense assets are positioned to protect the relief.

PASSAGE OF COMMAND

9-21. The two commanders must decide on a time or an event that initiates the passage of command. This normally occurs when the frontline subordinate commanders have assumed responsibility for their respective AOs and the incoming commander has sufficient communications to control the operation. Despite their parent organizations, all units in the AO come under the control of the AO commander if the AO comes under attack during the relief.

FIRE SUPPORT

9-22. The fire support assets of both units support the operation. The relief plan must specify the method used in relieving artillery units. If terrain allows, relieving artillery units should not occupy previously used firing positions. Instead, relieving firing units should establish firing positions nearby those positions of the relieved unit and integrate their fires with that of the relieved unit. The relieving unit's artillery is normally the first unit into the AO and the relieved unit's artillery is their last force out of the AO.

RELIEF TECHNIQUES

9-23. There are three techniques for conducting relief operations. Reliefs can be implemented sequentially, simultaneously, or staggered. Simultaneous relief takes the least amount of time to execute, but is the easiest to detect by the enemy. Sequential reliefs can take place over a long period of time. Staggered relief occurs when the commander relieves each element in a sequence determined by the tactical situation, not its geographical orientation.

9-24. In a simultaneous relief, the relieving BCT occupies assembly areas behind the relieved unit. Once CS and sustainment units are in position, all maneuver units execute the relief at the same time. This technique is only practical when units are dispersed and there are sufficient routes available to support the large-scale movement of forces involved in this technique. The technique may also be used when the likelihood of enemy interference is very low.

9-25. In a sequential relief, subordinate forces conduct the relief in a predetermined sequence. The sequence may be from front to rear, rear to front, or one side to another. This is the most common technique for a BCT level relief in place because it reduces the amount of congestion and intermingling of forces.

9-26. 9-25. In a staggered relief, the commander determines the sequence of the relief based on the tactical situation. He determines which units will withdraw and in what order based on ongoing and expected enemy contact, the ability of the relieving unit to occupy positions as they arrive in the AO, the ability of the terrain and road network to support the simultaneous movement of multiple units, and the desire to conceal the relief from enemy

reconnaissance and detection. In a staggered relief, force intermingling is of special concern as it places an increased burden on the BCTs command and control systems. The BCT must develop plans that mitigate intermingling. In addition to relief planning considerations, staggered relief plans should address:

- Reconnaissance handover
- Sequencing the relief and withdrawal of units
- Traffic control
- Fire support coordination
- Obstacle plans
- MEDEVAC and vehicle evacuation
- C2
- Emplacement of the digital network and communications architecture

OTHER CONSIDERATIONS

9-27. Table 9-2 outlines other considerations for conducting a relief in place.

Table 9-2. Relief in Place BOS Integration considerations

<i>INTELLIGENCE</i>	<p>The outgoing unit transfers all information concerning the enemy and AO to the incoming unit.</p> <p>Deception efforts should focus on concealing the relief.</p> <p>The S2 should prepare complete enemy COAs and SITTEMPs with possible enemy actions to counter the relief operation.</p>
<i>MANEUVER</i>	<p>Close coordination between units is paramount. This means all CPs should collocate.</p> <p>The incoming unit must fit into and accept the defensive plan of the outgoing unit.</p>
<i>FIRE SUPPORT</i>	<p>Normally FS units remain in place until the relief is completed.</p> <p>The incoming FS unit supports the outgoing unit's indirect fire plan.</p> <p>Plans are made for continuation of all normal FS activities to include continuation of radar zones.</p> <p>The outgoing commander controls fires until passage of command.</p> <p>FS assets should be in position before maneuver elements begin the relief.</p>
MOBILITY/ SURVIVABILITY	<p>The HBCT Engineer monitors the handover of obstacles and obstacle lanes between units.</p> <p>Engineer assets are positioned to provide mobility support for moving units.</p> <p>The incoming EN Officer determines priority for improving the countermobility and survivability plan.</p> <p>Transfer of scheme of obstacles overlay and obstacle execution matrix.</p>
<i>AIR DEFENSE ARTILLERY</i>	<p>ADA assets are positioned early to ensure coverage of forces.</p> <p>Incoming ADA assets are OPCON to the outgoing commander until passage of command.</p> <p>All supporting ADA units work on the outgoing command's early warning net.</p>
COMBAT SUPPORT SERVICE	<p>Assets must be positioned to support the incoming unit immediately upon passage of command.</p> <p>All units coordinate Sustainment support in the event of enemy contact during the relief.</p>
<i>COMMAND AND CONTROL</i>	<p>Commanders should collocate during the relief.</p> <p>Key leaders conduct reconnaissance of the AO by infiltration before execution.</p>

SECTION III – RIVER CROSSING OPERATIONS

9-28. The purpose of any river crossing operation is to project combat power across a water obstacle to accomplish a mission. A river crossing is a unique operation. It requires specific procedures, detailed planning and different technical support than other tactical operations. See FM 3-97.13 (FM 90-13) for Army doctrine for river crossing operations.

TYPES OF CROSSINGS

9-29. The types of crossings are hasty, deliberate, and retrograde. The HBCT must anticipate and plan for river crossings in advance. The planning requirements and engineer technical support are similar, regardless of the type crossing. The following paragraphs provide a brief description of each type of crossing.

HASTY

9-30. A hasty river crossing is a continuation of an attack with no intentional pause to prepare for a crossing. This is possible when enemy resistance is weak and the river is not a severe obstacle. It is the most preferred type of crossing. The HBCT may use organic, existing, or expedient crossing means, but additional support from the unit of employment x (UEX) maneuver enhancement battalion is often necessary. Coordination for support must be made as early as possible prior to the crossing. Figure 9-4 provides an example of the HBCT conducting a hasty river crossing. Planning for the hasty river crossing include the following tactical concepts:

- *Assault Forces.* This force makes the initial assault of the river and continues the advance from the exit bank to the final objective stopping only when absolutely necessary. Planners should consider using assault boats and/or Army aviation to secure the exit bank. Engineers from the UEX are additional assets available to open or improve routes on the exit bank.
- *Follow-on Forces.* These forces provide overwatching direct and indirect support, crossing site security, and follow and support assistance to the assault force. In the event the assault forces become stalled, the follow-on forces can assume the main effort and ensure that the HBCT does not lose momentum.
- *Support Forces.* These forces develop crossing sites, emplace crossing means, control units moving into and away from the crossing sites, and assist the assault force to the objectives.

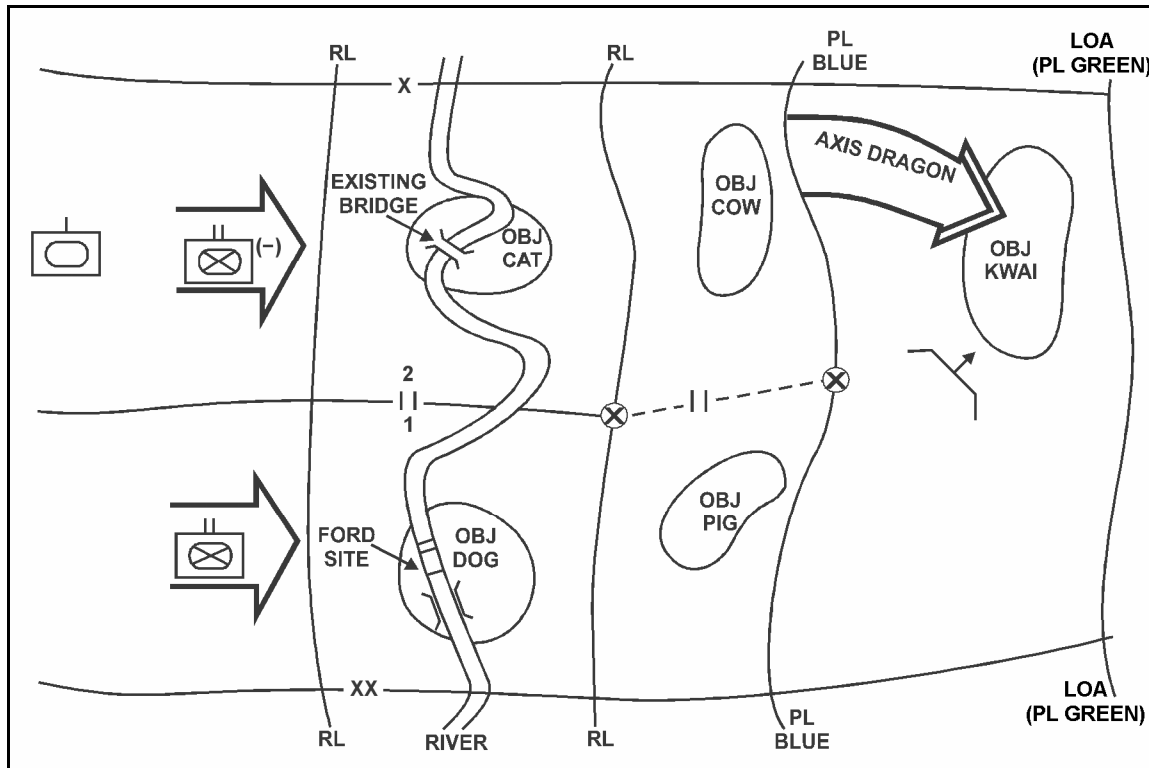


Figure 9-4. Example of a hasty river crossing

DELIBERATE

9-31. A UEx is typically the smallest organization that conducts a deliberate river crossing. A deliberate river crossing is conducted when a hasty crossing is not feasible or has failed. It is conducted after a halt to make detailed preparations. It is characterized by:

- A significant water obstacle.
- Strong enemy resistance.
- The necessity to clear entry and/or exit banks of enemy forces.

9-32. A deliberate river crossing involves the following:

- Centralized UEx planning and control.
- Thorough preparations, to include the time to perform extensive reconnaissance and rehearsals.
- The massing of forces and crossing equipment.

9-33. The deliberate river-crossing organization normally consists of an assault force, maneuver-support force, bridgehead force, and breakout force. The HBCT normally operates as one of these organizations during a deliberate crossing. These organizations provide the following functions:

- *Assault Force*. Seizes the far-shore objective and eliminates enemy direct fires on the crossing site.
- *Maneuver Support Force*. Provides crossing means, traffic control, and obscurity. This force normally consists of maneuver, engineer, MP, and chemical units.
- *Bridgehead Force*. Attacks from the far-shore objective to secure the bridgehead, eliminating enemy direct fire and observed indirect fire on the crossing area.

- *Breakout Force.* Once the river crossing is complete, and the bridgehead line secured, a breakout force crosses the river behind the bridgehead force and attacks out of the bridgehead. This force is normally not part of the unit that conducted the river crossing.

9-34. Figure 9-5 provides an example of a deliberate river crossing.

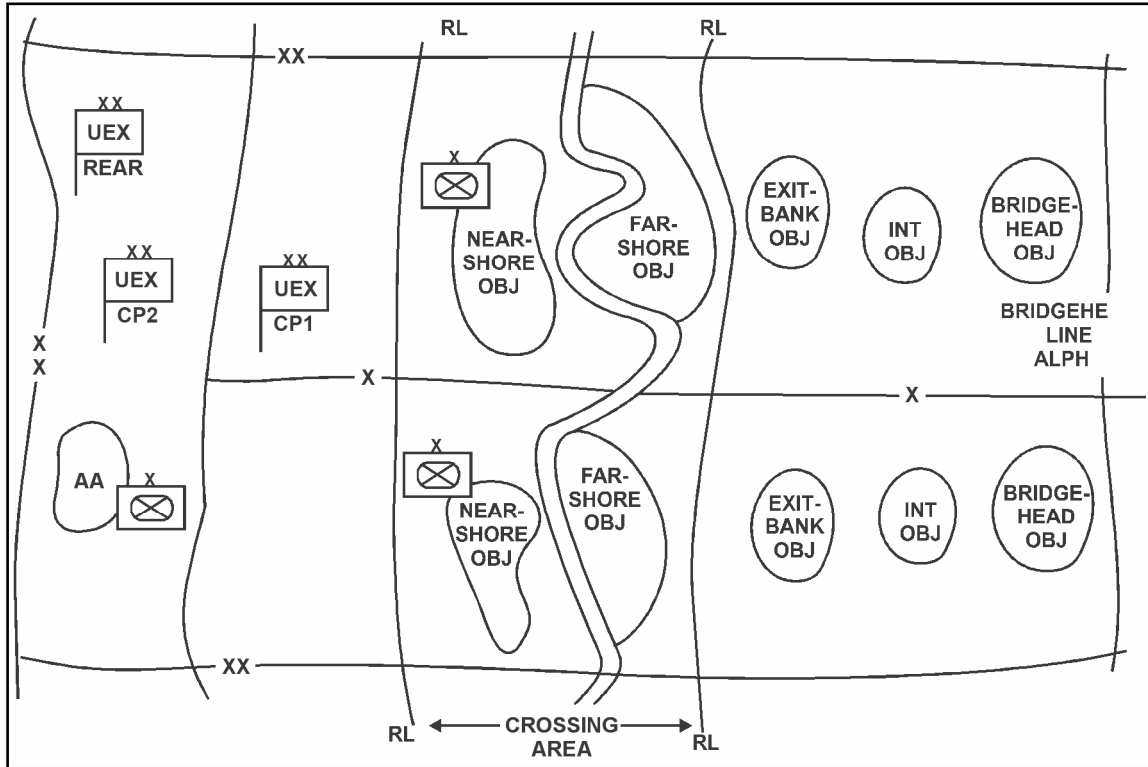


Figure 9-5. Example of a deliberate river crossing

RETROGRADE

9-35. The retrograde crossing is a movement to the rear across a water obstacle while in contact with the enemy. The forces conducting the crossing establish a defense on the exit bank or continue the retrograde to the defensive positions beyond the water obstacle. A retrograde river crossing features centralized planning and control because of the limited crossing means.

PHASES OF A RIVER CROSSING

9-36. A river crossing has four phases. They are distinct phases for planning, but there is no pause between them during execution. Figure 9-6 shows each phase and its mission. Table 9-3 shows river crossing phases.

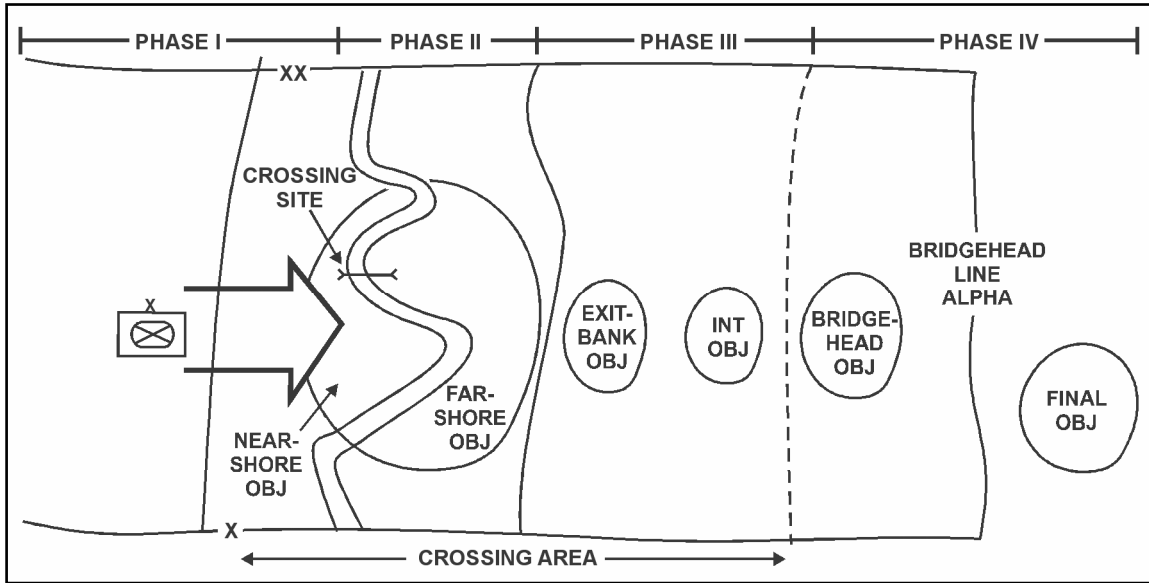


Figure 9-6. Phases of a river crossing

Table 9-3. River crossing phases

	PHASE I	PHASE II	PHASE III	PHASE IV	CONTINUATION OF THE ATTACK
PHASE	Advance to the river	Assault across the river	Advance from the exit bank	Secure the bridgehead line	Continue offensive combat operations
MISSION	Seize the near-shore objective	Seize the far-shore objective, eliminating direct fire on the crossing sites (activate the crossing area)	Secure exit-bank and intermediate objectives to eliminate direct and indirect fires on the crossing area	Seize and secure bridgehead objectives to protect the bridgehead against counterattacks and create time and space for the buildup of forces for the attack out of the bridgehead by breakout forces; extend the crossing area	Continue the attack on to the UEx and the UEy' objectives
BRIDGING ASSETS		Assault boats (begin constructing rafts)	Rafts (begin constructing float bridges)	Bridges	

COMMAND AND CONTROL

9-37. During a river crossing each CP has specific responsibilities during the operation. TAC (as organized by the HBCT commander) focuses on close combat operations and specifically:

- Coordinates and controls the lead maneuver battalion’s seizure and securing of near shore objectives.

- Coordinates and controls the dismounted assault crossing of the river to secure the far-shore objectives.
- Coordinates and controls the maneuver battalion's attack to seize and secure exit bank and intermediate objectives.
- Coordinates and controls the maneuver battalions seizure and securing of bridgehead objectives.
- Prepares to reorganize and follow the breakout force's attack out of the HBCT head.

9-38. The MAIN CP normally controls the crossing area. It prepares the HBCT crossing plan and provides the staff nucleus to coordinate it. The S4, assisted by the supporting MP unit leader and engineers organize a small, temporary traffic-control cell collocated in the MAIN. An alternative available to the HBCT is to employ the BTB, with appropriate staff augmentation, as the crossing area headquarters. The crossing area headquarters responsibilities include:

- Moves into the crossing area to control traffic flow, crossing means, and obscuration.
- Coordinates assault crossing means for maneuver battalion dismounted assault and controls obscuration of the crossing sites in coordination with the effects coordinator (ECOORD).
- Controls follow-on maneuver battalion passing through the crossing area into attack positions.
- Controls the passage of the HBCT's units through the crossing area and prepares to cross breakout forces.
- Passes crossing-area control to the supporting corps's engineer battalion.

9-39. The Brigade support battalion (BSB) CP ensures responsive sustainment for the entire operation.

9-40. The HBCT commander may designate the deputy commanding officer (DCO) as the crossing area commander. The crossing area commander controls the movement of forces inside the crossing area. He is responsible for:

- The movement and positioning of all elements transiting or occupying positions within the crossing area.
- Security elements at crossing sites.
- Maneuver-support forces such as engineers, MP, and chemical units within the crossing area.

9-41. Each forward BCT conducting a river crossing is normally supported by a direct support engineer battalion from the UEx or higher echelon. The engineer battalion commander serves as the crossing area engineer and is responsible to the crossing area commander for engineer crossing means and sites. He informs the crossing area commander of changes, due to technical difficulties or enemy action that renders a crossing means inoperable or reduce its capacity. He commands those engineers tasked to move the force across the river; they remain there as the attack proceeds beyond the exit-bank objectives. An additional higher echelon engineer battalion focuses on supporting the BCT at exit-bank, intermediate, and bridgehead objectives and is not normally involved in the river crossing.

9-42. Each crossing site has a crossing site commander who is an engineer (either a company commander or platoon leader) that is responsible for crossing the units sent to the site. The crossing area commander is normally the company commander for the bridge unit operating the site. He commands the engineers operating the crossing means and the engineer regulating points at the call-forward areas for that site. He is responsible to the crossing area engineer and keeps him informed on the status of the site.

9-43. Each battalion and separate unit commander designates a movement control officer, who coordinates the unit's movement according to the movement control plan. He provides staff planners with detailed information on the unit's vehicle types and numbers.

SECTION IV – COMBINED ARMS BREACHING OPERATIONS

9-44. Obstacle breaching is the employment of tactics and techniques to project combat power to the far side of an obstacle. Breaching is a synchronized combined-arms operation under the control of a maneuver commander. Breaching operations begin when friendly forces employ suppressive fires and end when battle handover has occurred between a unit conducting the breaching operation and follow-on forces. Breaching is an inherent part of maneuver. Effective breaching operations allow friendly maneuver in the face of obstacles. The HBCT can execute brigade level breaching operations if mission analysis and enemy estimates allow the comparable relative combat power to execute successfully. However, for large scale breaching operations, the HBCT will be part of a UEx operation and execute suppression, breach or assault responsibilities.

9-45. Maneuver company teams and maneuver battalions normally conduct breaching operations by organizing subordinate forces into support, breach, and assault forces. They develop a scheme of maneuver specifically designed to cross an obstacle and continue the mission. See FM 3-34.2 for breaching operations. Unless enemy resistance is light, the HBCT will function as part of a UEx breaching operation. With limited forces available in its two maneuver battalion organization, the HBCT will require augmentation to effectively execute as a sole HBCT mission

9-46. The HBCT organizes for a breaching operation when:

- The enemy's strength is beyond a maneuver battalion's capability to successfully conduct a breaching operation.
- A subordinate battalion has failed in its attempt to breach an obstacle.

BREACHING TENETS

9-47. Breaching operations are characterized by the application of the breaching tenets; intelligence, breaching fundamentals, breaching organization, mass, and synchronization. If the HBCT must execute a brigade level breach, mission analysis is critical in order to determine if UEx augmentation forces are required for the breach. The UEx mission analysis should reveal this requirement. In most cases, a brigade breach will be a UEx operation in order to allow adequate forces to organize for the mission properly and to mass effects to successfully execute the operation. As part of the UEx breach, the HBCT can perform the suppression and breach force or the assault force. The following paragraphs provide a description of the breaching tenets for HBCT level breaching operations.

INTELLIGENCE

9-48. Effective intelligence is a vital aspect for successful HBCT breaching operations. The HBCT employs organic and supporting reconnaissance assets, as well as external sources from higher echelon reconnaissance assets to gain vital enemy and obstacle information. Development of the situation out of contact via these assets is critical. The HBCT conducts reconnaissance to identify and define the scope of enemy obstacles to answer the commander's intelligence requirements relating to the enemy's obstacle effort (obstacle intelligence). Examples of obstacle information that is needed to fulfill obstacle intelligence requirements include:

- Obstacle location and orientation

- Soil conditions (in the case of a minefield) to determine the ability to use mine clearing blades
- Presence of wire
- Gaps and bypasses
- Minefield composition (buried or surface-laid AT and antipersonnel mines, anti-handling devices, and the depth of mines)
- Type of mines
- Locations and type of enemy weapons systems overwatching the obstacle
- Composition of complex obstacles
- Gaps between successive obstacles

9-49. This obstacle information once analyzed and combined with other relevant enemy intelligence allows the commander to refine maneuver, fire, and reduction plans.

9-50. Effective breach planning must begin during the HBCT's intelligence preparation of the battlefield (IPB) process. The BCT engineer officer in coordination with the supporting engineer battalion commander, HBCT S2, and engineer battalion S2 must develop and use the engineer battlefield assessment process to provide the HBCT commander and staff a common vision of how the enemy is anticipated to use the terrain and his engineer effort. This engineer team must work closely with the HBCT S2 to template all possible enemy obstacles throughout the width and depth of the battlefield based on each enemy course of action (COA). To provide the necessary focus during the HBCT planning process, they must ensure that enemy protective, tactical, and situational obstacles are templated and integrated into each enemy COA and situation template (SITTEMP). A detailed HBCT SITTEMP is an essential part of developing the common vision of the enemy needed to drive the HBCT's reverse planning process during COA development, task organization, and reconnaissance planning early in the military decision-making process (MDMP).

BREACHING FUNDAMENTALS

9-51. Suppress, obscure, secure, reduce, and assault (SOSRA) are the breaching fundamentals that must be applied to ensure success when breaching against a defending enemy.

9-52. *Suppress.* Suppression is the focus of all available fires on the enemy to prevent effective fires against friendly forces. Suppressive fires include the full range of direct fire weapons, indirect fires, and electronic attack. The purpose of suppression is to protect forces reducing and maneuvering through an obstacle.

9-53. At HBCT level, it is usually impossible to focus the suppressive fires of an entire maneuver battalion against the enemy at the point of breach. The bulk of this effort is towards fixing adjacent enemy forces from laterally repositioning against the maneuver battalion that is breaching. Also, indirect fires, EW, and situational obstacles are used to help isolate the objective of the breach force. This allows the breach force to focus its suppressive direct fires against a limited number of enemy weapon systems. The commander must also consider the need for counterfires to reduce the enemy's ability to mass indirect fires against breaching forces. The HBCT may request augmentation from UEx fire assets (missile and cannon) to support the breaching operation in order to mass effects as required.

9-54. *Obscure.* Obscuration is employed to protect forces conducting obstacle reduction and the passage of assaulting forces. Screening smoke employed between the point of breach and the enemy conceals movement and obstacle reduction activities. Obscuration employed on or near the enemy positions also degrades his enemy's observation. This can be created by artillery, generated, or potted smoke depending on wind direction, anticipated length of the breaching operation, size of the reduction area, and temperature gradient. In certain

situations, artillery can create a degree of obscuration from dust generated by high-explosive artillery rounds. Artillery deliver smoke is generally used to obscure enemy forces while generated and potted smoke is used by the breach force to obscure its activities during reduction. Historically, weather such as fog, rain, and darkness has been used to aid in obscuration efforts.

9-55. *Secure*. The breach force has the responsibility to secure the reduction area prior to obstacle reduction. The breach force must destroy enemy positions near or at the point of breach as well as suppress enemy forces over-watching the obstacle. Obstacle reduction can only take place once the point of breach is secured. The HBCT and UEx use shaping operations to assist in securing the point of breach. These combat multipliers target adjacent enemy units to include reserves that can influence the breaching operation as well as suppress, fix, and obscure the enemy units defending at the point of breach. Once the conditions have been set by the HBCT, the maneuver battalion assigned as the HBCT breach force must maintain the security of the points of breach by utilizing mortars with artillery, tank, and Bradley main gun fire as well as dismounted infantry securing any restrictive terrain that can affect the breaching operation. In addition to the breach force securing the points of breach, the HBCT assigns an additional maneuver the task as the support force that provides suppressive and fixing fires on adjacent enemy units that can influence the breaching operation.

9-56. *Reduce*. Reduction is the creation of lanes through, over, or around an obstacle to allow an attacking force to pass. The number and width of lanes created varies with the enemy situation and the size and scheme of maneuver of the assault force. Two lanes are generally required for passage of a task force. Once the breach force has created the lanes and seized the far side of the obstacle, follow-on forces may create additional lanes if required.

9-57. *Assault*. The purpose of the assault is to destroy enemy forces on the objective. The breach force reduces sufficient lanes through enemy obstacles and secures adequate maneuver space on the far side of the obstacle for the assault force to deploy prior to enemy contact. The assault force moves through the lanes, deploys, and continues the attack to destroy the defending enemy forces.

BREACHING ORGANIZATION

9-58. The commander organizes his task forces into the following elements:

- *Support*. Eliminates the enemy's ability to interfere with a breaching operation. The support force may accomplish its mission from a support by fire position such as in open terrain or may need to conduct a limited objective attack such as in more restrictive terrain.
- *Breach*. Creates and marks lanes through the enemy's obstacles and secures the far side of the obstacle. The breach force is a combined arms force that is task organized with maneuver forces, engineers, and other CS assets necessary to apply the breach fundamentals and secure its objective on the far side of the obstacle. The breach force normally organizes its subordinate units into support, breach, and assault elements.
- *Assault*. Destroys or defeats an enemy force or seizes terrain on the far side of the obstacle. The assault force is allocated enough combat power to achieve overwhelming mass (at least a 3:1 combat power ratio) against the targeted enemy force.

MASS

9-59. Breaching is conducted by rapidly applying concentrated combat effects within an area to reduce an obstacle and penetrate the enemy's defense. The HBCT seeks to isolate a small

portion of the enemy defense by fixing the majority of the enemy force. The HBCT normally isolates a company size or smaller enemy force that allows the breach force to focus all its fires against a much smaller enemy force. Often, the breach force isolates and destroys platoon-size enemy forces in succession starting with the platoon identified as the easiest to overwhelm. The commander also masses his engineers and reduction assets with the breach force to quickly overcome obstacles. The breach force is allocated at least double the amount of reduction assets required to ensure success.

SYNCHRONIZATION

9-60. Breaching operations require precise synchronization of the breaching fundamentals (SOSRA) by support, breach, and assault forces. The commander ensures synchronization through proper planning and force preparation. In fast moving operations or when the situation is vague, the staff must rapidly synchronize the actions of the HBCT to conduct breaching operations. This requires a heavy reliance on standard standard operating procedures (SOPs), TTPs, and drills. Fundamentals to achieving synchronization discussed in FM 3-34.2 (FM 90-13-1) are:

- Detailed reverse planning
- Clear subunit instructions
- Effective C2
- Well-rehearsed forces

BREACH PLANNING

9-61. The commander first decides how he intends to attack the assigned objective to accomplish his mission. This decision drives where, how, and with what forces he must support, breach, and assault. The commander and staff design a tactical plan for breaching of enemy obstacles as part of COA development. They ensure adequate suppression, obscuration, and security. They determine the objective of the assault force based on the situation, the HBCT's mission, and the higher here to penetrate the enemy position based on known or potential enemy vulnerabilities in his disposition. The enemy strength and the terrain on the assault force's objective(s) drive the size and composition of the assault force. The assault force is allocated at least a 3:1 combat power ratio over the targeted enemy force.

9-62. Table 9-4 shows an example of criteria supporting decision points during breach operations. The criteria are not all-inclusive.

Table 9-4. Establishing criteria

DECISIONS	CRITERIA
Decide the point of penetration and reduction site.	- Recon force identifies obstacles and enemy positions related to PIR.
Commence suppression and obscuration fires.	- Observers are in position. - Support force crosses designated PL.
Support force occupies SBF position.	- CFZ in place over the SBF positions. - Obscuration is in place to screen support force movement. - Completion of designated EFETs. - Support force maintains more than 70 percent of its combat power.
Commit the breach force.	- Suppression and obscuration is adjusted and effective. - CFZ in place over reduction site. - Engineer preparations complete. - Fire-control measures are in effect.
Commit the assault force.	- Lane created, proofed, and marked. - Far-side security is in position.

REVERSE BREACH PLANNING

9-63. Breach planning is normally conducted using a reverse sequence, beginning with actions on the objective. Figure 9-7 depicts an example of the reverse planning sequence.

- The size of the assault force drives the number and locations of lanes to be created. A maneuver battalion requires at least two lanes.
- The lane requirements and the type of obstacle(s) drive the amount and type of reduction assets organized to the breach force. As a general rule, one engineer platoon with additional reduction assets is required to create an initial lane through a complex obstacle.
- The maneuver space required by the assault force to deploy on the far side of the obstacle drives the objective of the breach force.
- The enemy strength and terrain on the breach force objective drives the amount and type maneuver forces allocated to the breach force.
- An enemy's ability to mass fires at the breach location or laterally reposition against the breach force drives the amount of suppression required. This in turn drives the size and composition of the support force. The terrain and disposition of the enemy are the dominant factors in determining if the support force can accomplish its responsibilities from a support by fire position or through a limited objective attack.

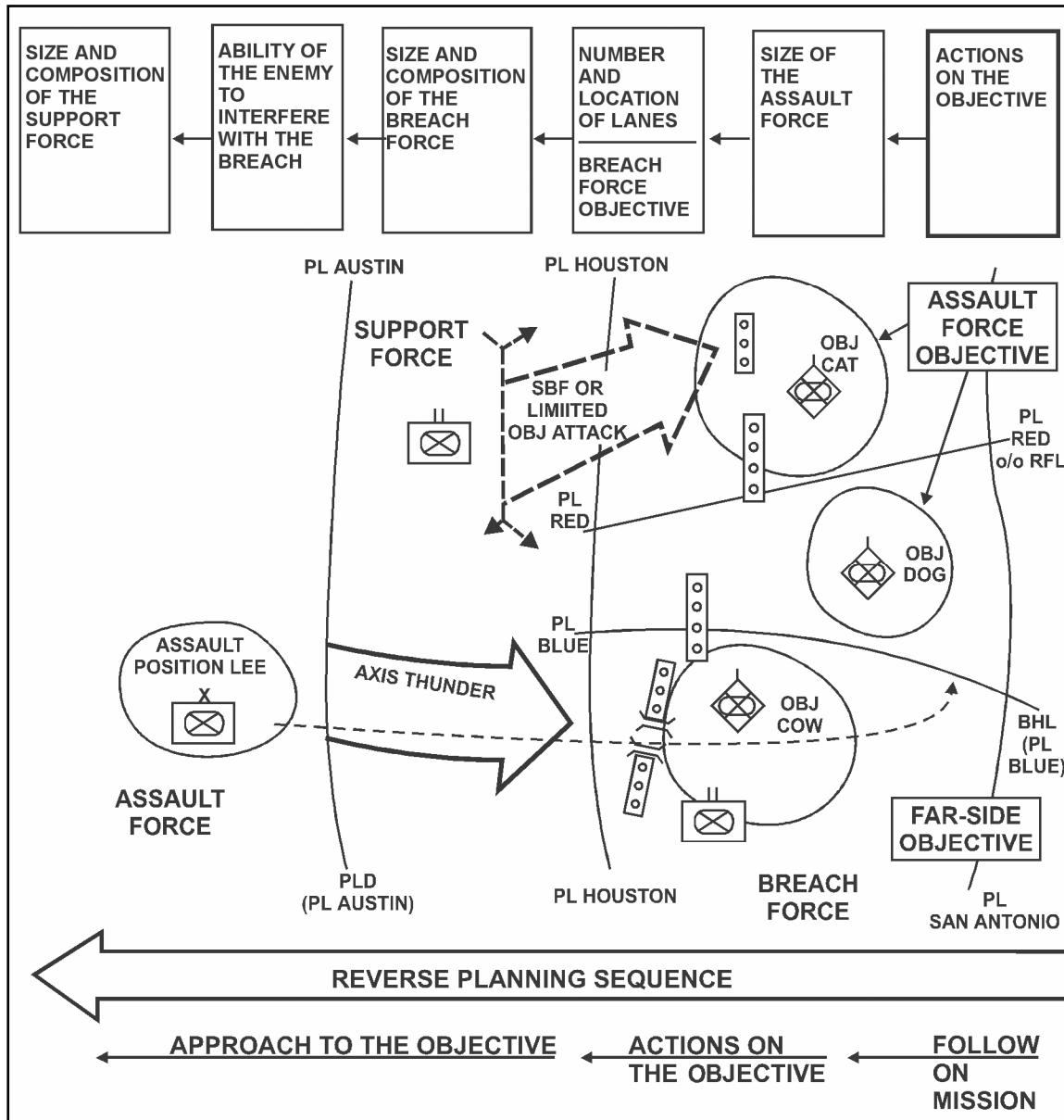


Figure 9-7. Reverse breach planning

OBSTACLE INTELLIGENCE

9-64. Developing obstacle intelligence is necessary to confirm the situation prior to execution allowing the HBCT to refine the plan. The Brigade engineer, supporting engineer battalion commander, HBCT S2 and engineer battalion S2 must assist in developing the HBCT ISR plan. Maneuver battalion scouts and the reconnaissance squadron must be trained to collect detailed obstacle information. Any efforts to conduct engineer-specific reconnaissance must be integrated into the HBCT ISR plan. Engineer reconnaissance teams are normally task organized to the HBCT's reconnaissance squadron and maneuver battalion scouts to assist in conducting detailed obstacle reconnaissance. As obstacle information is reported, the S2 assisted by the brigade engineer and engineer battalion, analyze and compare it to other

information. They update the enemy situation and SITTEMP accordingly. Obstacle related intelligence is forwarded to subordinate units and is used to refine plans.

SYNCHRONIZING COMBAT MULTIPLIERS

9-65. The HBCT plan must synchronize combat multipliers to isolate the point of penetration. The HBCT staff must integrate maneuver, close air support (CAS), artillery, aviation, electronic warfare (EW), scatterable mines, air defense, obscuration, and deception to create the conditions for the success of the HBCT and maneuver battalion breach. Additionally, the HBCT must continue to fight deep beyond the breach area to stop the enemy from counterattacking or repositioning to reinforce the enemy unit targeted for penetration. Detecting and engaging the enemy's reserve is a primary concern for the HBCT. The HBCT must carefully balance resource requirements (such as fires and CAS) for isolating the point of penetration with the requirements of the element conducting the breach.

9-66. The HBCT staff should use the war game to synchronize combat multipliers across the HBCT zone to set the conditions for HBCT or maneuver battalion level breaches or bypasses. The breach plan should synchronize combat multipliers at the breach or bypass as a critical event in the HBCT synchronization matrix. The staff should also develop breach decision criteria to assist the commander in synchronizing these combat multipliers and tracking SOSRA conditions:

- Artillery— isolate breach site and suppress enemy; critical friendly zone (CFZ) management.
- CAS— isolate and suppress enemy; disrupt counterattack.
- Attack helicopters— isolate and suppress enemy; disrupt counterattack.
- Intelligence – locate and identify enemy units in the vicinity of the breach
- Electronic warfare (IEW)— identify, locate and jam enemy C3 associated with units in the vicinity of the breach. .
- Obscuration (projected and generated)— isolate the breach site.
- Scatterable mines— prevent repositioning of enemy forces without hindering friendly actions on the objective; disrupt counterattack.
- Air defense artillery (ADA)— isolate and cover the breach site.
- MP— provide maneuver mobility support for forward passage of lines, establish TCP, route marking.
- Chemical reconnaissance— force protection at the point of penetration and at the breach.
- Information operations (IO)— shaping operations, feints, and demonstrations in conjunction with the UEy and UEx deception plans.

9-67. Both HBCT and maneuver battalion staffs should focus the synchronization of these combat multipliers during the war game and rehearsal to assist in setting conditions for subordinate unit breach or bypass operations. The staff should include breaches or bypasses as a significant event in the synchronization matrix. Maneuver battalion plans should also address their responsibilities to synchronize their own combat multipliers and set SOSR conditions for a company team level breach or bypass operation. Synchronize execution by including the breach at the HBCT, task force, and company team rehearsals by conducting both walk-through and mounted rehearsals.

TRAFFIC CONTROL AT THE BREACH AREA

9-68. The HBCT must develop a plan for controlling the lanes and passage of forces. The plan should include a specified lane numbering system, identified TCPs, level of lane

marking, when responsibility for the lanes passes from breach force control to HBCT control, and which lanes will support reverse flow of traffic to evacuate casualties. The HBCT normally tasks MPs, engineers, and combat forces (for security) to control and secure the lanes once the breach force has secured its objective. As with river crossing operations, the BTB CP, with staff augmentation as necessary, is capable of assuming C2 of the breach area. HBCT command and control (C2) responsibilities for lanes and traffic control are:

- Assumes control of lanes in tactical obstacles
- Widens initial lanes for two-way traffic
- Reduces, proofs, and marks additional lanes or bypasses
- Upgrades/maintains lane marking
- Assumes control of all lanes and traffic up to the BHL

HBCT RESPONSIBILITIES DURING MANEUVER BATTALION LEVEL BREACH OR BYPASS OPERATIONS

9-69. During offensive operations, the brigade should address the brigade's responsibilities during maneuver battalion level breach or bypass operations:

- Resources the maneuver battalion with additional or special assets such as engineers, reconnaissance assets, smoke, retrans, JTAC (Joint Tactical Air Control Party), or ADA.
- Fixes enemy forces to prevent repositioning or interference with the breach.
- Isolates the penetration to set conditions or prevent enemy counterattack:
 - Artillery fires, observation plan, attack aviation, and CAS.
 - Scatterable mines and special purpose munitions, obscuration (projected and generated,
 - Intelligence
 - Electronic Warfare (EW)
 - ADA.
- Plans a forward passage of lines by follow-on forces through a unit conducting a breach:
 - Widen or reduce additional lanes.
 - Upgrade and maintain lane marking.
 - Assumes control of all lanes and traffic up to the BHL.
- Provides and tracks decision criteria for transition from a maneuver battalion to an HBCT level breach.

SECTION V – OPERATIONS

9-70. A linkup is a meeting of friendly ground forces, which occurs in a variety of circumstances. The BCT may conduct linkup operations on its own or as part of a larger force to:

- Complete the encirclement of an enemy force.
- Assist breakout of an encircled friendly force.
- Join an attacking force operating in the enemy's rear area.

9-71. Regardless of the purpose of the linkup, in execution, the operation takes on one of two forms:

- Linkup of a moving force with a stationary force.
- Linkup of two moving forces.

LINKUP OF A MOVING FORCE WITH A STATIONARY FORCE

9-72. To ensure the forces join without engaging one another, linkup points are selected at locations where the axis of advance of the linkup force intersects the security area of the stationary force (see Figure 9-8). Digital enablers such as FBCB2 will enhance situational understanding for the units. Digital enablers and tools will allow each unit to know “where they are and where I am”. These points must be readily recognizable to both forces. Alternate points are chosen in the event that enemy activities cause the linkup to occur at places other than those planned. The number of linkup points selected depends on the terrain and number of routes used by the linkup force. Personnel in the lead element of the linkup force must be thoroughly familiar with mutual identification procedures and plans for a rapid passage of lines. Stationary forces assist in the linkup; they open lanes in obstacles, furnish guides, and designate assembly areas. It is vital that the two forces use communications channels to coordinate the linkup. Each unit must ensure that the two subordinate elements actually making the initial linkup are communicating on a common radio net.

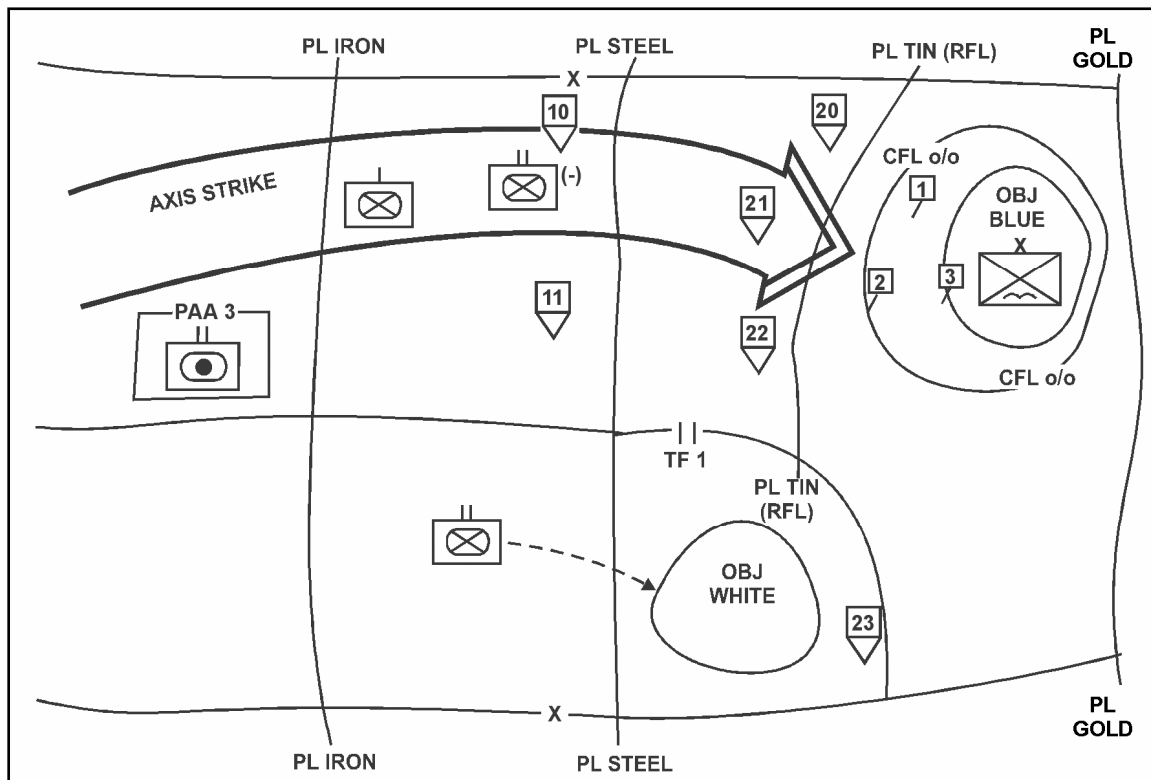


Figure 9-8. Example linkup of a moving and stationary force

LINKUP OF TWO MOVING UNITS

9-73. Linkup between two moving units is one of the most difficult operations (see Figure 9-9). It is normally conducted to complete encirclement of an enemy force. Primary and alternate linkup points for the two moving forces are established on boundaries where the two forces are expected to converge. Again, organic digital enablers such as FBCB2 allow the converging units to have a common picture of friendly units and significantly mitigates tactical risk by converging units. As linking units move closer, positive control of fires and subordinate units must be maintained to ensure they avoid firing on one another and to

ensure the enemy does not escape between the two forces. Leading elements of each force should monitor a common radio net.

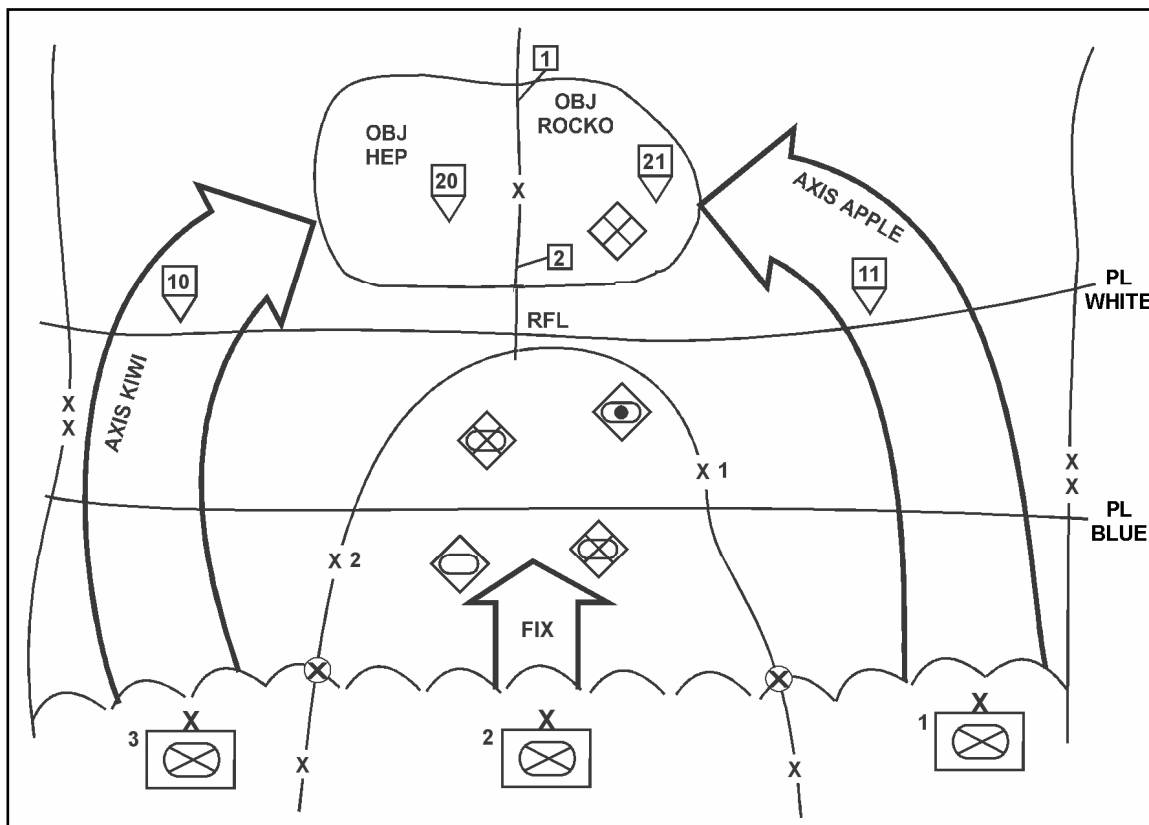


Figure 9-9. Example linkup of two moving forces

CONDUCTING LINKUP

9-74. The initial conduct of the linkup is normally executed as a movement to contact or an attack, depending on the enemy situation and the mission. The HBCT must stay focused on the purpose of the operation—to linkup with other friendly forces. The IPB must concentrate on the enemy's efforts to frustrate the linkup since friendly actions are more predictable in linkup operations. As the HBCT begins its maneuver, it attempts to establish and maintain contact with its corresponding friendly force. When extended distances are involved, tactical satellite (TACSAT) communications are very useful. Also, the use of liaisons (with radios) with each force is very effective. Each force monitors the progress of the other and makes adjustments to their plans as necessary. Control measures to include fire support coordination measures (FSCMs) are adjusted as required to reduce the risk of fratricide.

9-75. As the two forces draw closer, the staff keeps the forward task force(s) and reconnaissance elements well informed of the friendly and enemy situation. The COP and locations of friendly forces via FBCB2 are critical enablers that mitigate the risk of the operation. Lead forces that will actually make the initial linkup use FM radio to make contact with the other force. It is vital that the HBCT ensures subordinate forces making the linkup are in contact with the other force so they can coordinate the details of the linkup and avoid fratricide. As forces close, the stationary force is usually the best unit to control indirect fires. At this point, the operation slows as lead forces close on one another and conduct initial linkup. The ABCS may negate the physical linkup of converging forces. As

long as each unit can “see” friendly forces digitally, there may be no requirement for physical linkup.

9-76. FSCMs are changed and emplaced based on the progress of the operations and the enemy situation. Specifically, coordinated fire lines are cancelled and activated. A restricted fire line (RFL) is also placed into effect as the friendly forces close upon one another to prevent fratricide. Once the linkup (physical or digital) has occurred, the HBCT executes other future operations as planned or directed by the higher headquarters. The HBCT may be required to continue the attack or establish a defense with the other force. Also, the HBCT may assist the other force with emergency resupply or medical support. When linking up with a stationary force, the HBCT may be required to escort their sustainment and support vehicles to the unit's location.

9-77. Flexibility is a must during linkup operations. The HBCT must develop and coordinate a plan that contains contingencies for major changes in the situation to include a breakdown of digital capabilities. This includes linkup at different locations and times than expected. The plan must also account for all feasible enemy reactions to the linkup operation.

SECTION VI – TROOP MOVEMENT

9-78. Troop movement is the movement of troops from one place to another by any available means. The movement of forces and support is essential to successful HBCT operations. Digital enablers and the ability to see friendly units greatly enhances tactical efficiency. The four forms of movement that the HBCT conducts are:

- Administrative movement
- Tactical road march
- Approach march
- Combat formations

9-79. Also, as part of troop movement the HBCT occupies assembly areas.

ADMINISTRATIVE MOVEMENT

9-80. An administrative movement is conducted when contact with the enemy is unlikely. It is most appropriate in conventional, contiguous battlefield operations where enemy resistance has been defeated or destroyed. It is not appropriate in AOs characterized by non-linear, non-contiguous operations and/or where forces may be subject to ambush or attack. An administrative movement emphasizes efficient use of organic and supporting transportation assets. The S4 (sustainment section) is normally responsible for the planning of administrative movements.

TACTICAL ROAD MARCH

9-81. The tactical road march is a unit move in a combat-ready posture normally conducted in the combat zone. Enemy contact is possible either during the march or soon after arrival at the unit's destination. During a road march, units move on designated routes using roads and trails. Units normally move by tactical road marches to assembly areas to prepare for combat operations. The S3 is normally responsible for planning tactical road marches (see FM 4-01.3 [FM 55-10] for planning road marches).

ORGANIZATION FOR A TACTICAL ROAD MARCH

9-82. The HBCT organizes into a march column for a tactical road march (see Figure 9-10). The column is composed of the following four elements:

- Reconnaissance

- Quartering party
- Main body
- Trail party

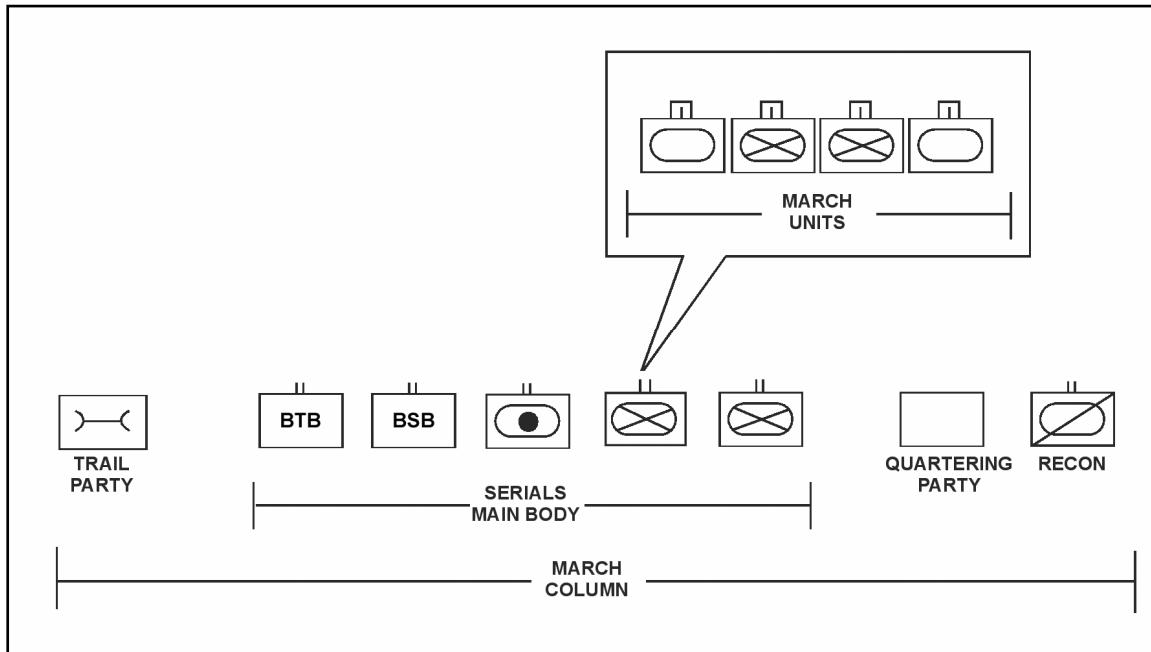


Figure 9-10. Tactical road march

9-83. *Reconnaissance.* The reconnaissance party conducts route reconnaissance of movement routes to determine travel times, bridge and underpass capacities, and trafficability. It identifies critical points, obstacles, and (if there is enough time) alternate routes. The reconnaissance squadron may perform this role for the HBCT by conducting route reconnaissance to the new location, quickly clearing the new assembly area, and providing security (usually a screen) for the area. It may be augmented by engineer forces, reconnaissance assets (UAVs, etc) and other CS assets.

9-84. *Quartering Party.* A quartering party is a group of unit representatives dispatched to a probable new site of operations in advance of the main body to secure, reconnoiter, and organize the site prior to the main body's arrival and occupation. Each battalion, and in some cases, separate company-size units form quartering parties. They guide march elements to and into the new area. They typically confirm the tentative locations that have been selected by the HBCT based on a map reconnaissance. Quartering parties also act as a liaison between their parent headquarters and the HBCT headquarters in order to change unit locations within the assembly area based on the results of their reconnaissance. The BTB headquarters will employ a separate quartering party for the placement of the HHC support elements and the new HBCT MAIN location.

9-85. *Main Body.* The main body of the march column consists of the remainder of the unit minus the quartering and trail parties. The major elements of the column are serials and march units. A march serial is a major subdivision of a march column that is organized under one commander who plans, regulates, and controls the serial. A serial is normally battalion size. A march unit is a subdivision of a march serial. It moves and halts under the control of a single commander who uses voice and visual signals. A march unit is normally company size.

9-86. *Trail Party.* The trail party follows the main party and conducts vehicle repair and recovery, medical aid and evacuation, and emergency refueling.

TACTICAL ROAD MARCH TECHNIQUES

9-87. The HBCT can employ the following three march techniques during the tactical road march:

- Open column
- Close column
- Infiltration

9-88. *Open Column.* In an open column, the commander increases the distance between vehicles to provide greater dispersion. The vehicle distance varies from 50 to 100 meters, and may be greater if required. The open column technique is normally used during daylight. It may also be used at night with infrared lights, blackout lights, or passive night-vision equipment. The open column is the most common movement technique because it offers the most security while still providing the commander with a reasonable degree of control.

9-89. *Close Column.* In a close column, vehicles are spaced about 20 to 25 meters apart during daylight. At night, vehicles are spaced so that each driver can see the two lights in the blackout marker of the vehicle ahead. Close column is normally used for marches during darkness under blackout driving conditions and in restricted terrain. This method of marching takes maximum advantage of the traffic capacity of a route but provides little dispersion. The close column may be appropriate when traversing areas with relatively lightly armed enemy forces (small arms and rocket-propelled grenades (RPGs)). In this circumstance the close column provides more immediate massed direct fires against flank attacks or ambushes.

9-90. *Infiltration.* During a move by infiltration, vehicles are dispatched individually, in small groups, or at irregular intervals at a rate that keeps the traffic density down and prevents undue massing of vehicles. Infiltration provides the best possible passive defense against enemy observation and attack. It is suited for tactical road marches when there is enough time and road space and when the commander desires the maximum security, dispersion, and deception. The disadvantages of an infiltration are that more time is required to complete the move, column control is nearly impossible, and recovery of broken down vehicles by the trail party is more protracted when compared to vehicle recovering in both close and open columns. Additionally, unit integrity is not restored until the last vehicles arrive at the destination, which complicated the onward deployment of the unit.

APPROACH MARCH

9-91. An approach march is a form of tactical movement that emphasizes speed over tactical deployment (see Figure 9-11). A unit using an approach march moves in a task organized tactical formation to its destination. The approach march is used when the enemy's approximate location is known, which allows the force to move with greater speed and less physical security or dispersion. The approach march terminates in a march objective, such as an attack position, assembly area, or assault position; or can be used to transition to an attack.

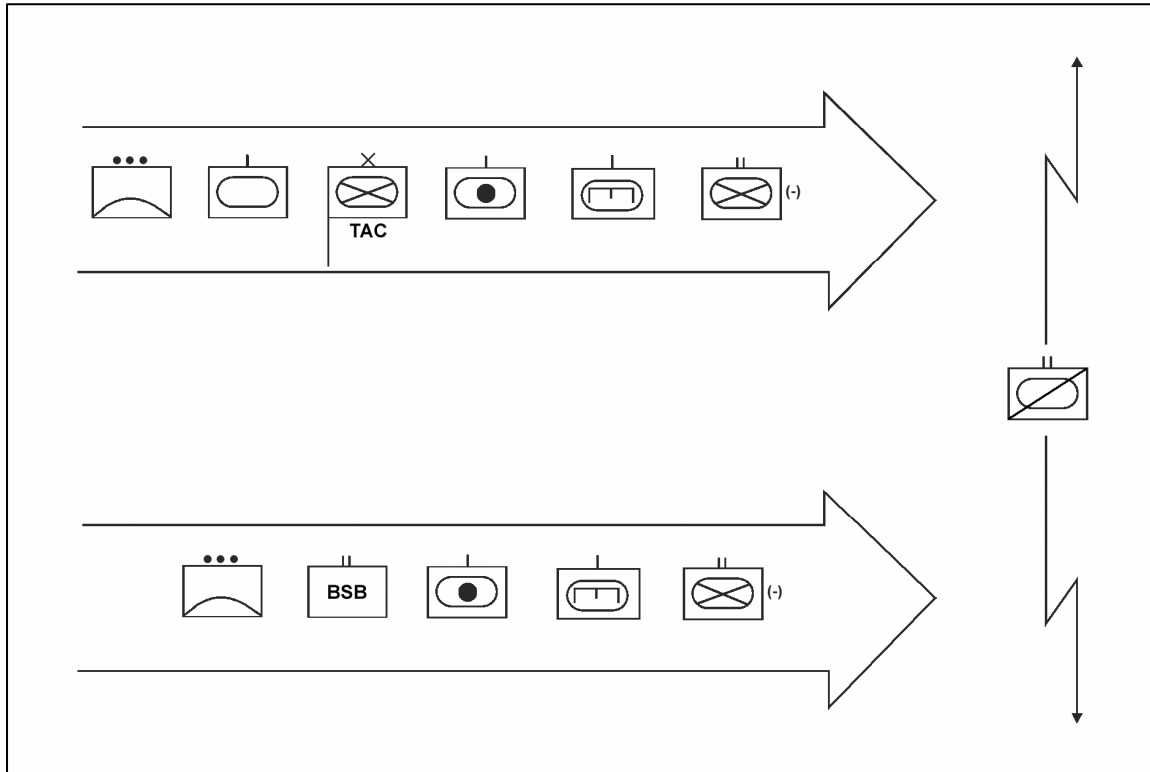


Figure 9-11. Approach March

9-92. An approach march employs security forces (advance, flank, and rear) based on the threat situation. The approach march technique allows the HBCT to disperse task-organized units into a tactical formation in unrestrictive terrain without being constrained to roads and trails. This allows the HBCT to transition to a combat formation more readily than the road march because of the HBCT's organization and dispersion. The commander should assign an AO or an axis of advance in combination with routes for the approach march. These routes, AOs, or axes should facilitate the force's movement and maximize his use of available concealment. The HBCT's formation is selected to support the scheme of maneuver at the objective or occupation of the area at the final destination.

ASSEMBLY AREAS

9-93. An assembly area is a position in which a force prepares or regroups for further action. The HBCT typically occupies assembly areas to prepare for future combat operations or when it has a reserve mission. Designation and occupation of an assembly area may be directed by the higher headquarters or by the HBCT commander such as during relief operations or during unit movements. Units in assembly areas conduct maintenance, resupply, planning, and mission preparations. Units occupying assembly areas employ passive and active OPSEC measures to deny the enemy any indications of friendly plans such as intentions, force composition, or unit identity and locations. Assembly area planning, occupation, and departure can be difficult and time consuming. Performed correctly, they can aid in structuring the unit for timely execution of combat operations. Done incorrectly, they confuse and disorganize a unit before it ever makes contact with the enemy.

PLANNING CONSIDERATIONS

9-94. Assembly areas are typically outside the range of enemy medium artillery fires, generally no closer than 15 kilometers from the line of departure (LD). HBCTs typically occupy assembly areas alone, although their parent divisions may be in the same general geographic area. Assembly areas ideally provide:

- Concealment from air and ground observation
- Cover from direct fire
- Terrain masking of electromagnetic signal signature
- Sufficient area for the dispersion of subunits and their vehicles consistent with the tactical situation, both enemy and friendly
- Buildings or concealment for unit trains, maintenance operations, and C2 facilities
- Suitable entrances, exits, and internal routes. Optimally, at least one all-weather paved surface road transits the assembly area and connects to the MSR in use by the next higher headquarters
- Terrain that allows the observation of ground and air avenues of approach into the assembly area
- Good drainage and soil conditions that support unit vehicle movement

ORGANIZATION OF THE BRIGADE ASSEMBLY AREA

9-95. Brigade assembly areas may be organized using one of two methods.

9-96. *Method One.* The HBCT may divide the assembly area into subordinate unit AOs. In this method, the HBCT C2 facilities, BTB units, CS units, and most Sustainment assets are located near the center of the assembly area. If the BTB and BSB are within the same AA, the BTB commander is normally designated as responsible for C2 of security of the AO, and delineates security tasks and responsibilities. This technique configures the HBCT in a perimeter defense, with CABs and the RS deployed along the entire perimeter and oriented outwards (see Figure 9-12). In the event the RS is focused on ISR missions or preparation for missions outside the HBCT AA, it may be given a separate AA toward the center of the HBCT, i.e., not along the outer perimeter.

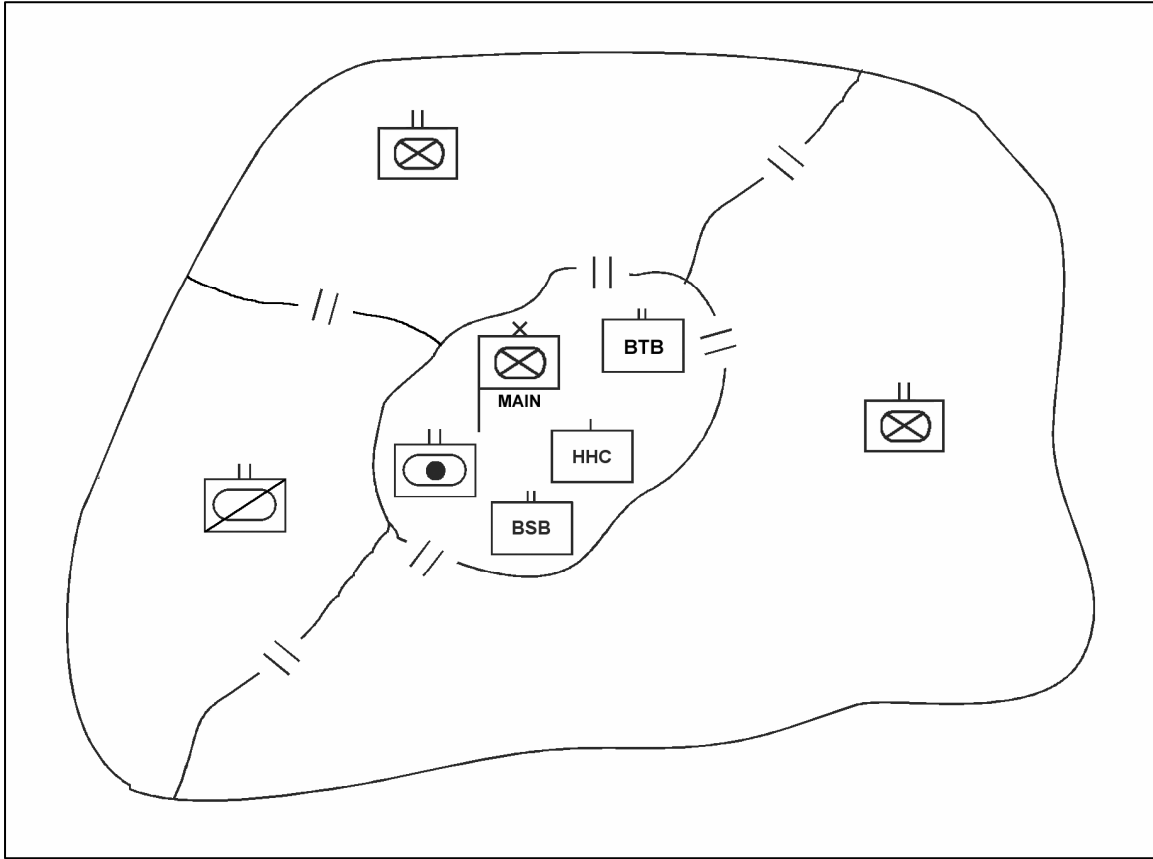


Figure 9-12. Method One

9-97. *Method Two.* The HBCT may assign separate individual assembly areas to subordinate elements. In this method, subordinate units maintain their own 360-degree security. Areas between subunits should be secured through visual and electronic surveillance, by elements of the reconnaissance squadron, unit patrols or a force under the command and control of the BTB commander. HBCT C2 facilities, the headquarters and headquarters company (HHC), and the bulk of sustainment assets occupy positions central to the outlying maneuver battalions (see Figure 9-13).

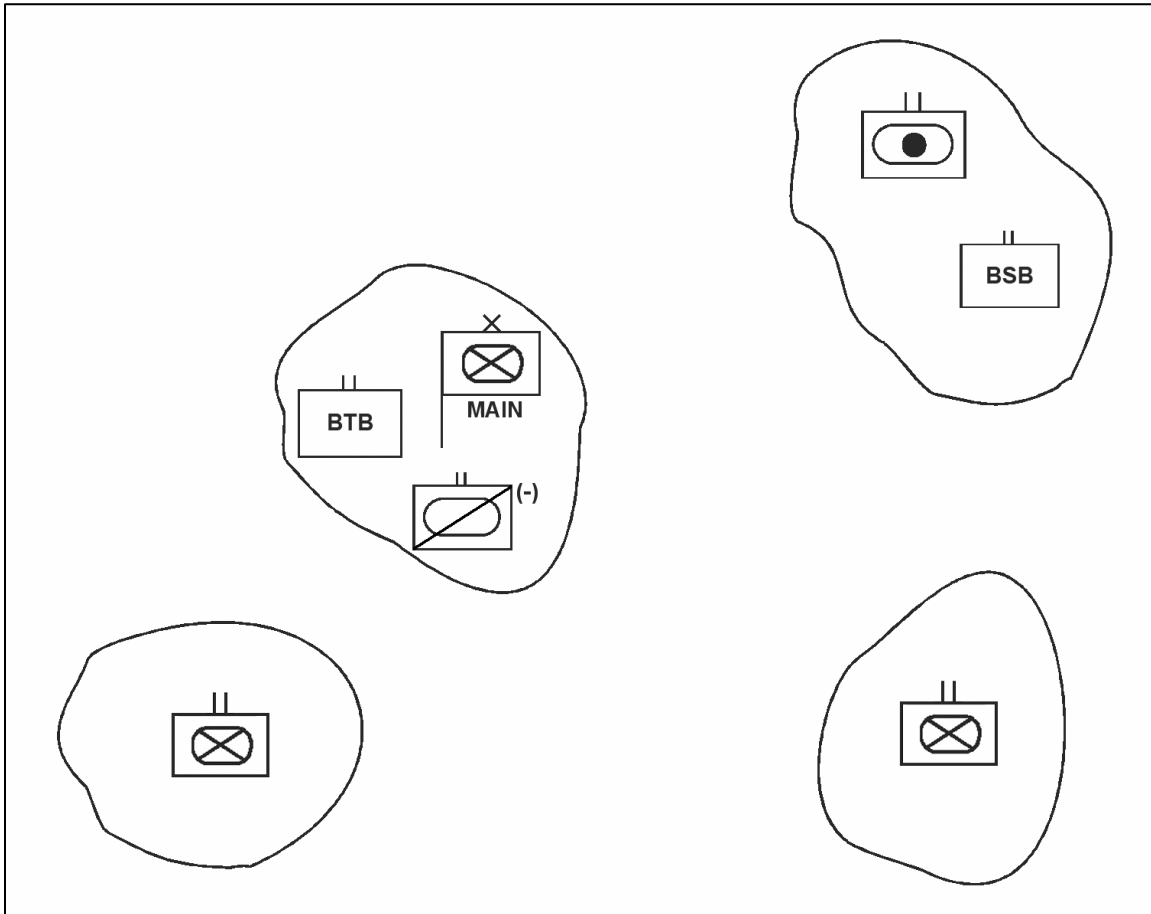


Figure 9-13. Method two

OCCUPATION OF THE ASSEMBLY AREA

9-98. Units position themselves in assembly areas in accordance with the HBCT plan. Units are typically guided into position by their quartering parties. Occupation is accomplished smoothly from the march without halting or bunching of units at the RP.

9-99. Units normally establish routes and separate SPs/RPs for march elements that proceed from the march column's route or RP toward the march unit's assembly area positions. This technique clears the route quickly, maintains march unit C2, and prevents bunching up of units at the march column RP.

COMBAT FORMATIONS

9-100. . The HBCT uses six basic formations—column, line, echelon, box, wedge, and vee. The type formation the commander selects is based on several factors:

- Actions on the objective
- The likelihood of enemy contact
- The type enemy contact expected
- The terrain the HBCT must cross
- The balance of speed, security, and flexibility required during movement

9-101. The commander and staff must also determine when, where, and how the HBCT transitions into different movement formations based on the terrain and anticipated situation. The commander and all subordinate units also maintain the flexibility to adapt to new formations based on changes in the terrain and enemy situation. The HBCT commander may dictate the combat formation to be used by one or more subordinate units in order to enhance security or maneuver flexibility for the force as a whole. For example, the HBCT may move in column, but the lead CAB may move in a box or wedge.

COLUMN

9-102. The column formation is useful in restrictive terrain or when attacking on a narrow front (see Figure 9-14). Characteristics include:

- Easiest formation to control
- Allows rapid movement especially along roads and trails
- Provides a high degree of security and firepower to the flanks
- Follow-on elements are available to assume the mission or support the lead element (depending on the terrain)
- Provides flexibility for maneuver to the flanks and forward; but slow to deploy to the front
- Limits firepower forward
- Vulnerable to piecemeal commitment of forces to the front

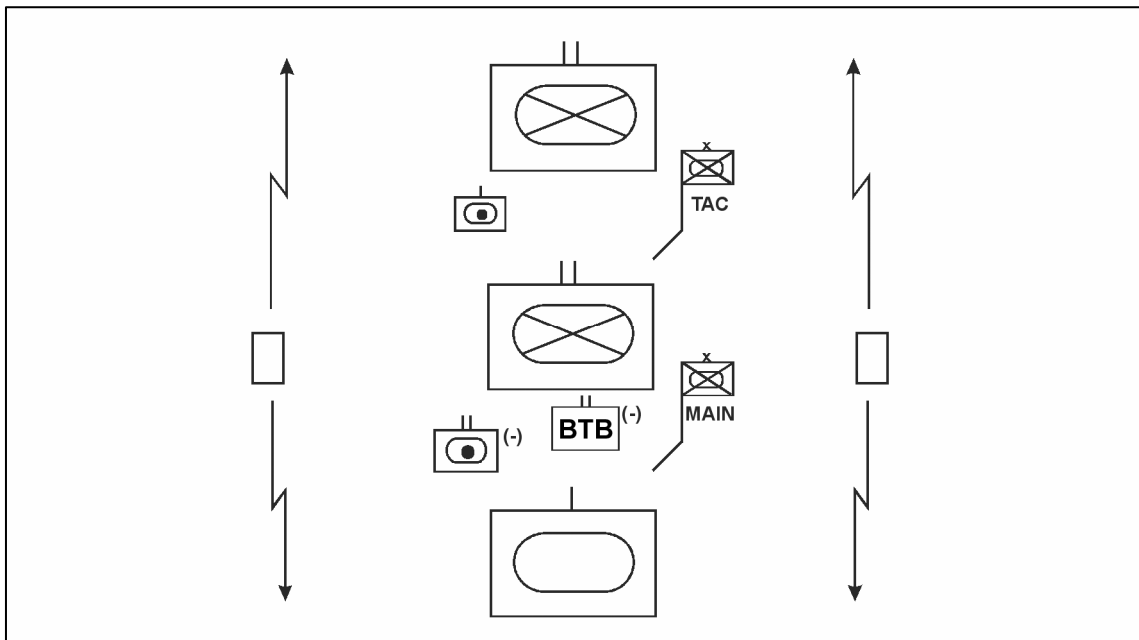


Figure 9-14. Example of a Brigade Combat Team in Column Formation

LINE

9-103. . The line formation is useful against a weak or shallow enemy defense or when the situation requires an advance over a broad front (see Figure 9-15). Characteristics include:

- Provides maximum firepower forward over a wide front
- Covers a relatively wide front
- Facilitates the discovery of gaps, weak areas, and flanks in the enemy's disposition

- Provides less flexibility of maneuver than other formations
- Limits firepower to the flanks
- Requires wide maneuver space for employment and to maintain adequate dispersion
- Difficult to control especially in restrictive terrain or during limited visibility

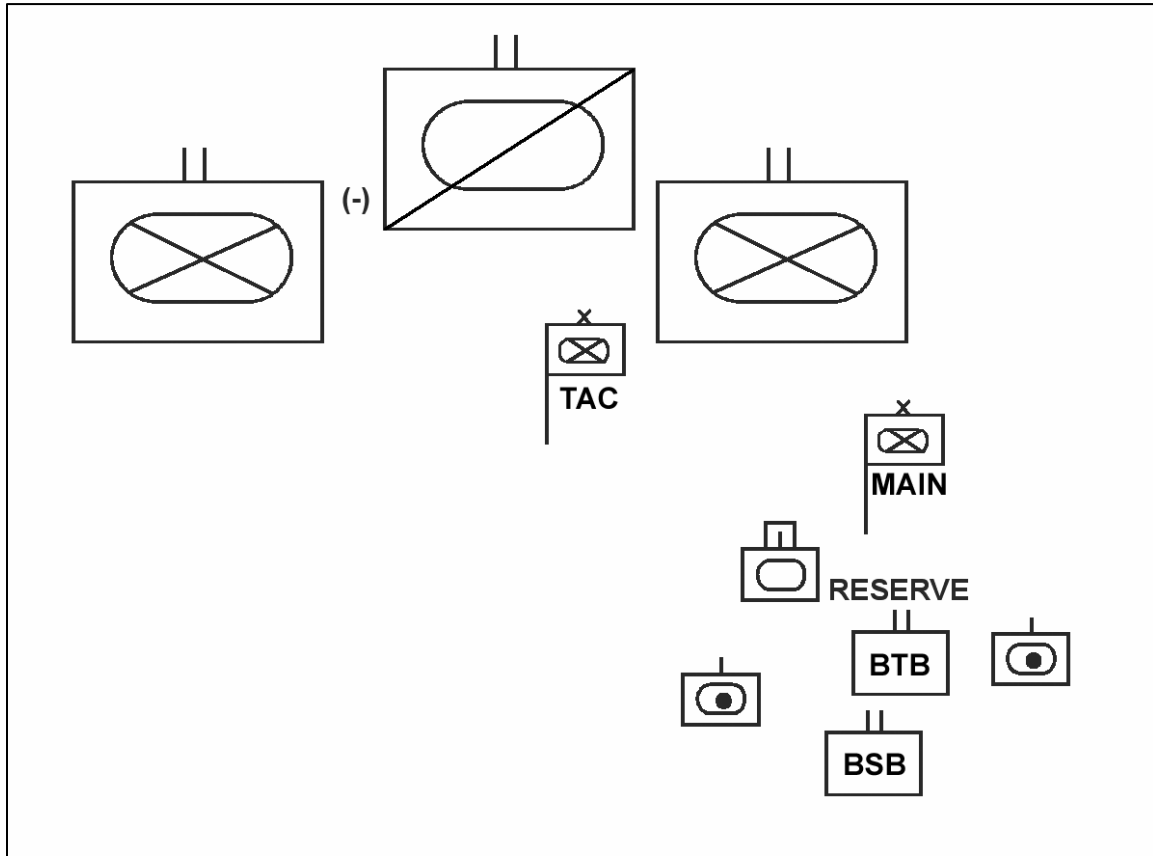


Figure 9-15. Example of a Brigade Combat Team in Line Formation

ECHELON

9-104. The echelon formation is useful when a flank of the HBCT is threatened or when maneuver and enemy contact is expected in the direction of echelon (see Figure 9-16). Characteristics include:

- Allows concentration of firepower forward and to the flank in the direction of echelon
- Facilitates maneuver against a known enemy in the direction of echelon
- Easy to control on open terrain. More difficult to control in restrictive terrain
- Allows flexibility in the direction of echelon
- Transitions easily into a line or vee (when augmented) formation
- Requires use of multiple routes or a wide maneuver area
- Reduces firepower, flexibility of maneuver, and security in the direction opposite of the echelon

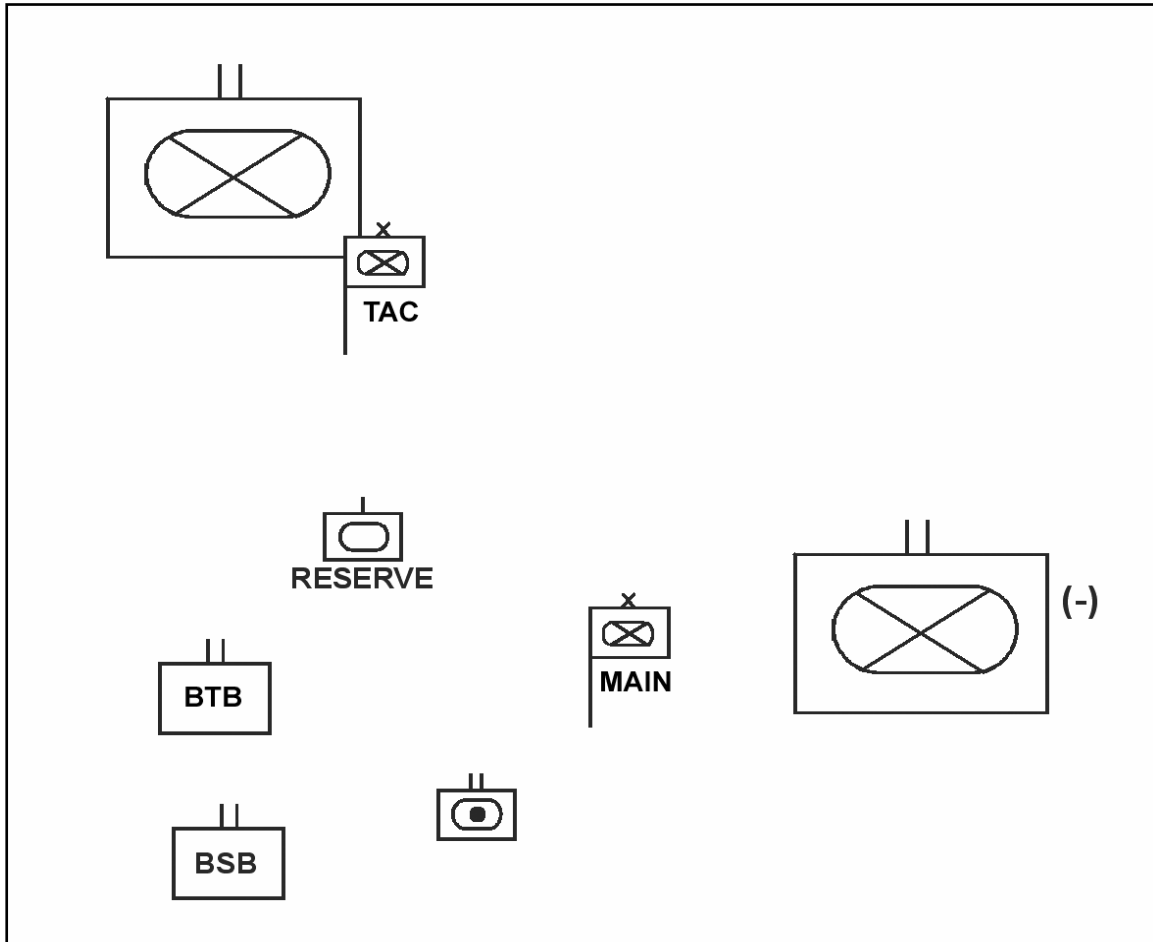


Figure 9-16. Example of a brigade combat team in echelon formation

BOX

9-105. The box formation is useful when general information about the enemy is known and the HBCT requires flexibility and depth in its attack. The diamond formation is a variation of the box formation. The box and diamond formations are used when the HBCT has four maneuver battalions (see Figure 9-17). Characteristics for both formations include:

- Provides the best flexibility for maneuver
- Allows easy transition into all other formations
- Distributes firepower forward and to the flanks
- Easy to control
- Provides all-around security
- Facilitates rapid movement
- Provides protection of accompanying CS and sustainment element located in the center of the formation

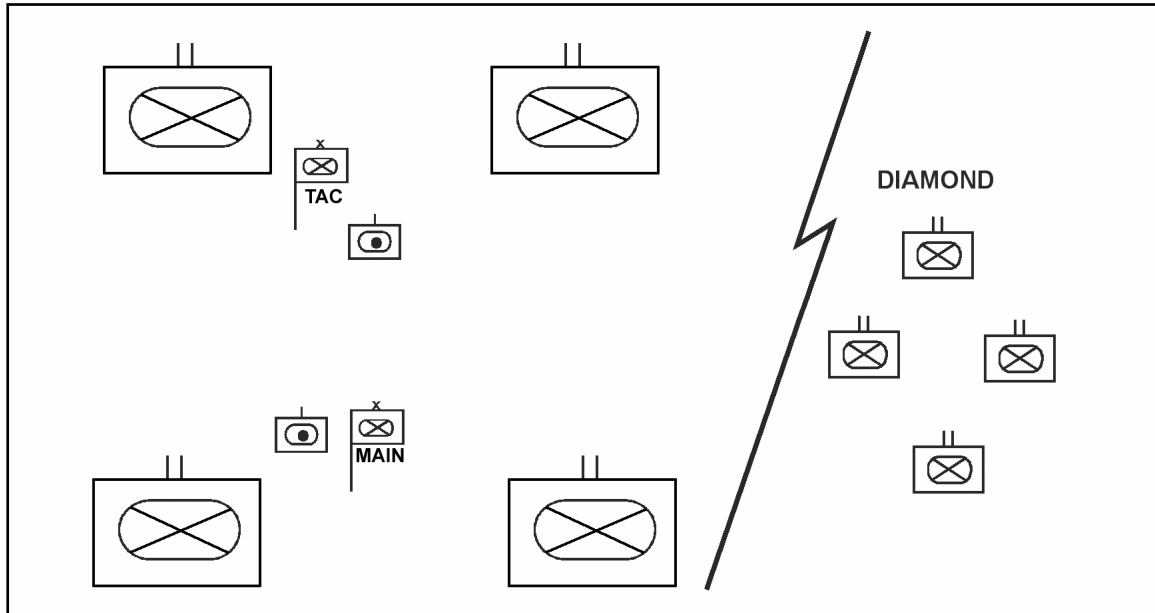


Figure 9-17. Example of an HBCT in box and diamond formation

WEDGE

9-106. . The wedge formation is useful to attack enemy forces appearing to the front and flank or when the situation warrants contact with minimal combat power followed by rapid development of the situation (see Figure 9-18). The HBCT may use the wedge when augmented with a third maneuver battalion. Characteristics include:

- Allows easy transition into other formations
- Makes contact with minimal combat power forward
- Provides mutual support between task forces
- Provides maximum firepower forward and good firepower to the flanks
- Facilitates control and transition to the assault
- Easy to control except in restrictive terrain or during limited visibility
- Requires sufficient space for lateral and in-depth dispersion

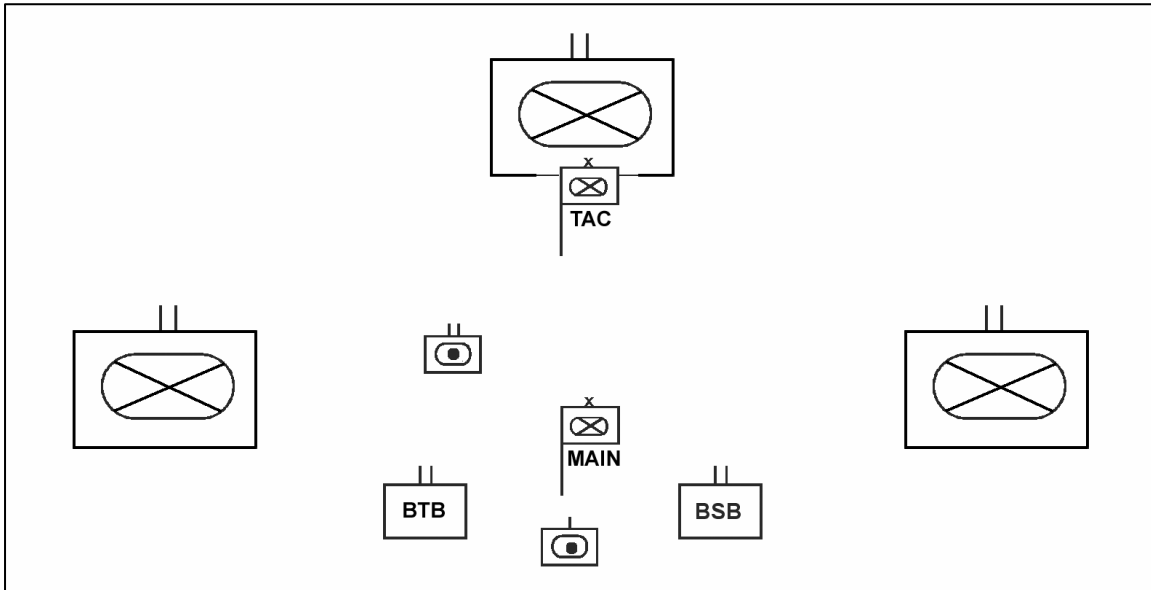


Figure 9-18. Example of an HBCT in wedge formation (augmented)

VEE

9-107. The vee formation is useful in an advance against a known threat to the front (see Figure 9-19) and when the HBCT has four maneuver battalions (augmented) or moving in a UEx formation. Characteristics include:

- Difficult to control especially difficult in restrictive terrain or during limited visibility
- Provides good firepower forward and to the flanks
- Difficult to reorient the formation
- Changes easily to the line, wedge, or column formation
- Facilitates continued maneuver after contact is made against a relatively weak enemy

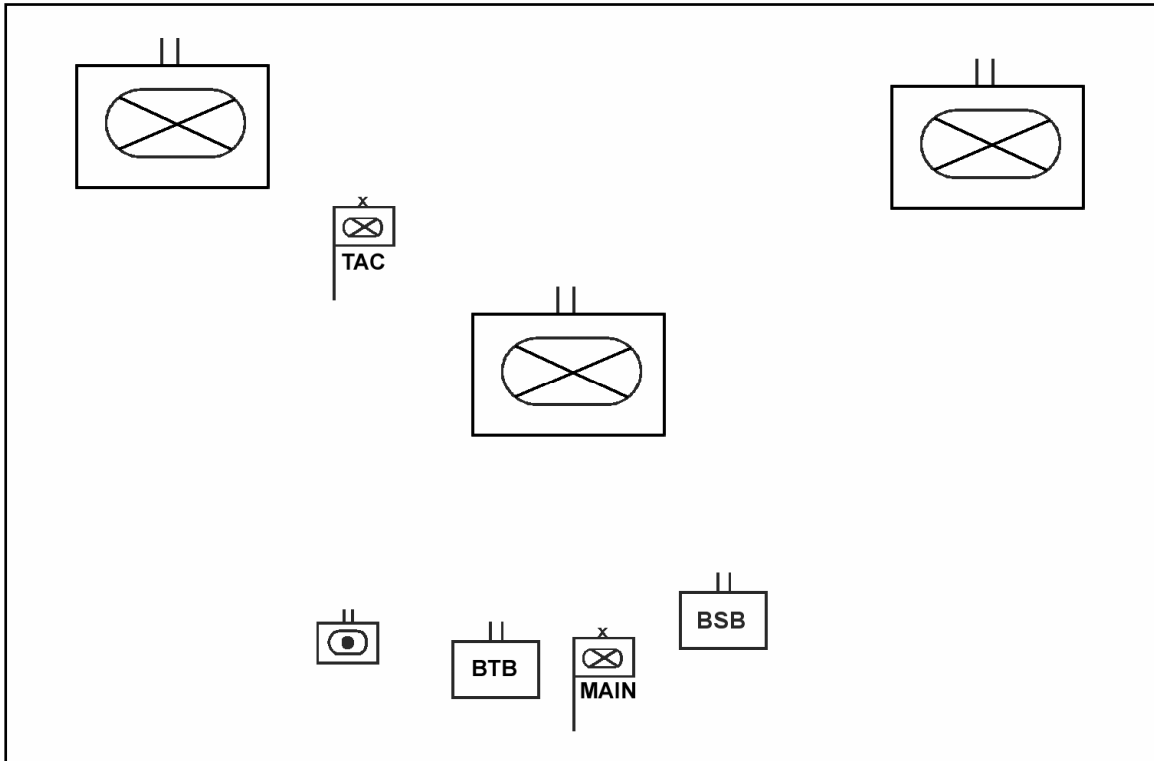


Figure 9-19. Example of an HBCT in vee formation (augmented)

CONTROL OF MOVEMENT

9-108. Effective movement allows the HBCT to arrive at its destination in a condition suitable to its probable deployment. Rapid controlled movement is key to maintaining a high tempo and synchronized operations. The HBCT must rely on well-trained SOPs and drills that allow it to move and change formations with minimum loss of momentum and control. The HBCT's ability to move rapidly is aided by:

- Digital command and control (ABCS)
- Standard movement formations and methods to change formations
 - Security operations
 - Selection and reconnaissance of sufficient routes and approaches
 - Mobility operations
 - Maintenance of air defense

CONTROL MEASURES

9-109. Graphic and procedural control measures are used to control movement and positioning of forces. Common graphic control measures include objectives, PLs, checkpoints, and boundaries. Procedural controls, such as reporting of the forward line of own troops (FLOT) by subordinates, also assist with controlling movement. All subordinates should report crossing or occupation of graphic control measures, initiation of movement, closure at designations, and give periodic reports of unit locations to the MAIN CP. The HBCT's SOP should specify the parameters for reporting unit movements.

MOVEMENT OF ARTILLERY

9-110. It is critical for the commander and staff to consider the movement of fire support assets along with maneuver forces to ensure that responsive fires are available at all times. Effective effects coordination involves a series of key players. Those players include the brigade S3, the fires and effects section of the HBCT, the fires battalion commander and his staff, and the CABs. All must integrate effects into all tactical planning to synchronize movement and positioning of fire support assets to ensure effective fires and to avoid unnecessary congestion. The fires battalion S3, acting for the fires battalion commander and in close collaboration with the ECOORD and the fires and effects cell (FEC) at the HBCT MAIN CP, is normally the lead in coordinating the movement of fire support assets and firing units.

MOVEMENT OF COMBAT SUPPORT AND SUSTAINMENT

9-111. The commander and staff must recognize that the bulk of the HBCT's vehicles are located in the CS and sustainment systems. They must synchronize movement of these units and assets to sustain the HBCT and avoid congestion of routes, especially when sufficient routes are limited. The staff must integrate sustainment movements in all planning to synchronize support and the use of terrain and routes. These elements normally move by tactical road march from one position to the next along roads and trails.

SECTION VII – HIGH VALUE ASSET SECURITY

9-112. The increased number and importance of artillery, aviation, communications, and intelligence acquisition systems has led to increased emphasis on their security. Referred to as high value assets (HVA), these may include artillery and air defense radars, units, unmanned aerial vehicle (UAV) launch and recovery sites, C2 nodes, and intelligence acquisition systems. The HBCT can potentially have up to one-third of its ground combat power allocated to security missions. An example of specific HVAs include:

- Q36/Q37 radars
- HBCT UAV site
- UEx UAV
- Patriot battery
- Sentinels
- Forward arming and refueling points (FARPs)
- Enhanced position location reporting system (EPLRS) nodes
- Joint network node (JNN) nodes
- Retrans sites

9-113. The magnitude of the security requirement for HVAs will vary depending on how many missions are assigned to the HBCT for security of UEx/UEy/JTF assets. Generally, these missions are kept to the minimum number possible. Techniques such as positioning assets near combat forces embedding them with combat forces and guarding them during periods of limited visibility, maximizing self-protection capabilities, and using specialized units such as host nation and coalition light forces helps the commander keep as many of his combat maneuver forces in the direct fire battle as possible.

9-114. When securing HVAs, some information and considerations the commander must address are:

- IP address, frequencies, location, and linkup point of the HVA
- Routes to be used for reaching the HVA. How many unit AOs must the security force move through and under what conditions?

- Mission and movement/positioning plan of the HVA
- Nature of the enemy threat
- Can the HVA be easily detected and targeted with indirect fire? If so, the security force needs to consider its own survivability and maintain adequate standoff from the HVA
- Duration of the mission. Who will determine change of mission?
- What other forces are in the area? What base clusters are nearby?
- What are the triggers to leave the security mission and enter the close fight? Is there an implied reserve mission?
- What is the mission/movement plan of the security force parent unit? The security force must maintain SA on the parent force in order to linkup or join the close fight.
- Who is the security force's higher headquarters? What is their IP address, location, frequency, and movement plan?
- What is the logistical support plan for the security force? Who provides logistical security?
- Whose communication architecture do they plug into?
- How will the parent unit track its forces assigned to HVA security missions and transition them back into the close fight?
- The security force must also consider those locations that could be used by enemy personnel serving as forward observers for enemy indirect fire systems.

9-115. HVA security missions are not simply additional requirements. They represent the evolution in the way HBCTs, UExs, and higher echelons fight. Systems that acquire and defeat the enemy with precision fires at vastly extended ranges are becoming the primary warfighting tools. Missions that provide for their security and facilitate their movement and effectiveness will increase rather than decrease.

9-116. The HBCT S3 and S6 must develop an overlay that depicts all HVAs in the HBCT AO, and ensure that overlay is distributed to subordinate commanders. The HBCT S3 shows task protection of HVAs to subordinate commanders as an area security mission.

9-117. The BTB is responsible for monitoring all elements not attached to subordinate units within the HBCT AO. However, the BTB may not have the resources to provide security for those elements. Accordingly, the HBCT (in coordination with the UEx or UEy as necessary) may impose command relationships between HVTs and its CABs or other elements to enhance security and force protection of those elements by ensuring their movement and positioning is coordinated.

SECTION VIII – SECURITY OPERATIONS

9-118. Security is an essential part of all offensive and defensive operations. Security operations are those operations undertaken by a commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected force. The ultimate goal of security operations is to protect the force from surprise and reduce the unknowns in any situation (FM 3-90).

9-119. The main difference between security operations and reconnaissance operations is that security operations orient on the force or facility being protected, while reconnaissance is enemy and terrain oriented. Security operations are shaping operations.

9-120. Successful security operations are planned and performed with the five fundamentals of security:

- *Orient on the Main Body.* The security force operates at a specified distance between the brigade and known or suspected enemy units. If the brigade moves, the security force must also move. The security force commander must know the scheme of maneuver of the main body and maneuver as necessary to remain between it and the enemy. The value of terrain occupied by the security force lies in the protection it provides to the brigade.
- *Perform Continuous Reconnaissance.* Security is active. The security force performs continuous, aggressive reconnaissance to gain all possible information about the enemy and terrain. Surveillance and patrolling required in security use the same techniques as in reconnaissance.
- *Provide Early and Accurate Warning.* Early warning of enemy activity provides the main body commander the time and information needed to retain the tactical initiative and to choose the time and place to concentrate against the enemy. Ground scouts are positioned to provide long-range observation of expected enemy avenues of approach and are reinforced with electronic surveillance devices and aerial platforms when available. Flexibility and depth are built into the surveillance plan.
- *Provide Reaction Time and Maneuver Space.* The security force operates as far from the main body as possible, consistent with the factors of METT-TC. This distance provides the reaction time and maneuver space required by the brigade commander. It fights, as necessary, to ensure adequate time and space for the brigade commander to maneuver and concentrate forces to meet the enemy.
- *Maintain Enemy Contact.* Once contact is made with the enemy, the security force keeps contact to protect the brigade. The security force uses redundant surveillance methods, direct and indirect fires, freedom of maneuver, and depth to achieve continuous contact.

9-121. There are five types of security – screen, guard, cover, area security, and local security.

- *Screen.* A task to maintain surveillance; provide early warning to the main body; or impede destroy, and harass enemy reconnaissance within its capabilities without becoming decisively engaged. The primary purpose of a screen is to provide early warning to the main body. Based on the brigade commander's intent and the screens' capabilities, it may also destroy enemy reconnaissance and impede and harass the enemy main body with indirect and or direct fires. A screen may be static or moving, and may be conducted to the front, flanks or rear of a moving brigade. Any subordinate maneuver element may be given a screening mission.
- *Guard.* A form of security operation whose primary task is to protect the main force by fighting to gain time while also observing and reporting information, and to prevent enemy ground observation of and direct fire against the main body by reconnoitering, attacking, defending, and delaying. A guard force normally operates within the range of the main body's indirect fire weapons. A guard mission accomplishes all the tasks of a screening force. The HBCT may task a subordinate task force a guard mission for the brigade, or the HBCT may be given a guard mission for a larger force.
- *Cover.* A type of security operation that protects the force from surprise, develops the situation, and gives commanders time and space in which to respond to the enemy's actions. A covering force accomplishes all the tasks of screening and guard forces. Additionally, a covering force operates apart from the main body to develop the situation early and deceives, disorganized, and destroys enemy forces. Unlike screening or guard forces, a covering force is tactically self-contained and capable of operating independently of the main body. The HBCT may be asked to perform a cover for a larger formation. As standing combined arms formations with assigned

maneuver, artillery, reconnaissance and engineer units, the CABs may perform cover missions for the HBCT.

- *Area Security.* Area security is a form of security that includes reconnaissance and security of designated personnel, airfields, unit convoys, facilities, MSRs, LOCs, equipment, and critical points. An area security force neutralizes or defeats enemy operations in a specified area. It screens, reconnoiters, attacks, defends, and delays as necessary to accomplish the mission. Area security missions are conducted to deny the enemy the ability to influence friendly actions in a designated area or to deny the enemy use of an area for his own purposes. Area security often entails route security, convoy security, and checkpoint operations.
- *Local Security.* Local security consists of low-level security operations conducted near a unit to prevent surprise by enemy forces. All units of the HBCT are capable of, and required to, conduct local security operations as an inherent part of force protection and mission assurance measures.

9-122. The screen, guard, and cover require increasing levels of combat power and provide increasing levels of security for the main body. The HBCT determines the relative allocation of combat power to security operations depending upon the mission. For example, the level of effort devoted to providing security for an HBCT mission (such as an attack or defense) is different from the level required if the HBCT is performing security for the UEx or UEy. If performing security missions for a higher headquarters, that becomes the primary task for the HBCT. Area security preserves the commander's freedom to move his reserves, position fire support means, provide for command and control, and conduct sustaining operations. Local security provides immediate protection to his force.

9-123. The HBCT may conduct security operations either in support of its own forces or facilities, or in support of the UEx. Whereas traditional divisions had an organic divisional cavalry squadron, the UEx reconnaissance, surveillance, and target acquisition (RSTA) brigade is organized to conduct ISR operations in the UEx sector or AO and is not organized to conduct security missions. Accordingly, the HBCT may be called upon to perform screen, guard, or cover operations in support of the UEx or in the rear area supporting the UEy. The ability of HBCT organizations to conduct security operations varies based on the type of unit. The CABs are organized as robust, standing combined arms units and are thus well suited to conduct all types of security operations. The HBCT RS can only execute a screen security or area security mission. It is not organized or equipped to conduct guard and cover operations.

9-124. *Concepts and Control Measures.* Figure 9-20 depicts commonly used security control measures in a contiguous defense operation. In Figure 9-20, the HBCT (1st HBCT) is providing security to the UEx front by establishing either a guard or cover in the UEx security zone. In this example, the HBCT employs the RS to screen forward, while the CABs are positioned to defend or delay in their sectors. This security allows the remainder of the UEx to focus on defensive preparations. Upon completion of the security operations, the HBCT will withdraw or conduct a rearward passage of lines through the defending HBCTs. The HBCT may then undertake other missions, such as become the UEx reserve, assume an area security mission in the UEx or UEy rear area, or conduct MSO (mission staging operation) in preparation for other missions.

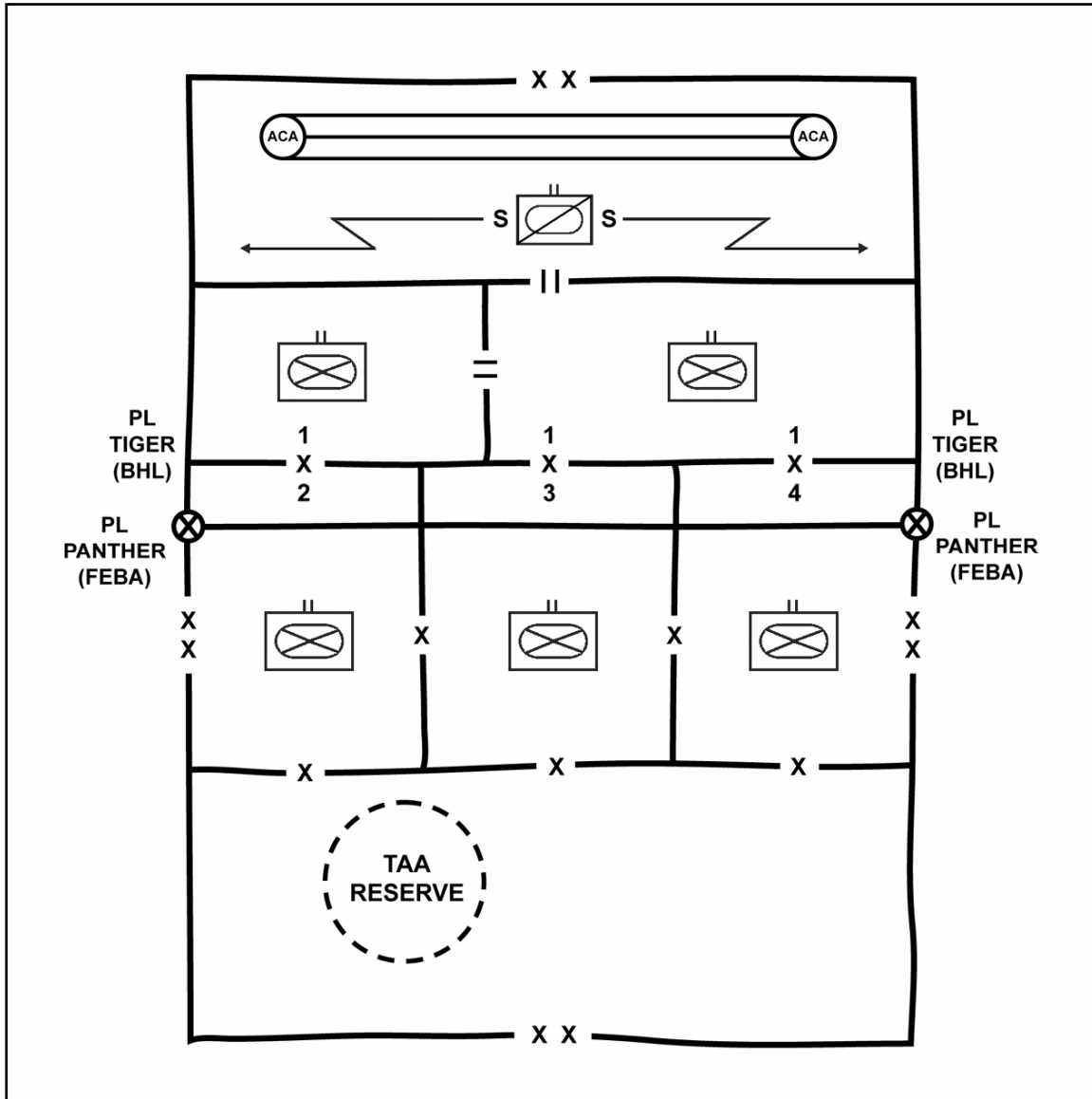


Figure 9-20. Common Security Control Measures

- The terms “stationary” and “moving” typically describe the actions of the main body (the force being protected), not the security force.
- Security operations are depicted using a lightning bolt on either side of the symbol representing the unit conducting the security operation and are labeled with the letter S, G, or C to denote screen, guard, or cover. The end of the lightning bolt has arrowheads that touch the designated operational graphics, which define the left and right limits of the security operation.
- The screen, guard, and cover have many common control measures, starting with boundaries defining the security area. The main body commander establishes the security area. For a security force operating to the front of the main body, the lateral boundaries of the security area are normally an extension of the lateral boundaries of the main body. The security force’s rear boundary is normally the battle handover line (BHL). To establish a screen to the rear of a force, the lateral

boundaries are also an extension of the boundaries of the main body, with the screening force's rear boundary being the rear boundary of the entire force.

- For a flank screen, the lateral boundaries of the security area are an extension of the rear boundary of the main body and its forward edges of the battle area (FEBA) or forward line of own troops (FLOT). The rear boundary of a flank screen is the lateral boundary of the main body. The rear boundary or another phase line (PL) may serve as a BHL between the security force and the main body to control the passing of responsibility for the enemy to the main body. Normally, the responsibility of the flank security force begins at the trail element of the advance security force or the lead combat element in the main body. It ends at the rear of the main body or the lead element of the rear security force.
- Each element of the security force normally reports when crossing or occupying PLs. Displacement to subsequent PLs is event driven. The approach of an enemy force, relief of a friendly unit, or movement of the protected force dictates the movement of the security force. The security force commander normally assigns additional lateral boundaries within the security area to delineate the areas of operations (AOs) for subordinate units. The commander uses checkpoints and named areas of interest (NAIs) to indicate specific areas of interest and to coordinate movement and surveillance. He uses contact points to facilitate coordination with flank units during front and rear security missions or between elements of a security force within the security area. Units conducting flank security for a moving force physically contact the main body at contact points. If the security force commander wants to ensure coverage of a specific NAI or avenue of approach, he establishes OPs.

9-125. *Executing an area security mission.* Figure 9-21 is an example of an area security mission for the HBCT. In this example the HBCT mission is to protect key facilities (for example, the bridge shown in the CAB 1 sector), secure the MSR (main supply route) running through the HBCT sector, provide security to UEx elements transiting the sector, and maintain surveillance of the urban area depicted in the CAB 2 sector. Based upon METT-TC, the HBCT employs the RS to screen in sector to the north, taking advantage of the restrictive terrain. While not depicted, the BTB (with augmentation from the HBCT) may be employed to coordinate and execute convoy security operations through the HBCT sector. Aviation assets from the UEx or UEy would significantly enhance the ability of the HBCT to perform this area security mission, particularly as distances (size of the sector) increase. The HBCT may get an area security mission such as this when the UEx does not have a Maneuver Enhancement (ME) Brigade available, or when METT-TC indicates it is beyond the capabilities of the ME Brigade to execute.

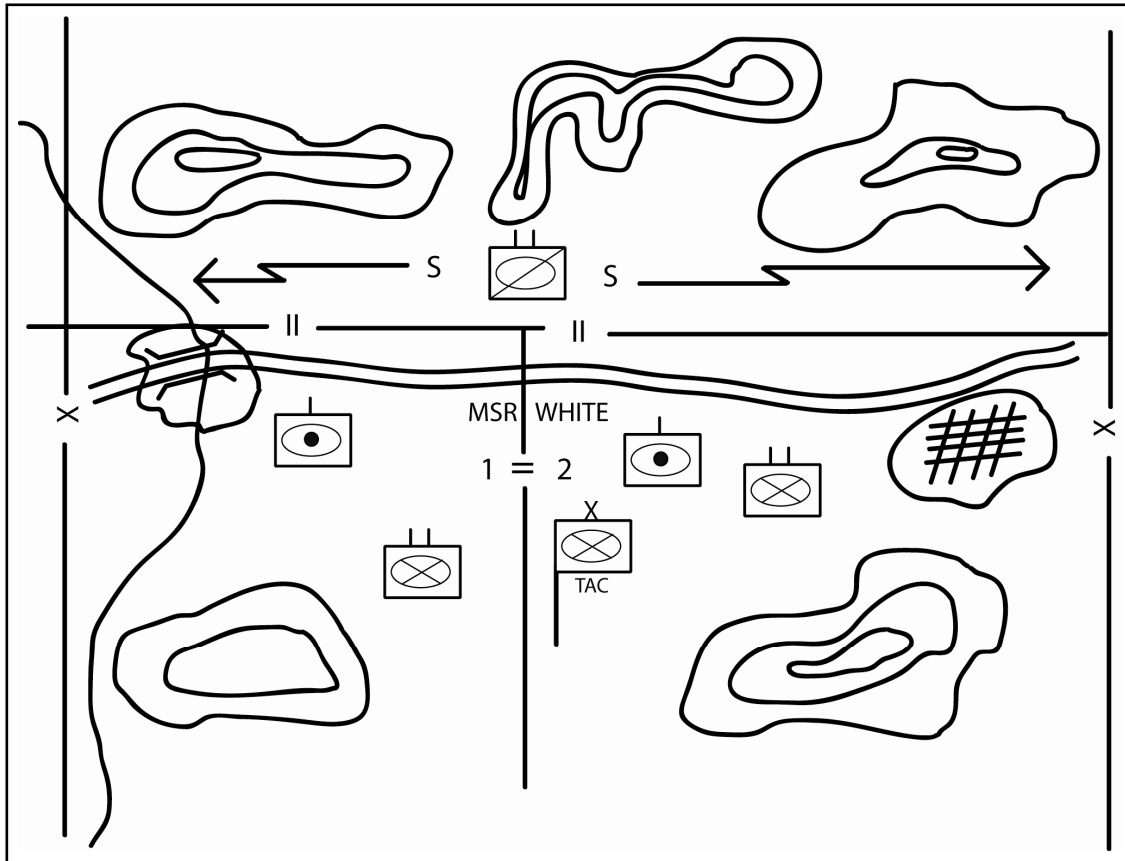


Figure 9-21. Example of HBCT Area Security Mission.

9-126. Integrating ground and air operations is critical to the success of many security missions. Aviation units assist in reconnaissance of the security area as the ground element of the security force moves forward. They can perform the following tasks:

- Extend the screen in front of the flank security element's screen line.
- Screen forward of the ground security force.
- Conduct reconnaissance of areas between ground maneuver units.
- Assist in maintaining contact between the security force and the main body.
- Assist in clearing the area between the flank security element and the main body during moving flank security missions.
- Assist in disengaging ground units, which is especially valuable when conducting battle handover and passage of lines with the main body.
- Monitor terrain that is hard to reach or would require too much time to cover with ground reconnaissance assets.

9-127. *Planning Considerations for Security Operations.* In addition to the normal planning considerations found in offensive and defensive operations (such as control of key terrain and avenues of approach) and BOS integration coordination, the HBCT will normally specify the following for security operations:

- Force to be secured. The main body commander must designate the exact force to secure. This designation determines the limits of the security force's responsibilities. The security force must orient on the force it is securing. If the

main body moves, the security force also moves to maintain its position in relation to the main body.

- Location and orientation of the security area
- Time to establish the security force
- Criteria for ending the security mission
- Augmentation of security forces
- Special requirements or constraints (for all BOS)

9-128. *Moving into sector for flank security missions.* There are three techniques of occupying and moving in a flank security area for moving security missions based on how the security force crosses the line of departure. The security force should not be required to make its own penetration when it faces prepared enemy defenses. This may prevent or significantly delay the security force from assuming its duties.

- Security force crosses the line of departure (LD) separately from the main body and deploys to perform the mission.
- Security force crosses the LD separately from main body; lead elements conduct a movement to contact.
- Security force crosses the LD with the main body and conducts a zone reconnaissance out to the limit of the security area.

9-129. These three techniques are often combined. Figure 9-21 depicts an example of the second technique. Other examples can be found in FM 3-90, *Tactics*. In Figure 9-22, the RS establishes a flank screen as the HBCT attacks toward an objective.

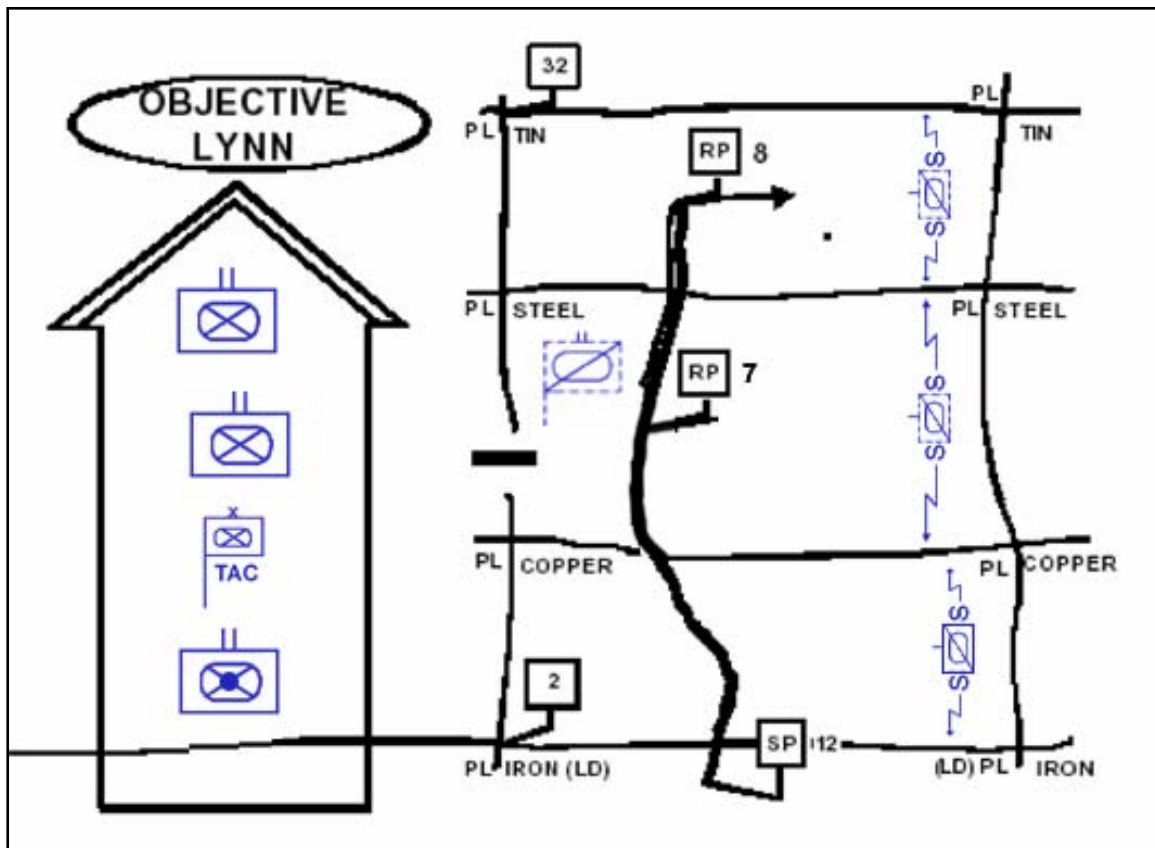


Figure 9-22. Example of establishing a flank screen.

9-130. *Executing a moving security mission.* There are several methods to move security forces providing screen, guard or cover to a protected force. Selection of a particular method depends upon the likelihood of enemy contact, and the rate of movement of the protected force. Different echelons within a formation may employ a combination of methods. For example, the RS may be conducting a continuous march (similar to a reconnaissance in zone), but subordinate troops may be executing alternate bounds by platoons. The methods are similar to offensive movement techniques and include:

- Alternate bounds by position or OP. Elements of units bound to and occupy key terrain, battle positions or key observation locations. Relatively secure, but time consuming. Requires detailed C2 to execute at small unit level.
- Alternate bounds by units. Units (as opposed to sub-units) bound around the unit to their flank or front to the next set of positions or next unit sector.
- Successive bounds. Units bound to the next sector or key feature, not going around units but either relieving them to also bound forward, or units simultaneously bound forward. Very secure, but also time consuming.
- Continuous marching. Entire security unit moves in a route reconnaissance or movement to contact mode. Least secure, but fastest.

9-131. *Guard Security Operations.* The three types of guard operations are advance, flank, and rear guard. A commander can assign a guard mission to protect either a stationary or a moving force. Whether the guard is for a stationary (defending) or moving (attacking) force, the various types of guard missions and knowledge of the terrain and enemy dictate the specific task organization of the guard force. The guard force commander normally plans to conduct the guard mission as an area defense, a delay, a zone reconnaissance, or a movement to contact mission within the security area. The HBCT is well suited to conduct guard security missions in support of the UEx or UEy. The HBCT RS is not organized or equipped to perform guard operations unless augmented with addition maneuver, effects, and engineer capabilities. It is capable of performing screening operations in support of other HBCT elements (CABs) that are performing guard missions.

- An advance guard for a stationary force is defensive in nature. It defends or delays in accordance with the main body commander's intent.
- An advance guard for a moving force normally conducts a movement to contact. It organizes and uses the graphics of a movement to contact. Ground subordinate elements of a guard are normally deployed abreast to cover the axis of advance or the main body's AO. The advance guard is responsible for clearing the axis of advance or designated portions of the AO of enemy elements. This allows the main body to move unimpeded, prevents the unnecessary delay of the main body, and defers the deployment of the main body for as long as possible.
- A flank guard protects an exposed flank of the main body. A flank guard is similar to a flank screen except that the commander plans defensive positions in addition to OPs.
- The rear guard protects the exposed rear of the main body. This occurs during offensive operations when the main body breaks contact with flanking forces or during a retrograde. The commander may deploy a rear guard behind both moving and stationary main bodies. The rear guard for a moving force displaces to successive BPs along PLs or delay lines in depth as the main body moves. The nature of enemy contact determines the exact movement method or combination of methods used in the displacement (successive bounds, alternate bounds, and continuous marching).

9-132. *Cover Security Operations.* A covering force accomplishes all the tasks of screening and guard forces. Unlike screening and guard forces, a covering force is a self-contained force capable of operating independently of the main body. A covering force, or portions of it, often

becomes decisively engaged with enemy forces. Therefore, the covering force must have substantial combat power to engage the enemy and accomplish its mission. A covering force develops the situation earlier than a screen or a guard force. It fights longer and more often and defeats larger enemy forces. Figure 9-23 is an example of an HBCT conducting an offensive cover mission in support of a UEx attack. In the figure the rear HBCT is conducting flank guard and rear screen missions for the UEx.

- As with guard security operations, the HBCT organization is well suited to perform cover operations, particularly if augmented with army aviation assets.
- A covering force for a stationary force performs a defensive mission, while a covering force for a moving force generally conducts offensive actions. A covering force normally operates forward of the main body in the offense or defense, or to the rear for a retrograde operation. Unusual circumstances could dictate a flank covering force, but this is normally a screen or guard mission.
- Whether the cover is for a stationary (defending) or moving (attacking) force, the various types of cover missions, as well as knowledge of the terrain and enemy, dictate the specific task organization of the covering force.
- The covering force commander normally plans to conduct the cover mission as an area defense, a delay, a zone reconnaissance, or a movement to contact mission within the security area. The commander normally assigns subordinate units one of these missions or the mission of screen or guard.

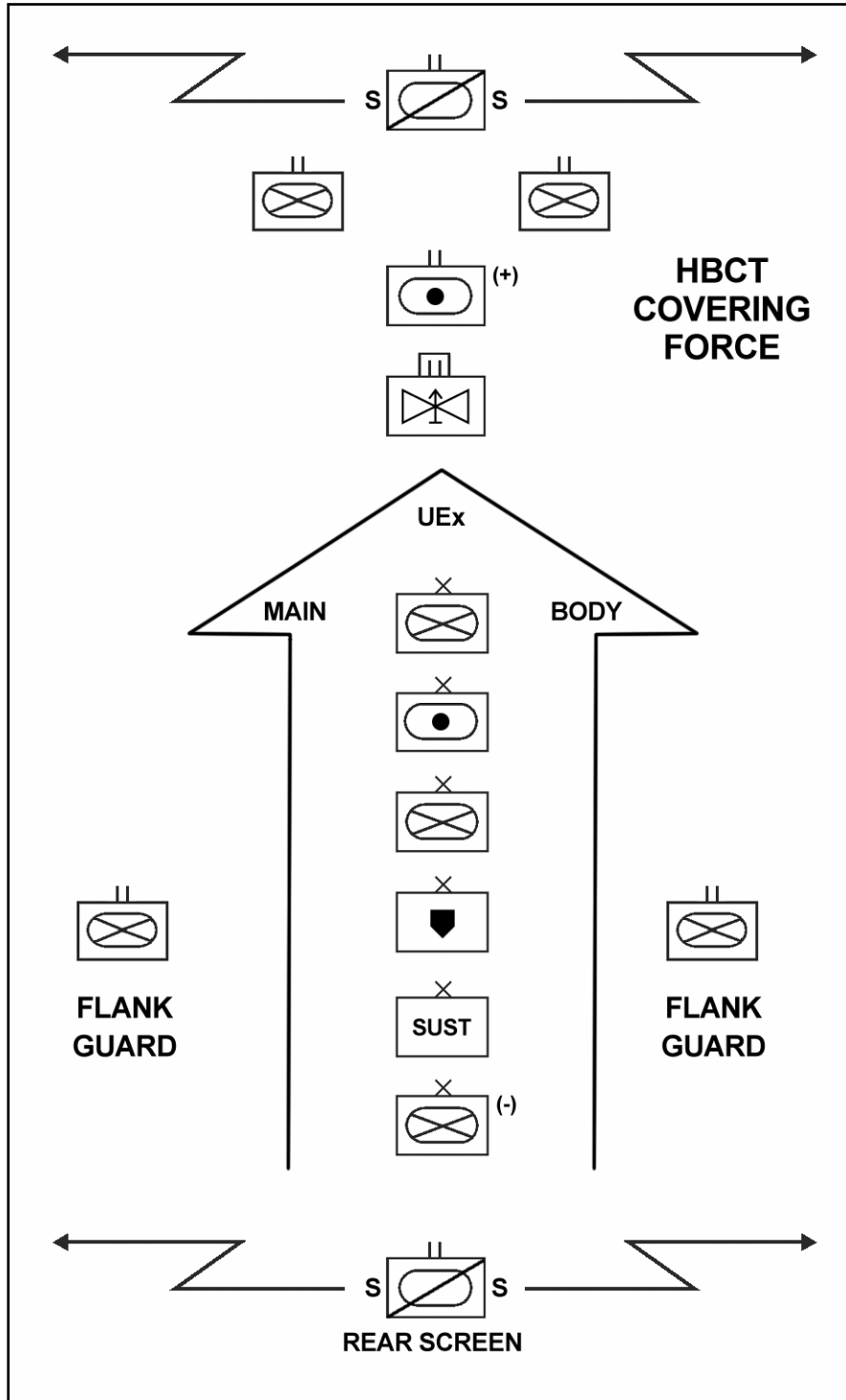


Figure 9-23. Example of HBCT Covering Force for a UEx attack.

Chapter 10

Sustainment

Sustainment operations are necessary to fight and win engagements. The HBCT's sustainment system involves the synchronization and control of all support functions required for sustaining Soldiers and their systems. The focus of the sustainment system is on the functions of manning, arming, fixing, fueling, moving, and sustaining forces. The HBCT commander uses his sustainment assets to maintain the momentum of operations and enhance the capabilities of his maneuver forces. Command and control digital enablers enhance sustainment operations. Logistics consists of many interrelated elements (see FM 4-0 for CSS functions, FMI 4-90.1, "Sustainment of the Heavy Brigade Combat Team" and FM 3-90, Appendix E). Key logistics functions of the BSB include:

- *Supply.* Receive and issue all classes of supply required by the HBCT (Class VIII resupply is a medical function).
- *Maintenance.* Keep equipment and weapons in a serviceable, operational condition. Repair and replace as far forward as possible and return disabled equipment to action.
- *Transportation.* Move units, personnel, equipment, and supplies as required supporting the concept of operations; supports Army doctrine of distribution-based logistics system.
- *Force Health Protection.* Provide Level II medical treatment and Class VIII resupply.
- *Field Services.* Request laundry and shower operations with light textile repair capabilities provided by UEx sustainment brigade ICW the BSB.
- EOD is an EAB (echelon above brigade) asset that serves as a combat force multiplier by neutralizing UXO that is restricting freedom of movement and denying access to supplies, facilities, and other critical assets. Specifically EOD detects UXO hazards, identifies unexploded U.S. and foreign ordnance, renders safe UXO, recovers UXO for technical intelligence exploitation, disposes UXO, and advises commanders on UXO hazards and protective measures. See FM 4-0 for detailed information on EOD.
- Legal Support.
- Financial Management Operation.
- Religious Support. Provide and perform religious support operations.

SECTION I – LOGISTICS CHARACTERISTICS

10-1. The characteristics of logistics serve to describe the planning and execution considerations required for successful operations across the full spectrum of operations. They are not a checklist, but rather a guide for analytical thinking and prudent planning. The S4, S1, HBCT surgeon, chaplain, and the BSB support operations officer integrate the sustainment characteristics in every operation. The HBCT commander identifies

sustainment characteristics having priority during an operation; they become the foundation for preparing the concept of sustainment. The logistics characteristics are:

- *Responsiveness.* Responsiveness is providing the right support, in the right place, at the right time.
- *Simplicity.* Simplicity avoids complexity in both planning and executing sustainment operations. Mission orders, drills, rehearsals, and SOPs contribute to simplicity.
- *Economy.* Economy provides the most efficient support to accomplish the mission. Commanders consider economy in prioritizing and allocating resources. Economy reflects the reality of resource shortfalls, while recognizing the inevitable friction and uncertainty of military operations.
- *Flexibility.* The key to flexibility lies in the expertise for adapting sustainment structures and procedures to changing situations, missions, and concepts of operations.
- *Attainability.* Attainability is generating the minimum essential supplies and services necessary to begin operations. Commanders determine minimum acceptable support levels for initiating operations.
- *Sustainability.* Sustainability is the ability to maintain continuous support during all phases of campaigns and major operations.
- *Survivability.* Survivability is being able to protect support functions from destruction or degradation equates to survivability.
- *Integration.* Integration consists of synchronizing sustainment operations with all aspects of Army, joint, interagency, and multinational operations.

10-2. Sustainment characteristics are integrated throughout the operational framework. They guide prudent planning and assist the staff in developing the sustainment plan (see JP 1-0; JP 4-0; FM 4-0 [FM 100-10]).

SECTION II – THE HBCT LOGISTICS SYSTEM

10-3. The HBCT organic BSB provides the HBCT distribution based, centralized logistics. The BSB is fully digitally enabled (BCS3; FBCB2; Movement Tracking System [MTS] that assist with providing a Logistical Common Operating Picture [LCOP]) with communications linkages to the STAMIS. These systems are critical to enabling the BSB's Support Operations Office to gain and maintain oversight of logistics requirements. The increasing use of assured communications and improvements in digital information technology provide the logistician in the BSB, the FSC and the S4 the information dominance and digital tools needed to tailor the sustainment package. Through near real-time information, the HBCT staff and BSB staff are able to make timely adjustments in their support requirements.

10-4. BCS3 and FBCB2 are combat multipliers that provide logistics status and information in support of sustainment planning and operations. BCS3 receives subordinate unit logistical reports from battalion FBCB2 terminals, and it transmits reports and requirements to echelons above brigade support elements. The logistics planner can plug their BCS3 laptop into the local area network (LAN) or tactical satellite communications (SATCOM) and immediately view supplies either in-transit or at supply points around the world. Maps can be viewed down to five-meter satellite-photo imagery and drill down on either the transporter or supply point icon, which enables viewing of equipment, parts and supply stocks down to individual item level of detail. Additionally, using the same procedures, the log planner can view ship and air manifest information, enabling logisticians to have complete asset visibility literally from the factory to the foxhole. BCS3 also provides movement planning, deconfliction of convoys and tracks actual movement of personnel,

equipment and supplies. BCS3 provides battle update briefing (BUB) products that are dynamically updated by the system's software and tailored to each command.

10-5. Requesting of supplies and other logistical services are accomplished using STAMMIS such as unit level logistics system-general (ULLS-G)---soon to be ULLS-Enhanced, standard Army retail supply subsystem (SARSS), Standard Army Maintenance system (SAMS)—soon to be ULLS-Enhanced, Standard Army Ammunition System-Modernized (SAAS-Mod), supply property book system-revision (SPBS-R)---soon to be PBUSE, and standard installation personnel system (SIDPERS) (soon to be replaced by an interim system eMILPO and then Defense Integrated Military Human Resource System (DIMHRS). DIMHRS is an internet based single entry integrated military personnel and pay management system for all DOD military Services and components during peace and war, including mobilization and demobilization.

10-6. The BSB consists of four companies: a headquarters and headquarters company; a field maintenance company; a distribution company; and a medical company. It carries sustainment stocks that exceed organic haul capability of the HBCT battalions, and plans and coordinates HBCT sustainment operations.

10-7. The BSB and the FSCs are the key to HBCT modularity as they can sustain operations with the support provided by two combat loads of supplies for the HBCT and can “plug into” theater logistics organizations.

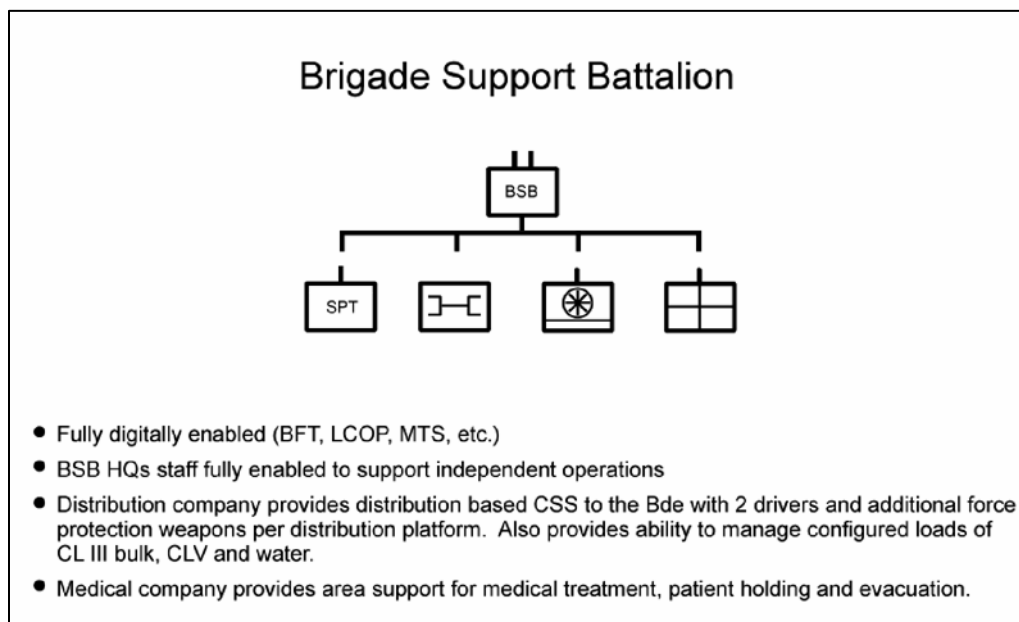


Figure 10-1. Brigade Support Battalion

10-8. The HHC provides command and control of all company level operations for the battalion headquarters. Besides the common responsibilities, the commander is responsible for commanding and controlling the company, developing the headquarters' occupation plan, ensuring local headquarters security and arranging and moving the company headquarters.

10-9. The distribution company is a multifunctional company containing capabilities to receive, store, issue and distribute all major classes of supply; produce and store water; operate an Ammunition Transfer and Holding Point (ATHP); and to manage configured loads of CL V.

10-10. The field maintenance company is designed to provide field maintenance and recovery support to elements of the HBCT not supported by an FSC, and to provide limited back-up field maintenance support to the Forward Support Companies (FSC) as required. This maintenance company will also serve as the clearinghouse for equipment entering and leaving the HBCT area of operations (AO).

10-11. The medical company provides area support for Level II medical treatment, patient holding and evacuation to the HBCT. When augmented with the Forward Surgical Team, it provides initial resuscitative surgical treatment to stabilize patients pending evacuation to an appropriate medical treatment facility.

UNIT LEVEL LOGISTICS ORGANIZATIONS

10-12. The two combined arms battalions, the fires battalion, and the reconnaissance squadron of the HBCT each have task organized FSCs that they are assigned/are organic to the battalion/squadron. The FSC provides them distribution based logistics for CL III, V and general supplies; field level maintenance and recovery; and field feeding. The FSC can operate either consolidated or with split distribution points/logistic release points, based on METT-TC. The FSC commander is the senior logistics commander for the combat battalion. The FSC is tasked and emplaced by the battalion commander. The FSC provides field maintenance, and all classes of supply, minus medical, to the combat battalion, while the combat battalion headquarters company medical platoon provides Echelon I medical care to the supporting FSC.

10-13. The FSCs accomplish their core functions through centralization of support. Centralization of support accomplishes the dual functions of providing battalion commanders with greater mobility as well as increased efficiency and effectiveness in the follow of support and supplies. Centralized support allows the BSB commander to cross level between FSCs and weigh the battle logistically or surge, as required. Centralization of support is enhanced through employment of maturing technology available to the UEx logistician. The FSC has the capability to command and control and integrate attached units such as engineer support teams, or teams from the UEx or UEy. Equipped with FBCB2, the FSC has the capability to provide near real-time information on the battlefield, which greatly assists in the support effort.

10-14. The FSC is a multi-functional unit that includes a food service section, distribution platoon and a field maintenance platoon organized to support a battalion. Based on METT-TC, one option is for the FSCs to locate 4 to 12 kilometers behind the combat battalion e.g. in the Combined arms battalion Support Area (CABSA) if the conditions were high intensive, offensive operations. In defensive operations the FSC's field trains and maybe the combat trains could locate in the BSA. The location of the FSC is normally a combat battalion commander's decision. Unit company supply sergeants are most often located in the CABSA with the FSC. They assemble their company LOGPACS and then move their vehicles to the LRP where company First Sergeants or their representative meets the LOGPAC and guides it to the company resupply point. Again based on METT-TC, an alternative approach to positioning of the FSCs in the CABSA is the traditional (pre-HBCT) technique of collocating with the BSB in the BSA. The FSCs collocate the maintenance control officer, the ULLS-G and SAMS-1 and 2 boxes and field maintenance teams with the battalion combat trains in order to facilitate and integrate S1 and S4 requirements with the FSC support capabilities. Based on METT-TC, the S4 has the flexibility to locate the unit maintenance collection point, recovery, emergency resupply of Class III and V, and other assets throughout the battalion area of operations. The battalion will also locate its aid station within the combat trains for force protection and proximity considerations. Field maintenance teams (FMT) from the FSC are habitually associated with each company under the supervision of the company 1SG. The 1SG also has under his control the combat medical team with ambulance capability from the

HHC. Casualties are evacuated by tracked ambulance to the casualty collection point (CCP) where they are consolidated and further evacuated back to the BAS.

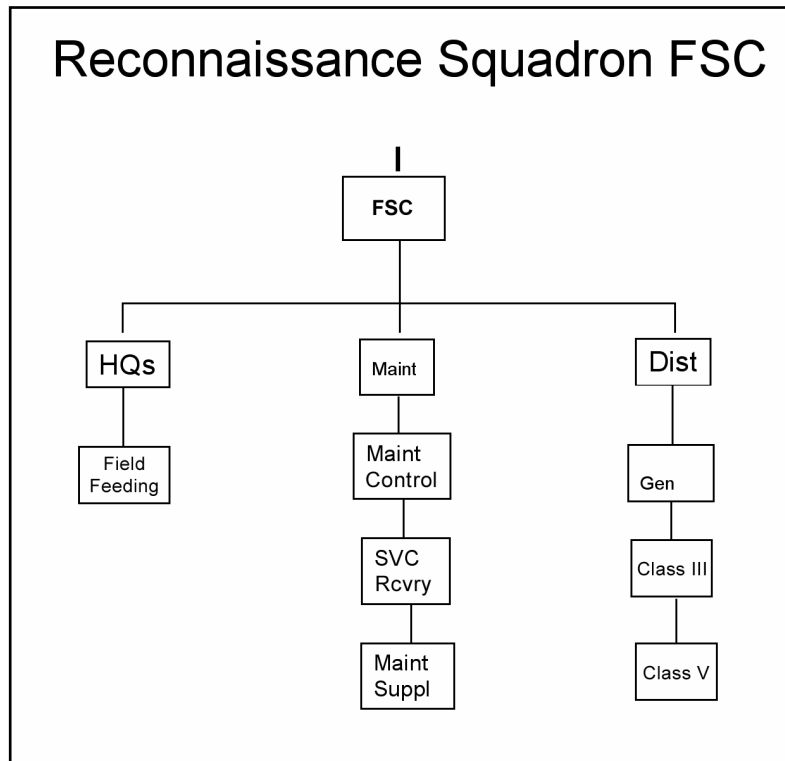


Figure 10-2. Reconnaissance Squadron FSC

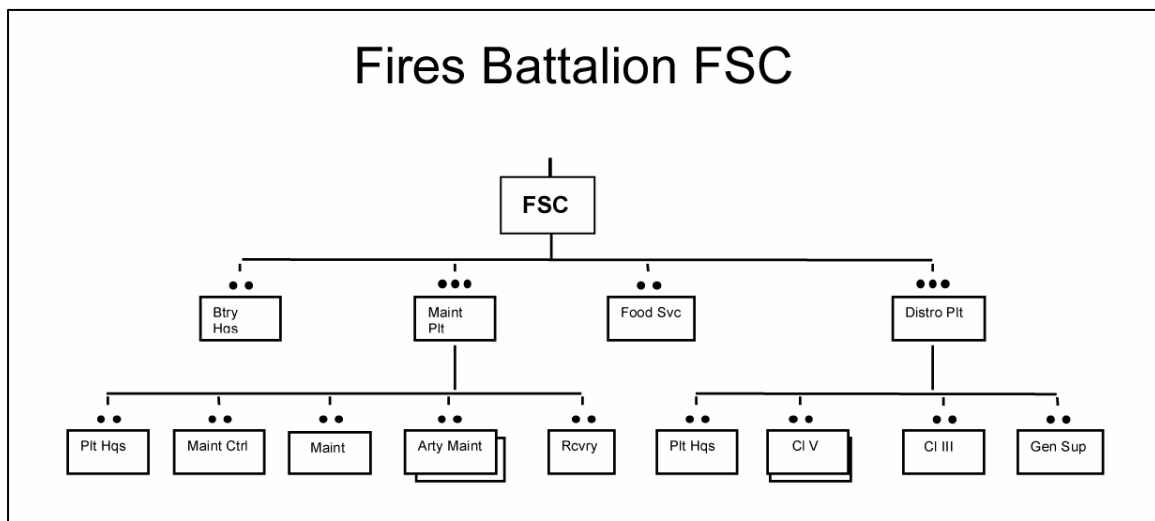


Figure 10-3. Fires Battalion FSC

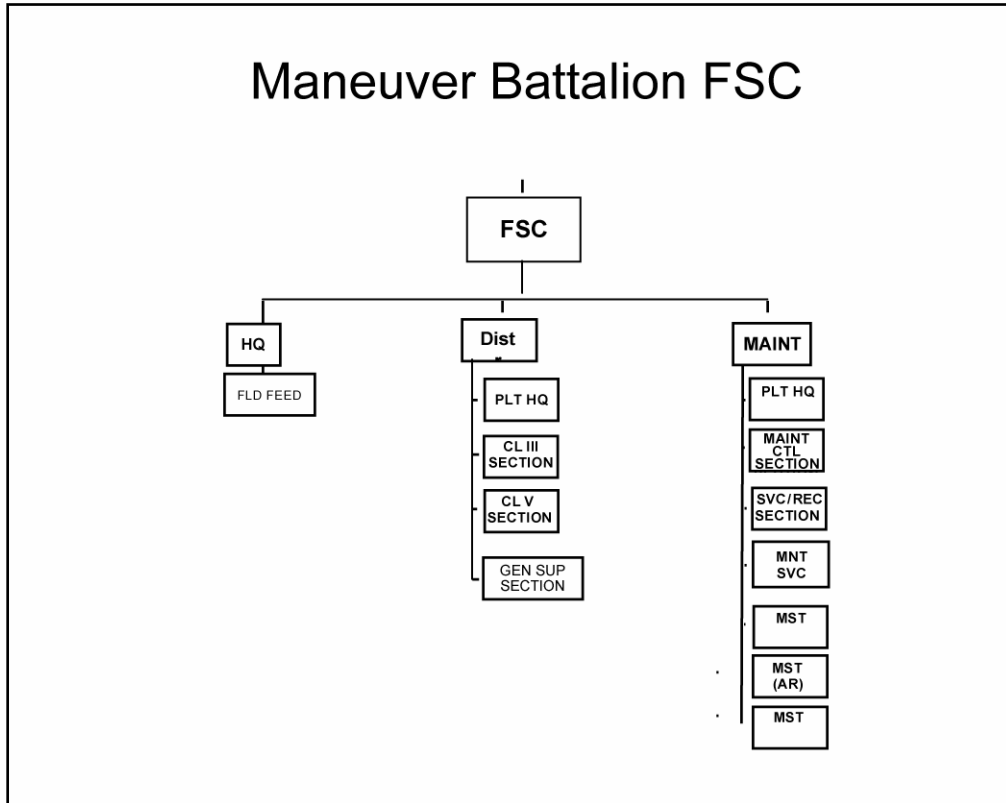


Figure 10-4. Combined Arms Battalion FSC

10-15. The field maintenance platoon of the FSC provides field level maintenance to the battalion/squadron. It provides service and recovery, automotive and armament support, ground support and electronic/missile maintenance and maintenance management to the battalion/squadron. The platoon can also provide field maintenance platoons to the supported companies.

10-16. The distribution platoon is organized to move CL III, V, water, and dry cargo.

10-17. The Brigade Troops Battalion (BTB) has an organic support platoon that provides the BTB maintenance, CL III, water, and field feeding support. The organic medical support section provides treatment and evacuation services. This support unit may receive augmentation from the BSB per mission requirements. The BTB support includes the HBCT HHC.

HBCT LOGISTICS OVERVIEW

10-18. The HBCT commander plans his tactical and sustainment operations concurrently. The commander ensures that his scheme of maneuver and fire support plan are logistically supportable. Under conditions of highly mobile operations, the enemy will not allow logistical units to move freely or securely behind combat units. Even defensive operations in the COE must anticipate unconventional forces throughout the battlespace. The logistics units (BSB and FSCs) conduct replenishment operations to resupply the combat units with LOGPACs via combat logistics patrols. Replenishment operations are defined as follows:

- Combat Replenishment Operations (CRO) are brief or pit-stop like events to rearm, refuel, provision essential supplies, and supports the maintenance function by cross leveling and use of on-board spares with duration of up to 3 hours.
- Sustainment Replenishment Operations (SRO) are quick, in-stride, sustainment operations that are conducted within a unit's battle rhythm with duration of 3 to 7 hours. An SRO can be either a deliberate or hasty operation if an opportunity exists or circumstance allow.
- Mission Staging Operations (MSO) are intense time-sensitive operations which include all preparations for an upcoming mission—planning, troop leading, rehearsals, training, reconnaissance, and surveillance, reconstitution, tailoring for the next mission, information operation, etc. to ensure mission success. This is a planned deliberate operation. MSO can be of duration of one to three (1-3) days that will require support from the BSB and sustainment brigade.

10-19. To maintain tempo in the offense or endurance in the defense, commanders fit logistics into the battle rhythm of their operation as fully as possible and design their tactical plan to reflect the logistical constraints of the situation. If sustainment planners identify constraints, the commander evaluates the risks and, if necessary, establishes new priorities or modifies his tactical plan to eliminate or reduce the risks. An advantage of having the offensive initiative is the ability to control the timing and tempo of operations. This makes it possible to sequence tactical combat operations and establish a predictable battle rhythm among combat elements. Having both the initiative and control of the rhythm and tempo of the advance, makes it easier to anticipate logistical requirements and organize the security and logistical operations to meet them.

10-20. In the defense, the HBCT will resupply its battalions either during the fight or by rotating companies into positions for Combat Replenishment Operations (CRO) or by relieving committed battalions with fresh forces in order to sustain them. To conduct sustainment operations securely during attacks, tactical commanders have three options:

- Halt the attack periodically, consolidate in secured positions, secure the lines of communications, and move supplies and logistical units forward.
- Field security forces large enough to secure logistical forces wherever they need to be on the battlefield while combat units continue the attack at a pace that does not outrun the or outdistance the logistics units.
- Establish a battle rhythm that supports an aggressive offensive or sustained defense, without becoming predictable to the enemy. This is done by rotating leading BCTs through logistical support one or two at a time while the force as a whole continues the operation. This maintains pressure on the enemy and ensures the initiative. The HBCT would halt in or move to anticipated positions with logistics units already close behind them. This approach could be used by the UEx for brief replenishment operations, or for periodic mission staging operations of longer duration to reequip, resupply, plan, receive attachments or reinforcing support, and rest in preparation for continuing the mission. This method allows logistical units to focus upon specific units at a given time rather than continually supplying all of them and requires fewer security forces since only a portion of the battlespace routes are secured for the period of logistical activity. The UEx commander will open and close support routes and air corridors only as needed and secure the necessary space only for a relatively short period of time.

10-21. The BSB's distribution and field maintenance capabilities are designed to support MSO and SRO as pulsed or surge operations synchronized with maneuver operations primarily through distribution to the FSCs. The BSB combines a logistics common operating picture via digital enablers with its distribution capabilities to develop an efficient approach to sustainment operations, forming a seamless distribution pipeline. This pipeline is

designed to reduce stockpiles and substitute delivery speed for mass. Total asset visibility (TAV), to include in-transit visibility (ITV), along with advanced distribution management and decision support, will give the BSB personnel visibility over all assets and infrastructure capacity in the AO. Direct throughput of supplies from UEx and the HBCT to the combat battalions/squadron is the rule rather than the exception with distribution-based logistics. The FSCs in the battalions/squadron are the cornerstone of the distribution-based logistics system. Essentially all logistical elements minus medical in the previous AOE battalion headquarters company are now organized as part of the FSC.

10-22. The personal involvement and on-the-scene appraisal of the situation by logistics personnel is as important to mission accomplishment, as is personal involvement by combat leaders. Logistics planners must:

- Understand the commander's intent, priorities, and concept of operations
- Monitor the battle
- Anticipate future requirements and use initiative to meet them
- Pre-position supplies and equipment
- Push support forward i.e. distribution based logistics
- Conduct risk analysis with force protection requirements
- Seek windows of logistics opportunity
- Use established procedures during lulls in battle to rearm, refuel, and repair
- Detect then contain or destroy rear area threats within their capabilities
- Allocate resources

10-23. The key logistics personnel in the HBCT are the HBCT XO, S1, S4, HBCT surgeon, chaplain, and the BSB commander and BSB support operations officer. The BSB commander is the HBCT commander's senior logistician. The BSB normally positions all of its elements within the BSA in accordance with the HBCT's tactical plan.

10-24. The majority of supplies are distributed to units using a LOGPAC system delivered via combat logistics patrols. Based on supply requests generated by subordinate units and anticipated supply requirements, subordinate S4s coordinate the distribution of supplies. Battalion field trains serve as the link between the BSB, combat trains, and their supported companies. In conjunction with the BSB, they provide all classes of supplies and services to maintain unit basic loads and combat effectiveness. Field trains support their companies and attached units by assembling preconfigured supply packages called LOGPACs. The transportation assets used to move LOGPAC supplies forward may also be used to transport replacements or return-to-duty Soldiers. Cargo trucks, fuel tankers, and ammunition trucks transport LOGPACs via combat logistics patrols from the CABSA to a battalion LRP under the control of the distribution platoon leader. Company/troop 1SGs pick-up their unit's LOGPAC, resupply their units, and return the LOGPAC vehicles back to the LRP. LOGPACs are used as a routine method of resupply and normally occur at least once a day, but not for all classes of supply i.e. METT-TC dependent. Distribution of large quantities of some classes of supply such as artillery ammunition or Class IV may be delivered directly from UEx or UEy logistics units to the using unit by "throughput" distribution. However, the HBCT S4 in coordination with the BSB support operations officer must ensure resources are available from the supported battalions to download the resources and the flatracks (or aerial rigging equipment) are tracked for subsequent retrieval and backhaul. Also, delivery of critical supplies, such as repair parts, medical, or emergency resupply, may be conducted at any time using air or ground transportation assets to deliver the supplies.

BRIGADE SUPPORT AREA

10-25. The BSA is the logistical hub of the HBCT. It consists of the BSB CP, BSB assets, and other logistics units from the UEx and higher echelons (see FMI 4-90.1). The combat

battalion's FSC can be located forward in the combat battalion's support area (field trains) and CTCP (combat trains), but may locate in the BSA based upon METT-TC conditions. The field trains/combat trains locations discussed in this chapter are options for given conditions of the battlefield and not a specified requirement. If the combat battalion was fighting under conditions like a high OPTEMPO offensive operation, given the distribution-based nature of the Army's current logistics system (a change from the old AOE supply point distribution doctrine), the combat battalion's support area could move out as far as ten to fourteen kilometers from the BSA. If the BSB uses a Forward Logistics Element (FLE) based upon orders from the HBCT commander, the distance of the FSC from the BSA could be extended even further.

10-26. The HBCT S3 in coordination with the HBCT S4 and the BSB support operations officer determine the location of the BSA. The BSA should be located so as not to interfere with the tactical movement of HBCT units, or units that must pass through the HBCT area, while still maintaining responsive support to the HBCT. Its size will vary with METT-TC. The BSA is normally located on a UEx MSR in the rear or sustainment area and ideally out of the range of the enemy's medium artillery. The BSA should be positioned away from the enemy's likely avenues of approach and entry points into the HBCT's rear area. The BSA may also be located in a well-vegetated area or in an urban area. Considerations for the BSA location include:

- Defensibility
- Availability of roads capable of handling heavy traffic and large vehicles in all weather
- Cover and concealment
- Site drainage
- Communication profiles
- Accessibility to air assets
- Adequate space for dispersion of assets and units
- Availability of a water source

10-27. Security and defense of the BSA is the responsibility of the BSB commander. He and his staff develop and implement security measures that include perimeter security, maintaining a quick reaction force, local patrolling, and the use of operations. Units in the BSA also prepare fighting positions, fortifications, and obstacles to enhance their survivability. Time and resources spent conducting force protection decreases time and resources expended on sustainment activities. The HBCT commander should designate combat units to provide rear area security or to be prepared to react to rear area threats under the C2 of the BTB commander, who is responsible for rear area security or the otherwise unassigned area in non-contiguous operations. Security of logistics assets in a nonlinear environment is particularly challenging.

MAIN SUPPLY ROUTES

10-28. MSRs are routes designated within the HBCT's AO upon which the bulk of sustainment traffic flows in support of operations. An MSR is selected based on the terrain, friendly disposition, enemy situation, and scheme of maneuver. Supply routes are selected by the HBCT S4 in coordination with the BSB support operations officer and HBCT S3. They also plan alternate supply routes for use if a MSR is interdicted by the enemy or becomes too congested. In the event of NBC contamination, either the primary or alternate MSR may be designated as the "dirty MSR" to handle contaminated traffic. All alternate supply routes must meet the same criteria as the MSR. MPs assist with regulating traffic and engineer units, if available, maintain routes. Security of supply routes in a nonlinear environment may require the HBCT commander to commit non-logistics resources.

10-29. Some route considerations are:

- Location and planned scheme of maneuver for subordinate forces to include maneuver forces, artillery units, and other UEx forces moving through the HBCT's AO
- Route characteristics such as route classification, width, obstructions, steep slopes, sharp curves, and type roadway surface
- Two-way, all-weather trafficability
- Weight classification of bridges and culverts
- Requirements for traffic control such as at choke points, congested areas, confusing intersections, or along built-up areas
- Number and locations of crossover routes from the MSR to alternate supply routes
- Requirements for repair, upgrade, or maintenance of the route, fording sites, and bridges
- Route vulnerabilities that must be protected. This may include bridges, fords, built-up areas, and choke points.
- Enemy threats such as air attack, conventional and unconventional tactics, mines, ambushes, and chemical strikes
- Known or likely locations of enemy penetrations, attacks, chemical strikes, or obstacles
- Known or potential civilian/refugee movements that must be controlled or monitored

SECTION III – HBCT COMBAT SUSTAINMENT PLANNING

10-30. The S4, S1, HBCT Brigade Surgeon, chaplain, and BSB/SB support operations officers are the principal logistics planners in the HBCT. The HBCT commander designates who will oversee logistics synchronization for the HBCT. Traditionally (pre-HBCT) this has been the HBCT XO. However, the commander may elect to use the DCO for that mission while the XO focuses on other staff planning, integration and synchronization functions in the MAIN CP. The S4, S1, and BSB support operations officer maintain a continuous logistics estimate during all operations. They use the logistics estimate to determine sustainment capabilities, anticipate support requirements, identify and resolve shortfalls, and develop support plans. They integrate into all planning what is needed to develop and synchronize sustainment with maneuver and fire plans. Sustainment commanders and planners must thoroughly understand the mission, tactical plans, and the HBCT commander's intent. They must know:

- Mission, task organization, and concept of operations for all subordinate battalions and attachments under HBCT control
- UEx and UEy sustainment plans
- Known and anticipated branch plans and sequels
- The density of personnel and equipment of each subordinate unit
- Known and anticipated enemy situation and capabilities
- Capabilities and limitations of subordinate units

PLANNING OVERVIEW

10-31. Logistics planners must understand the HBCT's current and projected sustainment capabilities. They use information collected from personnel and logistics reports and operational reports to determine the personnel, equipment, and supply status of each unit within the HBCT. They consider the disposition and condition of all supporting sustainment

units as well as individual unit-level capabilities. They analyze this data and the current situation to determine the HBCT's logistical capabilities and limitations.

10-32. Logistics planners must anticipate and understand support requirements of a tactical plan or COA. The S1, S4, and the BSB commander/BSB support operations officer, analyzes all COAs and modifications to current plans. He assesses their sustainment feasibility, identifies support requirements, and determines requirements for synchronization. The S1 and S4, like the commander, must visualize how the battle will unfold to determine critical requirements for each sustainment function. They logically consider the requirements for each sustainment function during the operational phases of before (prior to commitment), during (commitment to battle), and after (future missions). They analyze each COA/plan and consider the following:

- Type and duration of the operation
- Task organization, tasks, and sustainment requirements of subordinate forces
- Ramifications of tactical operations such as river crossings, tactical pauses, long movements, preparatory fires, or defenses
- Need for special equipment, supplies, or service.
- Requirements to separate, disassembly, configure, uncrate, or transload supplies above normal requirements
- Requirements for reconstitution
- Required varieties and quantities of all classes of supplies (especially Class III, V, and IX)
- Requirements for support of reconnaissance forces, security operations, or deception efforts
- Need for Class IV/V obstacle material
- Positioning of combat trains and other supporting logistics elements
- Casualty numbers and likely locations

10-33. The S4's analysis also includes estimated attrition based on likely outcomes of subordinate missions. Analysis of estimated attrition primarily focuses on critical systems such as tanks, infantry fighting vehicles (IFV)/armored personnel carriers (APC), artillery and engineers. The S1 assists by projecting potential personnel losses. To perform this analysis, current unit personnel and equipment densities, standard planning factors, operations logistics software, and historical data are used in conjunction with OPLOGPLN. When analyzing COAs, this projection helps the commander understand the potential losses and associated risks of each COA.

10-34. To understand the HBCT's capabilities and determine support requirements, logistics planners apply a METT-TC analysis to the situation. Table 10-1 gives an example of general sustainment consideration for tactical operations.

Table 10-1. Logistics considerations for tactical operations

MISSION
<ul style="list-style-type: none"> • HBCT mission and commander's intent. • Concept of operations. • Higher headquarters' mission and concept of operations. • Higher headquarters' concept of support. • Type and duration of operation. • Required supply rate. • Controlled supply rate.
ENEMY
<ul style="list-style-type: none"> • Enemy capabilities and tactics that could threaten sustainment operations. • Enemy unconventional tactics that could threaten sustainment operations. • Anticipated amount of EPWs.
TROOPS
<ul style="list-style-type: none"> • HBCT's task organization to include supporting logistics units. • Location and condition of all units, including sustainment units. • Current and projected status of personnel, equipment, and classes of supply. • Availability and status of services. • Unit-level sustainment capabilities.
TERRAIN AND WEATHER
<ul style="list-style-type: none"> • Effects of weather and terrain on sustainment operations. • Additional sustainment requirements of the HBCT due to weather and terrain. • Condition of infrastructure such as roads and bridges.
TIME AVAILABLE
<ul style="list-style-type: none"> • Impact on the ability to build-up supplies and replenish units. • Planning and preparation time for sustainment units. • Impacts of time on support requirements and distribution methods.
CIVIL CONSIDERATIONS
<ul style="list-style-type: none"> • Host-nation support and contract services. • Impact of civilian and refugee movements. • Potential for hostile reactions by civilians against sustainment operations.

10-35. The S4 and BSB support operations officer must balance support requirements and priorities with available sustainment capabilities. They consider existing stockages, anticipated receipts, capacities, and capabilities. They must assess the status of all logistics functions required to support the HBCT and compare them to available capabilities. They identify potential shortfalls then take or recommend actions to eliminate or reduce their effect on the operation.

10-36. When a logistics shortfall is identified, the S1, S4, HBCT surgeon, chaplain, and BSB support operations officer take every action available to eliminate or reduce its effect. They must understand its potential impact on the force, the risk it presents to mission accomplishment, its duration, and which requirement exceeded the unit's capabilities. They analyze the shortfall to determine its cause such as battle losses, supply availability, resource availability (equipment, man-hours), or distribution shortfall. They consider the following actions to resolve a shortfall:

- Shift supplies or assets by phase of the operation.
- Request support or additional assets from higher headquarters.
- Use alternative distribution methods.
- Consider the use of host nation support.
- Consider pre-positioning supplies or attaching additional sustainment capabilities to subordinate forces.
- Modify the COA or plan.

10-37. Based on the logistics estimate, the S4, HBCT surgeon, chaplain, and BSB support operations officer develop support plans. The overall sustainment plan is briefly described in the concept of support. The concept of support provides all commanders and staffs a general understanding of the commander's priorities and how the operation will be logistically supported. Detailed sustainment plans are outlined in a logistics annex to the HBCT's operation order (OPORD) or as part of a fragmentary order (FRAGO). The BSB commander also issues an OPORD to all units under his control. The BSB commander in conjunction with the S4 and XO closely monitor the implementation of the sustainment plan. They adjust sustainment operations or shift resources to account for changing situations, changes in priorities (such as shifting the main effort) or to replace lost sustainment capabilities.

SUPPORTING OFFENSIVE OPERATIONS

10-38. The following paragraphs describe the logistics considerations during the offense.

ANTICIPATE REQUIREMENTS

10-39. Anticipate increased consumption of Class III (B), Class V, and Class IX due to substantial maneuver. Though ammunition expenditures may not be as high as with a defense, responsive resupply is essential. Offensive operations place a heavy requirement on the HBCT's transportation assets. Offensive operations also increase equipment maintenance requirements. The staff must also consider plans for processing and evacuating enemy prisoners of war (EPWs).

10-40. *Class III.* Ensure all units are topped off on fuel and are carrying their basic load of petroleum, oil, lubricants (POL) package products prior to execution. Ensure all forward stocks are built up and the Class III point is prepared to move forward rapidly and set up tactical refueling points. Plan refueling operations based on the consumption estimates for each individual task force and unit.

10-41. *Class V.* Ensure subordinate units are fully resupplied with Class V prior to the operation and plan for resupply during the operation with the FSC's and BSB's combat load for the supported units. The S4 and support operations officer plan for ammunition resupply to arrive at designated ammunition transfer holding points (ATHPs) during tactical pauses for movement forward by the logistics distribution assets. ATHPs are located as far forward as possible and use throughput distribution whenever feasible. Additionally, the combined arms and fires battalions and the reconnaissance squadron should carry additional stockages of critical ammunition. When practical, consider pre-positioning artillery ammunition at initial firing positions to prevent firing batteries from using their combat loads during preparatory fires.

10-42. *Class IX/Maintenance Support.* Ensure rapid repair and return of nonmission capable equipment to support the operation. The commander establishes his maintenance priorities based on what systems and units are critical to the success of the operation. Maintenance procedures must place emphasis on BDAR. The BSB can send limited back-up forward to support the FSCs. FMTs at the unit maintenance collection points (UMCPs) ensure support is positioned well forward. Forward supporting maintenance teams from the BSB maintenance company must have the necessary transportation, communications assets, tools, and repair parts. This applies to the FSC FMTs as well. When feasible, consider the use of air transportation to bring critical repair parts forward.

10-43. *Class VIII and Force Health Protection.* Offensive operations challenge logistics planners with historically higher casualty rates, high Class VIII consumption, and extended evacuation distances. Offensive operations often prevent detailed route reconnaissance and rehearsals, and require medical units to maintain SU of moving friendly and enemy units. Offensive operations have some advantages as well. Planners can predict when and where casualties are likely to occur and plan for the event. In addition, as the attack continues to advance it is easier for medical personnel to approach and acquire the patient, and may create conditions for aero-medical evacuation. Planners should consider the following: place BSB medical assets as far forward as possible. Ensure all treatment teams have a full combat load of supplies before the operation begins. Push prepackaged sets of Class VIII supplies to battalion aid stations (BASs) . Position additional ground evacuation assets at BASs and level II care. Ensure responsive medical support is established for forward reconnaissance elements and cross-FLOT extraction. Identify and coordinate AXP's along the axis of advance and on the objective. Identify triggers to control movement of medical assets. Retain the flexibility to shift nonstandard evacuation assets to support mass casualty situations. Ensure integration of air ambulance support to include coordination of A2C2 requirements, establishing clear lines of authority to launch a MEDEVAC, and identification of PZs and LZs.

SYNCHRONIZE SUPPORT

10-44. Plan refueling and resupply operations based on anticipated support needs of each subordinate unit. Integrate refueling and resupply replenishment operations with the scheme of maneuver to ensure proper timing and to avoid interfering with likely or planned maneuver actions. Plan locations of refueling and resupply operations in covered and concealed locations as far forward as possible. Plan triggers for activating and deactivating collection points and LRPs based on the HBCT's movement and execution. Coordinate the locations, displacements, and routes of sustainment assets and units to maintain responsive support. The BSB coordinates with the HBCT S4 to use road nets efficiently. Ensure the securing of MSR's is included in the tactical plan. Also, consider using captured enemy supplies and equipment such as POL.

MAINTAIN SECURITY

10-45. Ensure adequate security of routes and sustainment assets based on the potential threat of undetected enemy forces. Dedicated security forces (if available) and sustainment units rehearse and prepare for enemy contact. Anticipate the need for route clearance and reconnaissance to support the movement of wheeled vehicles based on the terrain and roads available. This is especially critical for sustainment traffic moving across previous enemy positions that may contain obstacles and large amounts of unexploded ordnance. Ensure that logistics preparations for the mission does not give away tactical plans.

SUPPORTING DEFENSIVE OPERATIONS

10-46. The aim of sustainment activities in the defense is to support defensive preparations, security operations, the MBA engagement, and transition to the offense. The following paragraphs describe the logistics considerations during the defense.

ANTICIPATE REQUIREMENTS

10-47. Anticipate increased consumption of Class IV and Class V, and a decrease in Class III requirements. Anticipate the immediate requirement to replenish ammunition and provide additional ammunition stocks based on subordinate unit tasks. The demand for decontaminates and chemical protection equipment may also increase. Estimate the requirements for Class IV/V (obstacle material) and push materials forward early to facilitate defensive preparations. Plan for unit guides to linkup with the push of Class IV/V from the BSA to an LRP for the battalion or squadron. Plan and allocate additional Class III and maintenance support for engineer assets such as blade assets during the preparation phase.

AVOID POSITIONING

10-48. Avoid positioning logistics sites and units along enemy ground/air avenues of approach or in the vicinity of templated artillery, NBC, or situational obstacle strikes. Coordinate movement and terrain requirements with maneuver plans and positioning of other units such as artillery. Position the BSA and sustainment units as far to the rear as possible, but close enough to be responsive to maneuver units. Periodically move sustainment units based on the threat level to decrease their vulnerability of detection. Maximize the use of cover and concealment, dispersion, and protection afforded by the terrain.

AVOID PATTERNS

10-49. Avoid setting patterns of support to decrease the vulnerability of enemy interdiction. Vary times for LOGPACs moving in combat logistics patrols and LRPs locations. Consider conducting LOGPACs and other routine logistics activities during limited visibility. Maintain OPSEC.

PROVIDE SUPPORT IN DEPTH

10-50. Ensure the logistics structure supports the entire defense in depth. Normally, the initial focus of support is to the defensive preparation effort. Ensure maintenance, replenishment, and evacuation plans support security forces and forward reconnaissance assets. As the battle develops, the sustainment priorities normally shift to support the MBA units. MSRs support the entire scheme of maneuver to include all contingencies, subsequent positions, and offensive options. Plan alternate MSRs to provide flexibility. Develop and rehearse triggers for the movement, displacement, and evacuation of sustainment sites based on the enemy situation and the scheme of maneuver. Sustainment planners should consider the following during defensive planning:

- Establishing replenishment procedures for both mounted and dismounted reconnaissance missions.
- Establishing replenishment procedures for air versus ground insertion of reconnaissance assets.
- Developing procedures for both aerial and ground sustainment.
- Developing replenishment operations techniques, to include:
 - Using multiple/false LZs away from outposts as cache drop-off points.

- Predetermining the locations and times for resupply of Classes I, III, IV, V, VII, and XI.
- Establishing locations for caches on successive missions/insertions.
- FHP considerations include:
 - Determining the FHP requirements.
 - Deploying medical evacuation assets with supporting security assets in DS of recon operations, as required and appropriate.
 - Planning for CASEVAC/extraction operations.
 - Developing FHP SOP for supporting recon elements deployed deep into enemy territory.
 - Selecting evacuation sites (remember that all cache sites are potential casualty evacuation sites).
 - Developing TTPs for cross-FLOT casualty extraction.
 - Establishing the time for pickup and the pickup point for aerial extraction of casualties.
 - Developing a detailed plan for ground extraction, to include link up to quick-reaction force (QRF) and escort to casualty exchange point.
 - Conducting rehearsals for day and night extractions.
 - Requesting escort if a QRF is not established.

10-51. During reconnaissance missions if a member or members of the reconnaissance squadron become casualties, initial care will be self-aid, CLS advanced first aid, or emergency medical treatment (EMT) from a trauma specialist. Trauma specialists may be deployed as a crewmember in one of the reconnaissance vehicles or an ambulance team may be tasked from the BSBs medical company to provide support directly to the recon squadron (evacuating casualties to the nearest AXP or BAS). If casualties/patients require extraction/medical evacuation, it becomes a combat mission. Since this is a combat mission that may require offensive action, medical personnel are placed under the control of the QRF leader. Provided in Figure 10-5a is a technique for conducting cross-FLOT ground extraction and lists the overall considerations. Figure 10-5b is a technique for conducting cross-FLOT air extractions and lists the overall considerations.

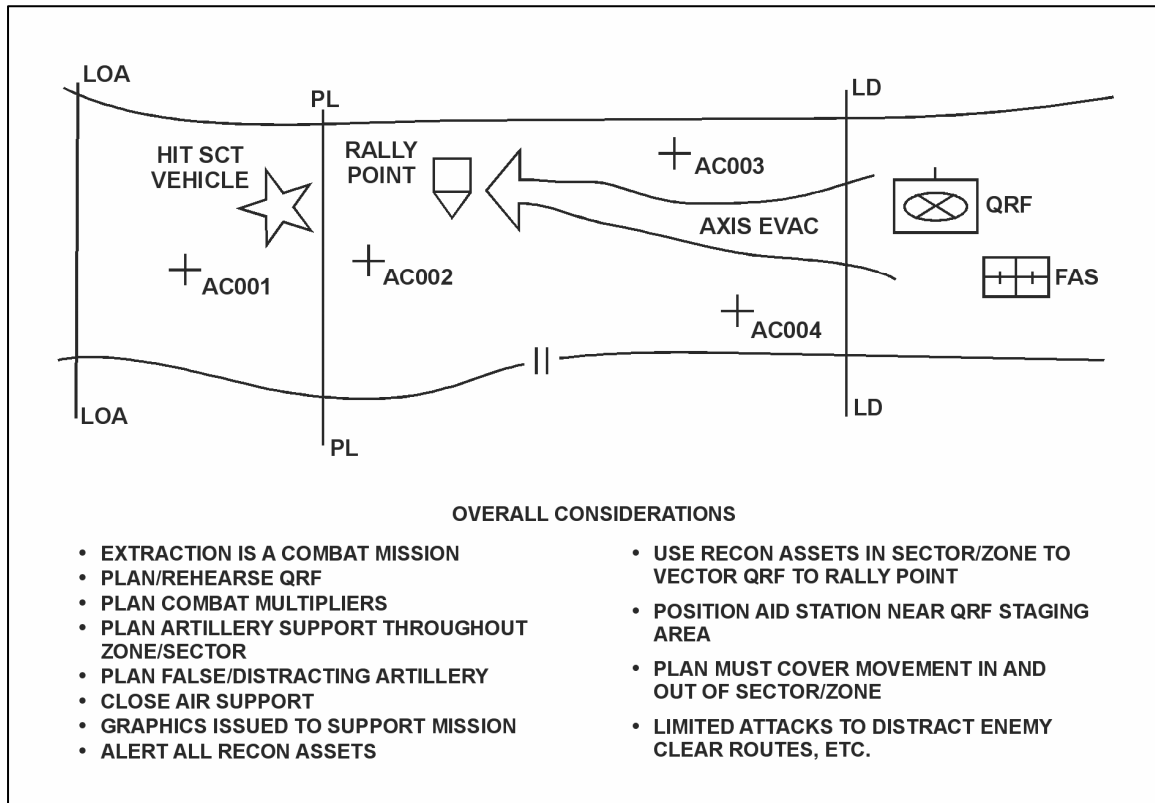


Figure 10-5a. A Technique for Cross-FLOT Ground Extraction

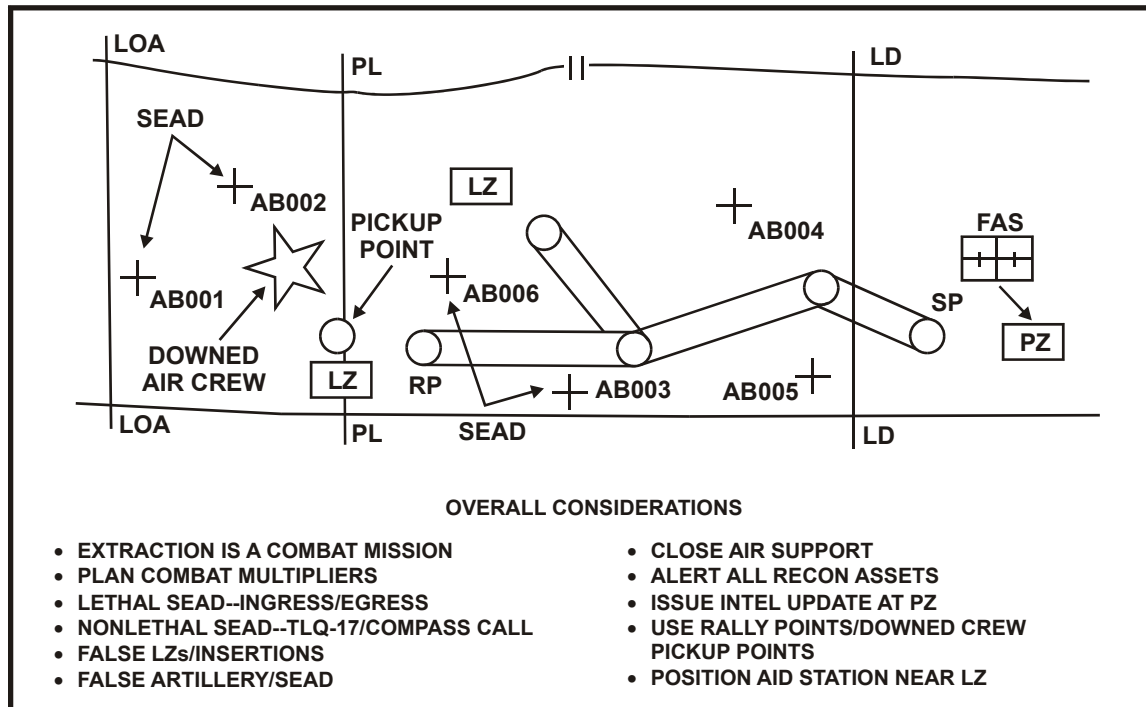


Figure 10-5b. A Technique for Cross-FLOT Air Extraction

CLASS IV/V (OBSTACLE MATERIAL)

10-52. In defensive operations the HBCT may be augmented with additional engineer forces, to include one or more Engineer battalions. Whether augmented or not, it is critical to identify Class IV/V requirements to support CABs, other units, and directed obstacle belts early in the planning process. Identify locations of CAB, BTB and other unit Class IV/V points early by coordinating with the supporting engineer battalion (if present) CAB S4s. Push materials forward as soon as possible. Ensure Class IV/V points are centrally located to support directed obstacle belts while remaining concealed from the enemy. Ensure material handling equipment is positioned at each Class IV/V point. Coordinate sufficient manpower support to organize materials, uncrate mines, cut overhead cover for fighting positions, and load material into haul assets. Closely track the usage of Class IV/V and maintain the flexibility to shift materials based on refinements to the plan, changes in the situation, and progress of obstacle construction. Plan to withdraw unused Class IV/V based on an event trigger to prevent loss of unused materials. Consider attaching additional haul assets to task forces or engineers to support hauling obstacle materials to construction sites. Maximize the use of UEx or UEy throughput to transport Class IV/V directly to task force Class IV/V points.

CLASS V

10-53. Push as much Class V forward as possible to the battalions or squadron based on the commander's priorities of support and anticipated ammunition requirements of each unit. Consider pre-stock of ammunition at primary and subsequent positions, but ensure pre-stocks are properly guarded and stored. Ensure the replenishment plan supports specialized ammunition requirements of all units such as artillery, ADA, and engineers. Maintain emergency replenishment stocks within battalion combat trains and with other sustainment units in depth.

MAINTENANCE SUPPORT

10-54. Maintenance priorities are approved or established by the commander. Maintenance teams dispatched as far forward as possible to cut down on the requirement to evacuate equipment. UMCPs are established close to existing road networks to enhance the “replace forward” concept.

CLASS VIII AND FORCE HEALTH PROTECTION

10-55. Defensive operations give the logistics planner the advantage of historically lower casualty rates occupation of the AO during planning and preparation phases. This allows detailed route reconnaissance, rehearsals, and site selections. Conversely, medical assets are more vulnerable to enemy action as they move into forward positions to conduct evacuation and to enemy attacks in the rear area. The medical planners, in coordination with the logistics planners, should position AXP and MEDEVAC assets to support timely casualty evacuations. Coordinate evacuation routes and plans with maneuver plans and obstacle locations. Develop a contingency plan for the loss of task force aid stations. Ensure medical support to CS and supporting external elements such as C2 facilities, engineers, AMDO, and communication nodes. Maximize the use of nonstandard ambulances to replace lost ambulances or provide additional evacuation support. Always plan for mass casualties and ensure adequate evacuation means, to include air evacuation, are developed and rehearsed.

MOVEMENT OF THE BRIGADE SUPPORT BATTALION

10-56. The HBCT S4 and BSB staff, in coordination with the HBCT S3, plans movements of the BSB to ensure responsive and forward support. The displacement of the BSA must be carefully coordinated with the tactical scheme of maneuver, location of the UEx/UEy support areas and MSRs, priorities of support, and time available for displacement. The BSB has sufficient organic transportation assets to move its personnel and equipment in one lift. However, downloaded supplies at BSB supply points and disabled equipment at BSA maintenance sites create mobility problems. The BSB and HBCT staff must closely monitor the BSB’s mobility status and anticipate mobility problems well in advance to develop solutions. For all additional transportation requirements beyond the BSB’s capability, the HBCT S4 and BSB support operations section must coordinate for internal and/or external support (see FMI 4-90.1 and FM 4-93.20 [FM 63-20]).

10-57. In addition to conducting preplanned moves, the BSB should have a SOP for conducting emergency moves. Emergency moves normally occur when the BSA must quickly relocate to avoid a significant enemy threat. The BSB commander in coordination with the HBCT staff designates alternate BSA locations and sufficient movement routes. They also ensure adequate means are employed to detect enemy threats early enough to avoid loss of the HBCT’s sustainment capabilities. The BSB commander disseminates emergency movement plans in his OPORD to all BSA elements. The BSB reconnoiters movement routes and alternate locations to ensure suitability. Emergency plans are rehearsed as time allows.

10-58. The BSB commander, in consonance with both the UEx sustainment brigade and HBCT commander, may support the tactical plan using any of the four movement and support techniques listed below:

- Movement of BSB within the HBCT formation
- Critical logistics assets provide DS to combat units
- Support from BSA/displace as an entity
- BSA echelonment/displacement by bounds

MOVEMENT OF BRIGADE SUPPORT BATTALION WITHIN THE BRIGADE COMBAT TEAM FORMATION

10-59. This technique is used when the likelihood of enemy contact is minimal; logistical demands on the BSB are expected to be light; subordinate battalions will use basic loads and organic recovery assets to satisfy initial demands. Sufficient time is allowed for the BSB to establish services and resupply the battalions prior to mission execution. BSB elements are dispersed within march columns and are secured by other elements of the HBCT. This technique provides timely movement and march security of the BSB, but precludes any meaningful support until movement ceases. This technique may be useful during tactical road marches or approach marches.

CRITICAL COMBAT SERVICE SUPPORT ASSETS PROVIDE DIRECT SUPPORT TO MANEUVER UNITS

10-60. If operational distances are significant and secure ground LOCs cannot be assured, selected sustainment assets may be placed in DS of specific combat elements of the HBCT. Normally, only critical Classes of supply (Class III and Class V) and medical support augmentation would accompany the maneuver elements. Other sustainment functions such as Level II care remain under the BSB. While this method increases the maneuver unit's sustainment capabilities, it also increases their vulnerability to enemy activity and reduces their mobility and flexibility. This technique may be useful when maneuver forces are widely dispersed such as in a security operation, reconnaissance in force, or stability operation.

SUPPORT FROM BRIGADE SUPPORT AREA/DISPLACE AS AN ENTITY

10-61. When HBCT operations are conducted in clearly defined phases with identifiable windows between phases such as in river crossings, the BSB may support the HBCT from a fully deployed BSA and then displace as an entity to a subsequent BSA location. This allows the BSB to maximize support from a mature logistical base that facilitates resupply and maintenance activities. This concept also enhances C2 of the BSB and simplifies actions for the supported force since a single point of contact is established for each service/facility of the BSA. During the time that the BSA takes to displace, support may be provided by a forward logistics element. The BSB should coordinate with higher for augmentation to maintain continuity, especially for CASEVAC.

BRIGADE SUPPORT AREA ECHELONMENT/DISPLACEMENT BY BOUNDS

10-62. When operations require continuous logistical support, this operational technique is recommended. Critical sustainment assets are divided and displace by successive bounds from one BSA location to a new BSA location. The BSB commander normally moves with the forward element to ensure rapid set-up of the displacing echelon. This technique provides more responsive support by minimizing the distance the BSB must travel to distribute supplies forward. It also enhances the survivability of logistical assets by positioning them in different areas. Because of echelonment, C2 of BSB operations may be degraded. A heavy reliance on unit SOPs is vital to ensure smooth displacement.

SECTION IV – SUPPORT OPERATIONS

10-63. Support operations focus on the sustainment functions listed on page 11-1. Sustainment operations are usually defined in detail in unit SOPs.

MAINTENANCE OPERATIONS

10-64. The overriding goal of maintenance operations is to return combat systems to the battle as soon as possible. Maintenance operations focus on replacing sub-system components as far forward as practical to reduce transportation requirements and time.

MAINTENANCE SUPPORT

10-65. The HBCT's maintenance system consists of operators, subordinate field maintenance personnel in the FSCs, and the BSB maintenance company. This gives the HBCT the capability to perform field maintenance. The BSB maintenance company provides maintenance support to the BTB's companies, the BSB and the headquarters of the HBCT. If the BSB has excess capacity and in the case of small density missile/electronic requirements, some maintenance teams may operate forward in the combined arms and fires battalion and reconnaissance squadron. The maintenance company repairs equipment, arranges evacuation of major systems to its area or the UEx support area. The distribution company operates the repair parts supply system for the HBCT. FSC maintenance teams repair disabled equipment within their capabilities as far forward as possible. Non-mission capable systems that require more extensive repairs are evacuated to battalion level UMCPs. If necessary, severely damaged equipment is evacuated to the BSB maintenance collection point. Figure 10-6 shows the HBCT's maintenance system and Figure 10-7 shows the flow of Class IX parts. Vehicles are evacuated upon METT-TC conditions as determined by the commander. If the unit cannot handle the workload or the site is untenable due to enemy threat, then evacuation is appropriate.

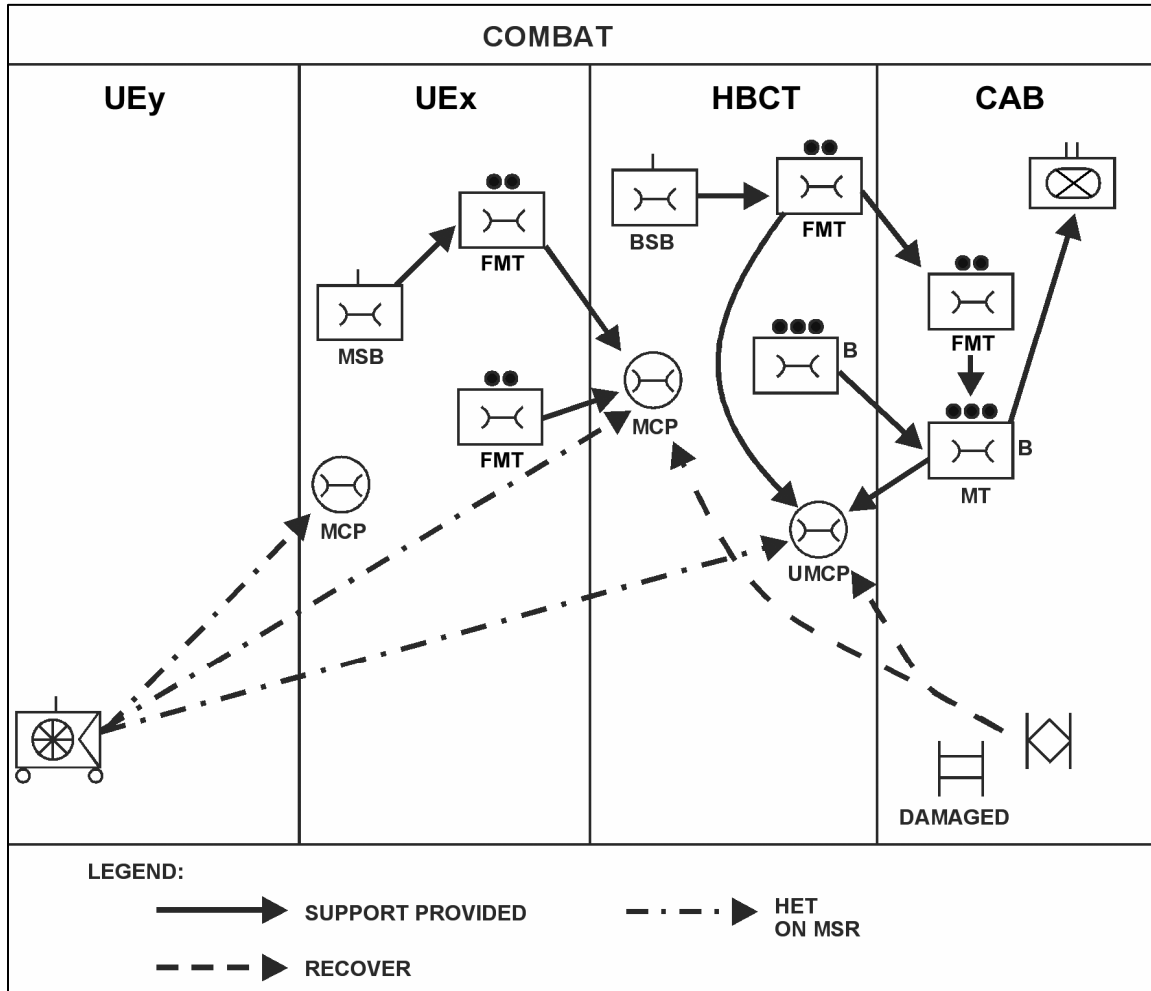


Figure 10-6. Brigade Maintenance Support for the UEx

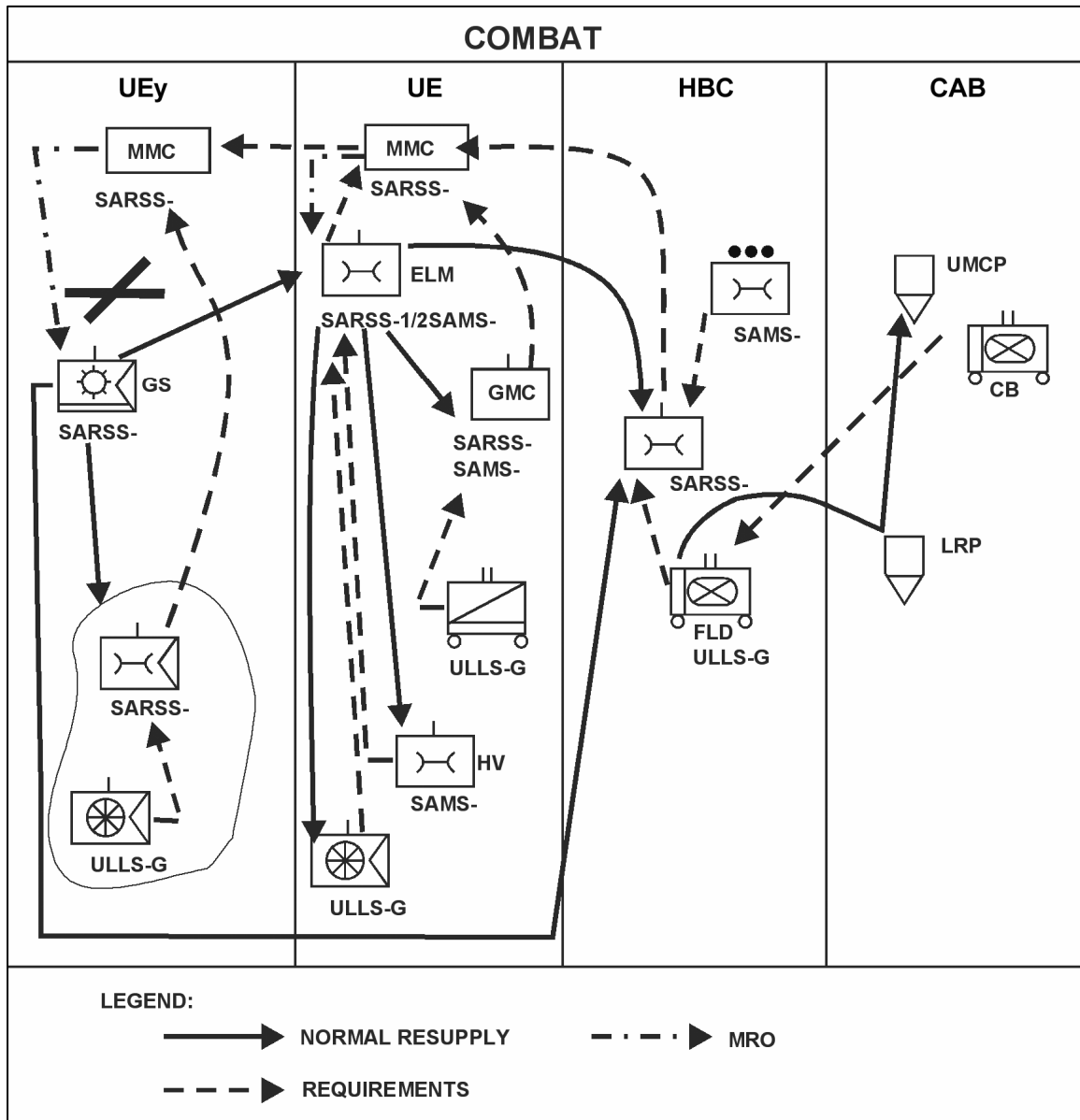


Figure 10-7. Class IX Supply System for the UEx

BATTLE DAMAGE ASSESSMENT AND REPAIR

10-66. BDAR is the procedure used to rapidly return disabled equipment to the battlefield by expediently fixing, bypassing, or jury-rigging components. It also includes the use of cannibalization of equipment. It restores the minimum essential combat capabilities necessary to support a specific combat mission or to enable the equipment to self-recover. Crews, FMTs, and recovery teams use battle damage assessment and repair (BDAR). The commander establishes guidelines for BDAR in SOPs and combat orders.

FIELD MAINTENANCE COMPANY, BSB

10-67. The BSB field maintenance company provides field maintenance and combat spares repair parts to supported units in the HBCT area. The company's organization includes a company headquarters, maintenance control section, area support platoon and a base support platoon. Specific functions include service and recovery, automotive and armament repair, ground support and electronic maintenance and maintenance management to HBCT base elements. The base support platoon of the FMC performs maintenance on selected (low density) equipment and limited back-up support to the maneuver HBCT. The area support platoon performs direct support to the HBCT base elements in addition to limited back up to the FSCs. It maximizes the use of combat spares and provides ULLS-G/SAMS-1 (to be replaced by ULLS-Enhanced) support to the BTB and BSB. The company is dependent on distribution delivery/asset visibility and connectivity.

FORCE HEALTH PROTECTION OPERATIONS

10-68. The HBCT Brigade Surgeon (HBCT Sustainment Section/MAIN) is a special staff officer and is responsible for ensuring FHP for the HBCT. The brigade surgeon exercises technical control as permitted by the brigade commander over medical activities in the command. The brigade surgeon provides staff oversight and supervision for FHP operations for the HBCT. He keeps the HBCT commander informed on the health of the command. He provides input and maintains the operational readiness status of the medical units and elements operating in the HBCT AO to facilitate FHP planning. He is assisted by other members of the brigade surgeon section (BSS) with planning, coordinating, synchronizing, and integrating the FHP with the HBCT maneuver plan. The BSS develops the brigade FHP plan in conjunction with the HBCT S3, S2, S4, and S1, closely coordinating FHP requirements with the BSB support operations section's health service support officer, supported HBCT medical platoons, and forward support medical evacuation team.

10-69. The BSB support operations section's health service support officer is responsible for coordinating and resourcing brigade level FHP requirements. He coordinates with the UEx medical operations section and supporting sustainment brigade for additional medical assets and synchronizing medical logistics requirements with MSO and SRO deliveries.

10-70. The BSMC commander is responsible for executing the HBCT FHP plan. He coordinates closely with the brigade surgeon, the BSS, the support operations health service support officer, and supported HBCT medical platoons to ensure FHP priorities are implemented. The BSMC command post coordinates HBCT level FHP treatment, air and ground evacuation."

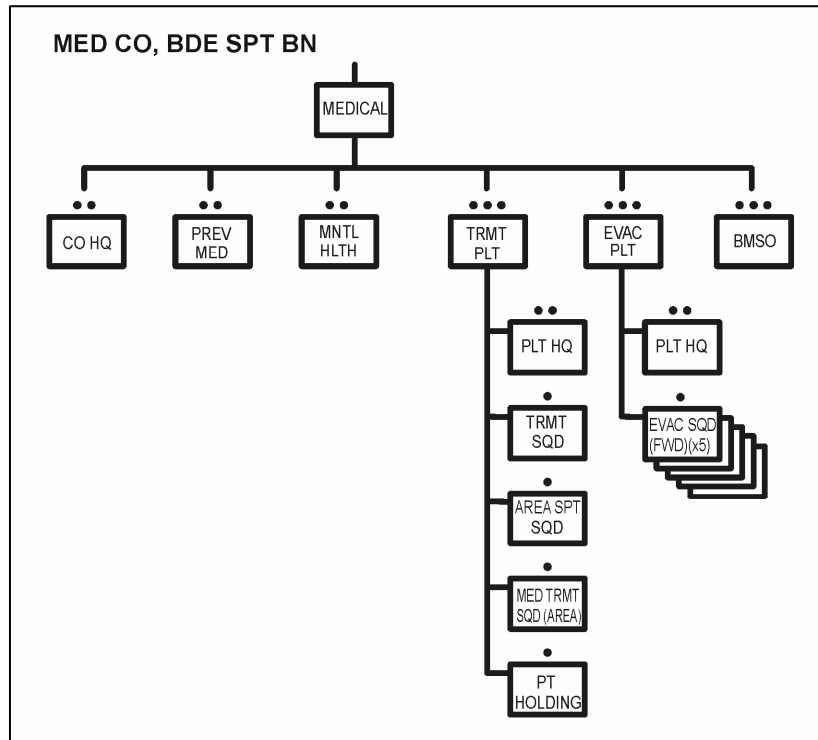


Figure 10-9. Brigade Support Medical Company

10-72. The BSS is responsible for developing the HBCT FHP plan. It coordinates with the BSB support operations section and the HBCT S4 on the use of evacuation routes and the positioning of HBCT medical assets and AXP's for support of HBCT operations. The AXP is used to transfer patients from tracked to either wheeled or air ambulances. The medical company normally positions medics from treatment squads and ambulances with subordinate aid stations to provide forward support. The medical company normally pre-positions ambulances with the BASs in anticipation of casualties so that they are prepared to begin the evacuation process. The BSB is responsible for ground evacuation from supported Level I MTF/BAS back to the BSMC Level II MTF. The BSMC is responsible for coordinating air evacuation from the pick up site to the appropriate level of care. The treatment squads normally operate from the BSA but may be used to create a "brigade" aid station to weight the main effort or to provide continued support as the BSA displaces.

MASS CASUALTIES

10-73. Mass casualty (MASCAL) situations arise when the number of casualties exceeds the capabilities of the supporting medical treatment and evacuation elements. The occurrence of mass casualties must be anticipated in order to arrange non-standard medical transport. Managing these situations will severely tax the entire FHP support system. Mass casualty situations always require command level intervention. A mass casualty event that exceeds the combat battalion's medical capabilities will require immediate decisions by commanders at battalion and brigade level to reallocate necessary treatment, evacuation, or non-standard evacuation assets. Additional security assets may also need to be diverted to support movement to the mass casualty site and evacuation of patients. Dedicating non-medical assets can take a significant amount of time as units are contacted, receive instructions, plan movement, and move into a supporting position.

10-74. Therefore, mass casualty thresholds should be established to guide the dedication of resources. Using thresholds allow commanders to anticipate requirements and proactively dedicate the necessary assets to relieve the situation. As the mass casualty event grows, additional resources from adjacent and higher-level units can be issued warning orders and fragmentary orders in anticipation of supporting the event. In such situations, the UEx when possible shifts its treatment and evacuation resources to meet the requirements. When required, additional evacuation resources and treatment elements may be requested from the UEy and higher echelon assets.

10-75. All organizations in the HBCT should plan for the use of cargo trucks as nonstandard evacuation vehicles. Manned with combat-lifesavers, these vehicles can quickly reinforce the evacuation effort. The key to managing mass casualties is the use of on-site triage and emergency medical treatment teams. Other important areas include effective communications and skillful employment of evacuation vehicles (air and ground). The rapid buildup of evacuation and non-evacuation assets at the mass casualty location eases the problem. Also, the prompt movement of patients to all available medical treatment facilities helps. This movement dissipates the medical workload by distributing casualties equitably among the medical treatment facilities. This is done based on the patient's condition and on the medical treatment facility's capabilities.

AIR EVACUATION

10-76. An air ambulance team is often field sited at the BSA (See Appendix A, *Aviation Support for Ground Operations*, for discussion of Army Aviation organization, roles and missions). The team leader should be involved with the tactical mission planning process to coordinate employment of air evacuation assets and to obtain A2C2 information. Air ambulances evacuate urgent patients from the BAS to BSMC Level II MTF or from the point of injury to the nearest MTF as appropriate. Air ambulances will evacuate from the FSMC to the combat support hospitals (CSHs) located in the UEy/theater area. The BSB support operations section, the HBCT ADAM/BAE cell and the HBCT surgeon coordinate air evacuation routes to and from the forward triage site with the air ambulance team leader. The HBCT BSB support operations section (HSS cell) must identify LZs during planning to synchronize air evacuation with other operations.

CLASS VIII RESUPPLY

10-77. Class VIII management is accomplished by the BSMC's brigade medical supply office (BMSO) and the combat battalion HHC medical platoons/BAS using the current MEDLOG system and the Theater Army Medical Management Information System (TAMMIS) Customer Assistance Module (TCAM). These enablers provide brigade medical elements a direct link with the highest level supporting MEDLOG element and the medical logistics management center (MLMC). The health service materiel officer (HSMO) of the BMSO and the medical logistics officer (MLO) of the BSB support operations section coordinates and manages Class VIII distribution resupply for HBCT medical units/elements. Each maneuver medical unit maintains its own basic load of 3 days of medical supplies and the BMSO has 5 days of critical medical supplies as an ASL. The UEx MEDLOG Company is normally in direct support of the HBCT. Once the DS relationship is established, the MEDLOG element provides Class VIII resupply for the HBCT and UEx medical elements. During deployment, lodgment, and early buildup phases, medical units operate from planned, prescribed loads and from existing prepositioned war reserve stockpiles identified in applicable contingency plans. The HBCT medical elements, to include combat battalion/squadron medical platoons, use Theater Army Medical Management Information System (TAMMIS) Customer Assistance Module (TCAM) to requisition Class VIII. The TCAM system is the primary source for Class VIII line item requisitions from the MEDLOG

element. See FMI 4-90.1 for definitive information on Class VIII resupply operations for the HBCT.

SUPPLY OPERATIONS

10-78. The HBCT conducts supply operations to deliver supplies and resources to subordinate units to sustain operations.

SUPPLY METHODS

10-79. All units within the HBCT carry a basic load of supplies with them to support their operations until the supply system can resupply them. Unit basic loads vary by type unit and the nature of the mission. Unit basic loads are defined in regulations and SOPs and are refined throughout operations. The HBCT uses a unit distribution-based logistics system to sustain forces.

10-80. *Push System.* A push system is used to supply subordinate forces. Under this system, planners estimate supply requirements and arrange to have them delivered to supported units before they require them. A push system is used to delivery large quantities of supplies to a unit early based on anticipated supply requirements. For example, the BSB will push some Class IV/V (obstacle material) to a battalion upon transitioning to a defense even before the battalion has developed its obstacle plan.

10-81. *Distribution Based Resupply.* In an effort to tailor supply distribution, the HBCT uses unit distribution i.e. the Army's distribution based logistics system. The BSB has the organic transportation capability to support the CABSAs out to a distance of 10-14 kilometers. Unit representatives come to the LRP established in the HBCT order to pick up their supplies. Battalion field trains have their own organic unit supply, fuel, and ammunition trucks assembled in the CABSAs, which may be located in the BSA or outside the BSA based upon METT-TC conditions, along with repaired equipment, personnel replacements, and other assets. There they form a LOGPAC that goes forward to provide support to forward-deployed elements. The HBCT's logistics annex often has as a requirement, the intent cut down on the distances the forward units must travel by having the distribution company travel as far forward as possible to the LRP. The HBCT S4 and BSB support operations officer develop the LRP locations and meet point times during the MDMP and publish them in the HBCT OPOD.

10-82. Unit distribution by UEx assets is often used to deliver obstacle materials to battalion Class IV/V (obstacle material) points. Other classes of supply may be delivered using unit distribution when the tactical situation permits and transportation assets are available. Emergency resupply using unit distribution may be accomplished via motor or air transport.

10-83. Throughput distribution bypasses one or more echelons in the supply system to minimize handling and speed delivery forward. Supplies are often throughput to the BSB or if located outside the BSA to the CABSAs from the UEx and UEy and, in the case of Class IV and some Class VII major end items, may be throughput directly to the user in the forward area. When most of a load is for a specific unit, the transporter may deliver directly to the requesting unit. Class IIIB, IV and Class V are most often throughput supplies.

10-84. *Strategic Configured Loads (CL).* A CL is a preplanned package of supplies that is transported as a single load to support a type of unit or weapon system requirement. It can be a predetermined mix of supplies consisting of Class V or obstacle materials (Class IV and/or Class V [mines]). CLs not only speed the passing of resupply requirements, but also improve the efficiency of ammunition distribution units. Part of the logistics staff estimate process must include consideration of CLs. What must be balanced is the increased efficiency versus the potential decrement in flexibility at the unit level. The use of CLs does not

preclude ordering single-type ammunition or supply loads. In fact, single-type loads (operational configured loads (OCLs)) are usually required for specific missions. Standardized engineer Class IV/V packages are configured and dedicated by unit SOP to provide commanders flexibility in achieving their unique operational and mission support requirements. OCLs are a combat battalion or squadron responsibility regardless of the command and support relationships specified for engineers. Logistical planners for both the engineer and maneuver force structure require an anticipative understanding for integration of the commander's intent, obstacle resourcing requirements, and their planned controlled supply rates at HBCT and UEx level. SCL and OCL planning requires a degree of crosswalk and coordination between the logistical and operational planners at both HBCT and UEx level.

10-85. *Aerial Delivery via Air Force Fixed-Wing Aircraft.* Aerial delivery capability, including parachute rigging, is not resident in the UEx. Aerial delivery execution requires augmentation from, or execution by echelons above the UEx. Air transportation is a flexible and essential element of the transportation system. Aerial delivery presents a viable option for distribution of limited quantities of dry cargo via [containerized delivery system [CDS] or platform [Type V] airdrop into limited access or far forward areas. Aerial delivery is an intensively coordinated endeavor and presents limited flexibility due to requirements for DZs and coordination lead-time. Rigging of delivery platforms or containers usually occurs outside the division AO and usually requires an aerial delivery platoon to execute. It becomes increasingly important as the intensity, depth, and duration of operations increases. Both the Army and Air Force provide air transportation.

10-86. *Aerial Resupply/Sling Load via Rotary-Wing Aircraft.* Army aviation assets are allocated by the ARFOR and/or UEx commanders to support sustainment operations. As with aerial delivery, the use of Army (rotary wing) aviation to conduct aerial resupply presents a viable option for distribution of limited quantities of supplies to remote locations or under emergency conditions. External load operations require early aviation augmentation or employment in an operation to support replenishment operations where LOCs are limited. Rigging of supplies for sling load is labor intensive but may be required and ideal for some situations. The limiting factor will be the availability of aircraft and sling load materials in the battlespace.

10-87. *Salvage Services.* The BSB distribution company provides salvage services. A collection point is usually established in the BSA. Serviceable, unserviceable (repairable), discarded, abandoned, and captured supplies and equipment are collected at this point. The salvage point will not accept communications security (COMSEC), medical supplies, toxic agents, contaminated equipment, aircraft, ammunition, or explosives.

TRANSPORTATION OPERATIONS

10-88. The BSB conducts transportation operations to deliver supplies and resources to supported units to sustain operations.

TRANSPORTATION METHODS

10-89. The BSB is structured and designed to conduct distribution based logistical support. The BSB's distribution company allows it to conduct distribution based replenishment operations at specified Logistic Rally Points i.e. Sustainment Replenishment Operations (SRO) and field maintenance operations for Class IX with the FMC. A unique capability of the distribution company is the assignment of two drivers per transportation platform that allows the capability to provide 18 hour/7days a week pulse operations as required.

10-90. The BSB is structured with organic transportation assets to meet the maneuver BCT's logistics requirements. The BSB distribution company has PLS vehicles with trailers, though there is only two flatracks for the vehicle and trailer instead of the previous designs

with six. This internal capability allows them to conduct SRO in support of the HBCT's tactical mission and does not require the combat battalion/squadrons' FSCs to go to the BSA for SRO. However, if the FSC is located in the BSA, the supply point operations are an obvious consideration for the BSB. The BSB has the capability and mission to conduct recovery and evacuation of damaged weapons systems.

SECTION V – HUMAN RESOURCES SUPPORT

10-91. Human resources (HR) support is an important component of sustainment. At the HBCT level, the HBCT S1 is responsible for providing or coordinating the operational and tactical level HR support that sustains the combat potential of the force and the morale and welfare of Soldiers.

10-92. HR activities are divided into three categories—manning the force, personnel services, and personnel support. During the early phases of operations, HR support for the HBCT focuses on the critical tasks of strength management, casualty operations, and replacement operations. Other HR mission essential tasks will be completed via reach operations or as the situation allows.

MANNING THE FORCE

10-93. The HBCT S1 section serves as a conduit between subordinate units and the UEx HR organization (G1). Because of distances and communications capabilities, all reports are submitted through the HBCT S1 for forwarding to the appropriate agency. Initial personnel data is submitted by subordinate and attached units of the HBCT through the use of digital technology. The HBCT S1 also provides information to subordinate units on status of evacuated/hospitalized personnel and adjusts personnel requirements accordingly.

10-94. There are four critical HR systems/functions that combine to form the task of manning the force: personnel readiness management, replacement management, personnel accounting, and personnel information management. The S1 is responsible for integrating the elements of this task at the HBCT level.

10-95. The purpose of the personnel readiness management system is to distribute Soldiers to units based on documented requirements or authorizations to maximize mission preparedness and provide the manpower needed for full spectrum overmatch. Personnel accounting is the system for recording by-name data on Soldiers when they arrive in and depart from units, when their duty status changes (e.g., from duty to hospital), and when their grade changes. Strength reporting is a numerical end product of the accounting process. It starts with strength-related transactions submitted at unit level and ends with a database update through all echelons to the Total Army Personnel Database. Personnel information management encompasses the collection, processing, and storing of critical information about Soldiers, units, and civilians. Personnel readiness managers, casualty managers, and replacement managers all utilize a personnel information database when performing their missions.

10-96. Replacement companies under C2 of replacement battalions at theater or UEy level, receive, support, and process replacements. They coordinate movement with the appropriate movement control element. The UEx replacement section coordinates with the G4 and UEx transportation officer for movement to the BSA. The HBCT S1 processes and assigns replacements to battalions. The battalion S1 further assigns replacements to company level.

PERSONNEL SERVICES

10-97. Personnel services are an integral part of unit readiness. The HBCT S1 is the staff officer responsible for personnel services. This includes casualty reporting, military pay, and

other essential services such as awards and decorations, evaluation reports, and enlisted promotions. While many of these functions are completed via reach operations, casualty operations are a critical function that must be completed throughout all operations, and with 100 percent accuracy.

CASUALTY OPERATIONS

10-98. The casualty reporting system is a by-name personnel accounting system that begins at unit level with the person who knows that a casualty has occurred. DA Form 1156 (*Casualty Feeder Report*) and DA Form 1155 (*Witness Statements on Individual*) are forwarded as soon as possible. Reports are prepared using the Army Casualty Information Processing System–Light (ACIPS-L) and are sent directly to HQDA, with copies furnished to other higher headquarters, as appropriate. Patient evacuation and mortality reports and treatment and disposition logs are provided daily to the HBCT S1 from the BSB medical company.

PERSONNEL SUPPORT

10-99. The third element of HR is personnel support. It includes postal operations management, and morale, welfare, and recreation (MWR), and community support.

POSTAL OPERATIONS MANAGEMENT

10-100. Mail is the soldier's link to family and friends. Inefficient distribution of mail can quickly undermine morale. In the early stages of a conflict, postal services may be unavailable or restricted to personal mail that conforms to the free mailing privilege (first class letter mail, postal/post cards, and sound recordings). The HBCT S1 establishes a daily mail schedule. Outgoing mail is consolidated at each unit and then forwarded to the HBCT S1 section prior to being forwarded to the divisional postal element. The HBCT S1 is also responsible for reconciling any problems within the HBCT hindering the delivery of mail to Soldiers in a timely manner.

MORALE, WELFARE, AND RECREATION

10-101. The HBCT S1 is the staff officer responsible for the coordination of MWF activities and community support. During early phases of operations, MWR support may be limited.

FIELD SERVICES

MORTUARY AFFAIRS

10-102. The HBCT is dependent on augmentation for collection, processing and evacuation. A mortuary affairs team, from the theater sustainment brigade provides mortuary services support to the HBCT. The team operates from the BSA and is responsible for processing remains. The team has no transportation capabilities and coordinates with the support operations officer for evacuation back to the theater mortuary evacuation point (TMEP). Internal to the HBCT, handling teams are pre-designated at the battalion level and operate in the combat trains. It is the battalion's responsibility to evacuate remains from the combat trains to the BSA.

SHOWER, LAUNDRY, AND LIGHT TEXTILE REPAIR

10-103. There is no organic laundry or bath capability in the HBCT. Support must be coordinated with the Sustainment Brigade.

WATER PURIFICATION

10-104. The BSB has the organic capability to produce, store and transport purified water to meet the HBCT's support requirements.

ADMINISTRATIVE SERVICES

10-105. The UEx Sustainment brigade (personnel services company) provides technical assistance to the HBCT staff elements and commander, and support to assigned and attached units for the following subfunctions of administrative services:

- Classified document control
- Reports and forms control
- Publications supply
- Bulk printing and reproduction
- Files and records management

10-106. Internal correspondence management and distribution are administrative services that must be closely monitored and managed by the HBCT S1 section. SOPs for distribution procedures and specific responsibilities must be developed to ensure the responsive flow of correspondence occur.

FINANCIAL MANAGEMENT OPERATIONS

10-107. Finance organizations provide high-priority support to units and individual Soldiers on an area basis. Finance units provide the following banking and currency support: contracting and host nation support; cost capturing and accounting services; US pay, non-US pay, and travel support; and advice to unit commanders. This means the same finance unit provides logistic and personnel support to units and Soldiers, joint and allied, within a geographical locale, regardless of unit affiliation. During deployments, mobile teams from corps-level finance organizations provide support to forward units. A finance battalion typically supports a division, with detachments FSB, providing financial management services as required. The HBCT S1 coordinates for support from mobile finance teams.

LEGAL SUPPORT

10-108. The Brigade Judge Advocate provides and supervises legal support to HBCT C2, sustainment, and support operations. The Brigade Operational Law Team located in the HBCT Fires and Effects section provides and coordinates all legal support for the HBCT. Legal NCOs and specialists in the HBCT and subordinate battalions provide para-professional and ministerial support for legal actions. The US Army Trial Judiciary and US Army Trial Defense Service are independent organizations that provide military judge and trial defense services to the HBCT.

RELIGIOUS SUPPORT

10-109. The HBCT chaplain is the staff officer responsible for implementing the commander's religious support program. Included in this program are worship opportunities; administration of sacraments; rites and ordinances; pastoral care and counseling; religious education, ministry to casualties to include support of combat shock casualty treatment, and development and management of the unit ministry team (UMT). The chaplain advises the commander and staff on matters of morals, morale as affected by religion, the impact of local religion on the military mission, and the ethical impact of command decisions. The UMT is composed of a chaplain and one enlisted chaplain assistant. The chaplain assistant is an active member of the NCO support channel. The assistant assesses the Soldiers and other authorized personnel's well being that can affect the unit's fighting spirit (see FM 1-05 and AR 165-1).

SECTION VI – RECONSTITUTION

10-110. Reconstitution is a set of actions that a commander plans and implements to restore his unit to a desired level of combat readiness. Reconstitution is often sustainment intensive, especially regeneration. Reconstitution is a total process. Its major elements are reorganization, assessment, and regeneration. Reconstitution decisions belong to the commander. The commander with his staff's support assesses unit effectiveness (see FM 4-100.9). He does not base his reconstitution decisions solely on facts, figures, and status reports from subordinate units. His assessment relies also and probably more importantly on other factors. These include:

- Knowledge of his Soldiers
- Condition and effectiveness of subordinate commanders and leaders
- Previous, current, and anticipated situations and missions

REORGANIZATION

10-111. Reorganization is an action to shift internal resources within a degraded unit to increase its combat effectiveness. Commanders reorganize before considering regeneration. Reorganization may be immediate or deliberate.

IMMEDIATE REORGANIZATION

10-112. Immediate reorganization is the quick and usually temporary restoring of degraded units to minimum levels of effectiveness. Subordinate units normally conduct immediate reorganization during lulls in the battle to maintain combat effectiveness.

DELIBERATE REORGANIZATION

10-113. Deliberate reorganization is conducted when more time and resources are available. It usually occurs after actions on the objective, during extended lulls in defensive battles, and during extended pauses between operations. Procedures are similar to those of immediate reorganization. However, some replacement resources may be available. Also, equipment repair is more intensive, and more extensive cross leveling is possible.

ASSESSMENT

10-114. Assessment measures the unit's capability to perform a mission. Subordinate unit commanders assess of their units before, during, and after operations. If a commander determines his unit is no longer mission capable even after reorganization, he notifies the HBCT commander. The HBCT commander either changes the mission of the unit to match its degraded capability or removes it from combat.

REGENERATION

10-115. Regeneration involves the rebuilding of a unit through the large-scale replacement of personnel, equipment, and supplies; reestablishment of C2; and mission essential training for the rebuilt unit. Because of the intensive nature of regeneration, it occurs at a regeneration site after the unit disengages. It also requires help from higher echelons. Units are generally regenerated from at least two command levels above. The HBCT may be moved to its home station or another location to conduct brigade-level regeneration. A HBCT normally has the capability to regenerate platoons and companies by cross-leveling equipment and personnel and integrating replacement Soldiers and systems. Regenerating a battalion or some specialized CS or Sustainment units is a UEx or UEy operation (see FM 4-100.9).

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Appendix A

Aviation Support to Ground Operations

SECTION I – AVIATION BRIGADE OVERVIEW

THE UEx AVIATION BRIGADE

A-1. Army aviation provides the ground maneuver commander the ability to apply decisive combat power at critical times virtually anywhere on the battlefield. This combat power may be in the form of direct fire support from aviation maneuver units, the insertion of overwhelming infantry forces, or artillery fires delivered via air assault. This versatility gives the maneuver commander a decisive advantage on the battlefield. Ground maneuver commanders synchronize aviation maneuver with ground maneuver to enhance offensive and defensive operations. This synchronization allows the ground maneuver commander to shape the battlefield and to influence events throughout his AO.

A-2. Army aviation units conduct missions across the full spectrum of operations from stability operations and support operations to major combat operations (MCO) and provide the force missions of attack (mobile strike and close combat attack). Aviation units also provide reconnaissance and security; air assault/air movement; airborne C2; support to command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR); Army airspace command and control, (A2C2); personnel recovery; medical evacuation (MEDEVAC); and maneuver sustainment support.

A-3. Army aviation is an extension of ground maneuver, providing an aerial dimension to the combined arms team. Aircrews talk and digitally transmit and receive on the same types of radios and communications systems, use a common language, and practice field craft similar to their ground comrades in arms. Army aviation is a maneuver force. Although ground and aviation planning times are similar, aviation moves much faster and with a greater ability to bypass obstacles and threats and to maneuver to a point of advantage that complements ground maneuver and fires.

A-4. The UEx aviation brigade is organized and equipped to support both joint and Army operations, with continuous combat, CS, and CSS operations throughout the depth and breadth of the battlefield. The aviation brigade supports the operations of the entire UEx with task organized aviation capabilities. Based on METT-TC, the aviation brigade commander task organizes available aviation resources into mission packages that are either controlled by a supported brigade combat team or the aviation brigade.

A-5. Aviation brigades are found in both the AC and RC and at every echelon from division to theater command. Time-tested fundamentals common to all brigades are critical to battlefield success and are discussed in this appendix.

A-6. Aviation forces normally operate as part of the combined arms team integrated from the HBCT level to the theater level. The aviation task force supporting the HBCT primarily conducts reconnaissance, security, and close combat support for the BCT. The aviation brigade can employ other combined arms elements conducting ground operations and can operate semi-independently or as a part of a joint force.

SECTION II – ARMY AVIATION ORGANIZATIONS

AVIATION BRIGADE ORGANIZATIONS AND MISSIONS

AVIATION ORGANIZATIONS: GENERAL

A-7. Each brigade differs in both form and function with different capabilities and subordinate units. Each brigade contains a headquarters and headquarters company (HHC) that provides personnel and equipment for the C2 functions of the brigade and security and defense of the command post (CP).

A-8. The intent is for aviation brigades to be modular, scalable, and tailorable so they can task organize as required to conduct reconnaissance, security, air assault, close combat attack (CCA), mobile strike, and maneuver sustainment support.

A-9. Multifunctional brigades are able to perform all aviation missions with little or no external augmentation. They contain a variety of different airframes and battalions to perform these missions and operate at the division level. Brigades assigned to echelons above division are considered functional aviation brigades. Functional brigades are more specialized with limited battalions and airframes to focus on specific aviation support missions. They do not contain attack reconnaissance battalions (ARBs).

A-10. The numbers and types of subordinate battalions are based on the brigade's mission. Separate companies may be assigned, attached, or under operational control (OPCON) to brigades, but it presents challenges for C2 as the brigade staff must also prepare plans and orders on the level of detail normally found at the battalion level.

BRIGADE MISSIONS: GENERAL

A-11. Each brigade is tailored for specific missions as discussed in this appendix. However, each brigade accepts other organizations and performs missions not necessarily defined in the table of organization (TOE) mission statement.

COMBAT MISSIONS

A-12. Combat missions include the following:

- Reconnaissance.
- Security.
- Air assault.
- Close combat attack.
- Mobile strike.
- Combat support.

A-13. Combat support missions include the following:

- Command, control, communications, and intelligence (C3I).
- Air movement.
- Personnel recovery operations.
- Aerial mine delivery operations (Volcano).
- MEDEVAC operations.

COMBAT SERVICE SUPPORT MISSIONS

A-14. Combat service support missions include the following:

- Air traffic services (ATSS).
- Aerial sustainment.
- Downed aircraft recovery.
- Casualty evacuation (CASEVAC) operations.
- Rear area operations.

AVIATION BRIGADES TYPES AND ORGANIZATIONS

AVIATION BRIGADE TYPES: GENERAL

A-15. The transformation force consists of eight distinct types of aviation brigades:

- Heavy aviation brigade.*
- Light aviation brigade.*
- Forced entry aviation brigade *
- Corps aviation support brigade (CASB).
- Theater support aviation brigade (TSAB).
- National Guard division (homeland defense) aviation brigade.
- National Guard division (heavy) aviation brigade.
- Army special operations aviation regiment. (ARSOAR).*

A-16. Subordinate battalions found in aviation brigades include the following:

- Light attack reconnaissance battalion (ARB) with 30 OH-58Ds.
- Heavy ARB with 24 AH-64Ds.
- Assault helicopter battalion (AHB) with 30 UH-60Ls (FM 3-04.113).
- General support aviation battalion (GSAB) with 8 UH-60Ls, 12 CH-47s, and 12 HH-60s.
- Aviation support battalion (ASB). (FM is TBP).
- Fixed-wing (FW) aviation battalion with 8 C-12s and 32 C-23 FW aircraft.

A-17. The following paragraphs describe the three types of aviation brigades that are most likely to support HBCT operations.

HEAVY AVIATION BRIGADE

Mission

A-18. The heavy aviation brigade's TOE mission is to find, fix, and destroy enemy forces using maneuver to concentrate and sustain combat power at the critical time and place as an integrated member of the combined arms team. This brigade (Figure A-1) destroys enemy forces using fire, maneuver, and shock effect. It conducts reconnaissance and security (R&S) operations and provides C2 support. It conducts air movement operations, aerial delivery of mines, and aeromedical support. See FM 3-04.111 for additional details.

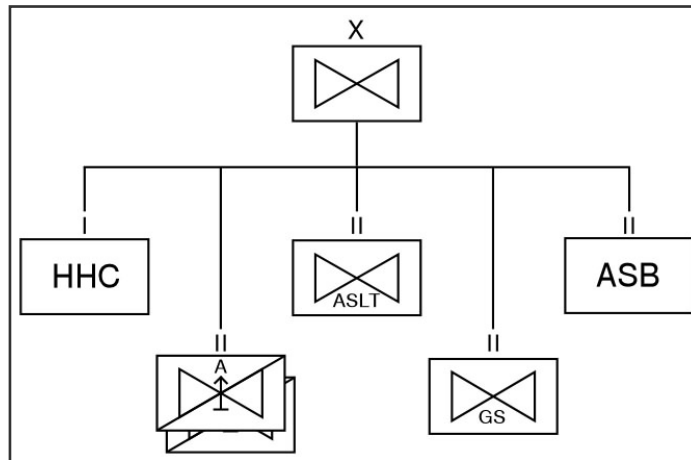


Figure A-1. Heavy Aviation Brigade

Organization

A-19. The heavy aviation brigade has an HHC, two heavy ARBs, an assault helicopter battalion (AHB), a general support aviation battalion (GSAB), and an ASB.

Fundamentals

A-20. A heavy AVIATION BRIGADE does not have any organic ground combat forces. The brigade can perform screen operations, guard operations when augmented, and participate in cover missions.

A-21. The heavy aviation brigade supports the UEx scheme of maneuver by facilitating ground maneuver through aviation operations. Utility and heavy helicopters allow the brigade to move forces and materiel quickly throughout the battlespace. Attack reconnaissance aircraft focus on providing quick reaction fire support through CCA to friendly maneuver forces in contact and mobile strikes against high-value targets (HVTs).

LIGHT AVIATION BRIGADE

Mission

A-22. The light aviation brigade's TOE mission is to find, fix, and destroy enemy forces using maneuver to concentrate and sustain combat power at the critical time and place as an integrated member of the combined arms team. This brigade (Figure A-2) destroys enemy forces using fire, maneuver, and shock effect. It conducts R&S operations, air assault and air movement operations, and aerial delivery of mines. It also provides C2 and aeromedical support. See FM 3-04.111 for additional details.

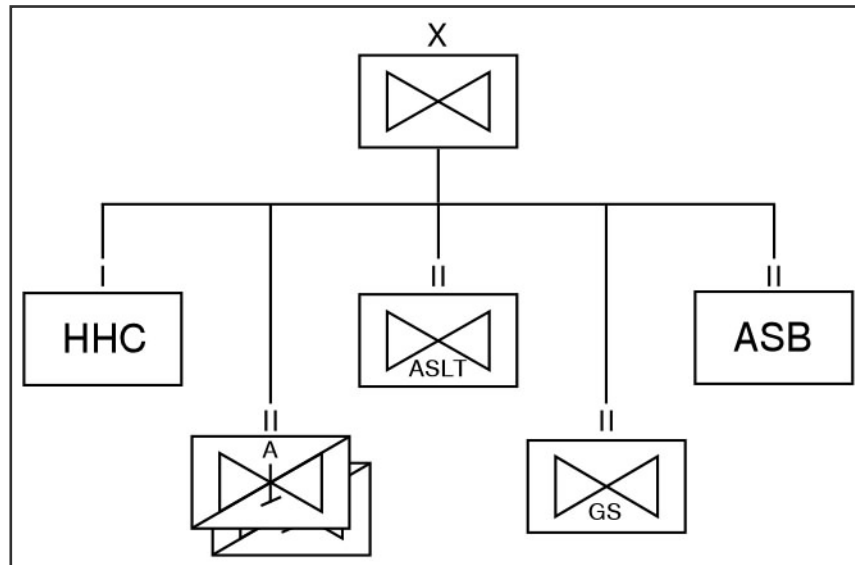


Figure A-2. Light Aviation Brigade

Organization

A-23. The light aviation brigade has an HHC, two light ARBs, an AHB, a GSAB, and an ASB.

Fundamentals

A-24. A light aviation brigade can perform screen operations and guard operations when augmented and participate in cover missions.

A-25. The light aviation brigade supports the UEx scheme of maneuver by facilitating ground maneuver through aviation operations. Utility and heavy helicopters allow the brigade to move forces and materiel quickly throughout the battlespace. Attack reconnaissance aircraft focus on reconnaissance and security missions to protect maneuvering forces, and quick reaction fire support through CCA once enemy contact is established.

FORCED ENTRY AVIATION BRIGADE

Mission

A-26. The forced entry aviation brigade's TOE mission is to find, fix, and destroy enemy forces using fire and maneuver to concentrate and sustain combat power to support division operations. This brigade (Figure A-3) destroys threat forces using fire, maneuver, and shock effect. It conducts R&S operations and provides C2 support. It conducts air assault and air movement operations, aerial delivery of mines, and aeromedical support. See FM 3-04.111 for additional details.

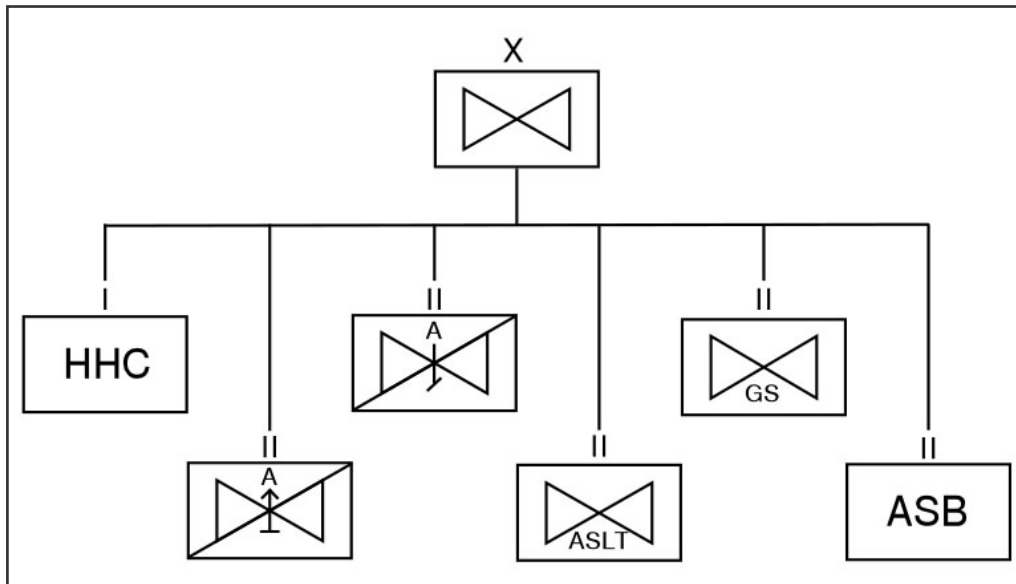


Figure A-3. Forced Entry Aviation Brigade

ORGANIZATION

A-27. The forced entry aviation brigade has an HHC, one heavy ARB, one light ARB, an AHB, a GSAB, and an ASB.

Fundamentals

A-28. The forced entry aviation brigade's primary role is to deploy quickly into a point of entry and provide aviation combat, CS, and CSS in support of decisive, shaping, and sustainment operations. The brigade may deploy into multiple, unimproved points of entry using force to overwhelm hostile antiaccess capabilities.

AVIATION BATTALIONS

ATTACK RECONNAISSANCE BATTALION

Attack Reconnaissance Battalion Types

A-29. Battalions plan, coordinate, and execute operations. They create opportunities for commanders to disrupt the enemy's decision-making process, forcing him to make decisions that disrupt initial plans. The battalion, through coordination, liaison, C2, and situational understanding (SU), helps set the conditions for the force's success.

A-30. There are three distinct types of battalions:

- Heavy.
- Light.
- Regimental aviation squadron (RAS).

Organization

A-31. Each division aviation brigade has two ARBs. An ARB has either all AH64s or all OH-58Ds.

A-32. Each heavy and light ARB has an HHC, a forward support company (FSC), three attack reconnaissance companies (ARC), and an aviation service company (ASC). The distinction between heavy and light ARBs is that a heavy ARB has 24 AH-64s and a light ARB has 30 OH-58Ds.

A-33. The RAS augments and extends the capabilities of the armored cavalry regiment's (ACR) three ground cavalry squadrons. The RAS contains a headquarters and headquarters troop (HHT), a forward support troop (FST), three air cavalry troops (ACTs), one attack helicopter troop, one general support aviation troop (GSAT), and one aviation service troop (AST).

Attack Reconnaissance Battalion Missions

A-34. The battalion's primary missions are reconnaissance, security, and the destruction of enemy forces through CCAs and mobile strikes.

ASSAULT HELICOPTER BATTALION

General

A-35. The fundamentals, mission, and organization of the AHB are relatively the same whether it is part of a heavy, light, or forced entry aviation brigade. The AHB's primary role is to plan, execute, and logistically support operations. The two basic fundamental tasks common to each AHB include air assault and sustainment. In the sustainment role, the AHB provides support to the air assault operation first, then to division. The AHB can also provide aircraft for GS missions when available. See FM 3-04.113 for additional details.

Organization

A-36. Division aviation brigades have one AHB. Corps aviation brigades have two AHBs. The air assault division, however, has two aviation brigades each with its own AHB. The AHB at all echelons consists of an HHC, an FSC, three assault companies, and an ASC (Figure A-4).

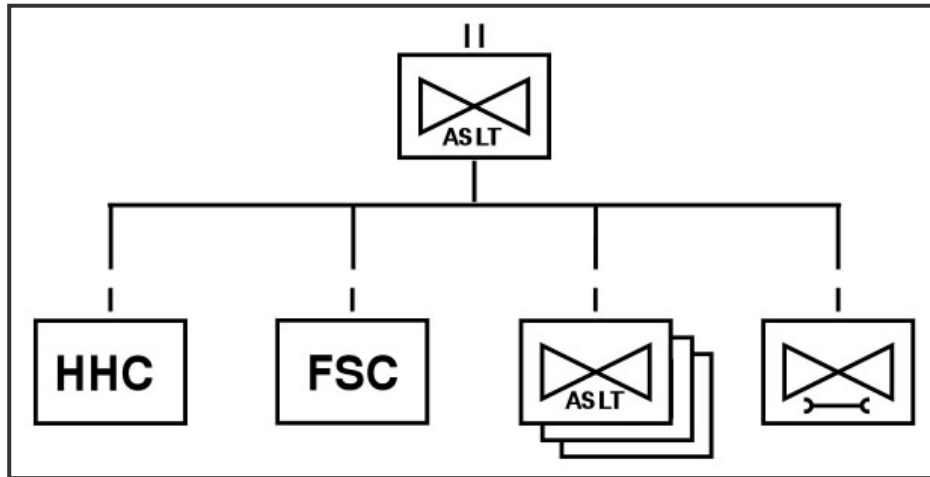


Figure A-4. Assault Helicopter Battalion

Mission

A-37. The primary mission of the AHB is to move the combat elements of a combined arms battalion (CAB) in one lift, augmented as necessary by CH-47 aircraft from the GSAB and to extend tactical reach of the maneuver commander, negate effects of terrain, seize key nodes, achieve surprise, and isolate or dislocate enemy forces. The battalion also conducts numerous other missions as described below.

GENERAL SUPPORT AVIATION BATTALION

General

A-38. The fundamentals, mission, and organization of the GSAB are relatively the same whether it is part of a division-, corps-, or theater-level aviation brigade.

Organization

A-39. Each aviation brigade has one GSAB, and the GSAB has an HHC, an FSC, a general support aviation company (GSAC), a heavy helicopter company, an aeromedical evacuation company, an ATC, and an ASC (Figure A-5).

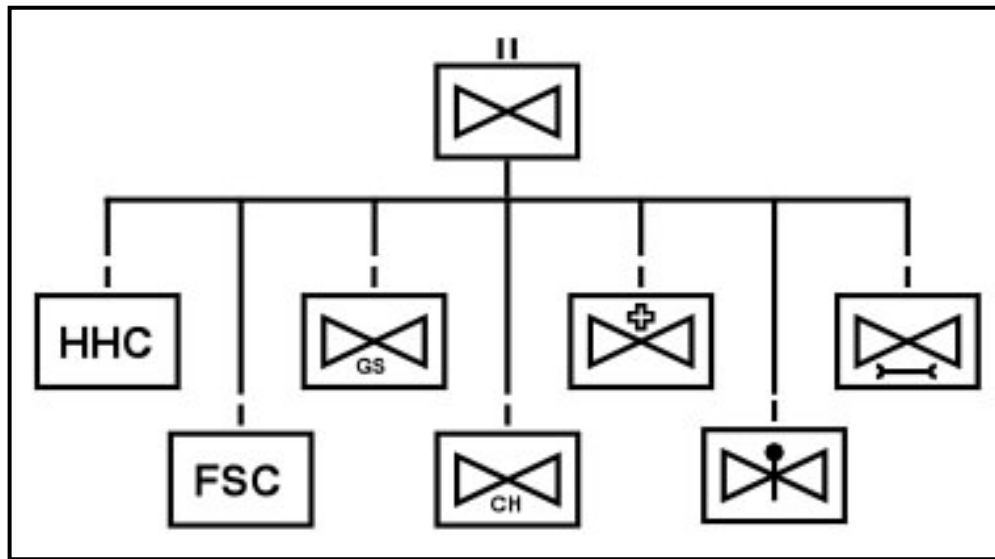


Figure A-5. General Support Aviation Battalion

Mission

A-40. The mission of the GSAB is to conduct general aviation support; provide airborne C2 and air transport of personnel, equipment, and supplies; conduct aerial sustainment operations; support air assault operations as required; and provide MEDEVAC support throughout the applicable area of responsibility (AOR).

SECTION III – ARMY AVIATION MISSIONS

PRINCIPLES OF AVIATION EMPLOYMENT

A-41. The principles and guidelines for employing aviation assets differ from those for typical ground maneuver forces. In general, aviation forces:

- Fight as an integral part of the combined arms team.
- Exploit the capabilities of other branches and services.
- Capitalize on intelligence-gathering capabilities.
- Suppress threat weapons and acquisition means.
- Exploit firepower.
- Exploit mobility.
- Exploit surprise.
- Mass forces.
- Use terrain for survivability.
- Displace forward elements frequently.
- Maintain flexibility.
- Exercise staying power.

A-42. Aviation forces normally operate as part of the combined arms team integrated from the HBCT level to the theater level. The aviation task force supporting the HBCT primarily

conducts reconnaissance, security, and close combat support for the HBCT. The aviation brigade can employ other combined arms elements conducting ground operations and can operate semi-independently or as a part of a joint force.

ATTACK

A-43. The aviation brigade has the organic capability to strike an enemy throughout the depth of the corps area of operations (AO) from multiple directions either in support of the HBCT or independently in noncontiguous battlespace. Attack reconnaissance aircraft carry a combination of missiles, rockets, and conventional ammunition to destroy high-priority targets, shield the maneuver forces as they move out of contact, and enable shaping of the battlespace. In addition to the traditional attack functions, the attack reconnaissance unit executes all the functions that air cavalry has performed throughout the ages. As an armor killer, it is deadly against massed moving targets and is also effective against enemy field artillery, air defense, communications, logistics units, and point targets (bunkers, caves, windows in buildings). The attack reconnaissance unit cannot occupy terrain; however, it can deny terrain for a limited period of time with direct and indirect fires. Attack reconnaissance aircraft provide a highly mobile and lethal attack capability against selected targets.

A-44. The mobile strike capability of the aviation brigade, particularly when coupled with Army and joint fires and effects, provides the commander a significant capability to extend the battle to the maximum range of organic and supporting sensors. Attack operations are normally conducted by the supporting HBCT aviation task force and the attack reconnaissance battalion. Attack reconnaissance units also make an excellent reserve or quick reaction force for the supported commander. The aviation brigade headquarters has the inherent staff planning experience to support maneuver, the synchronization and integration of joint effects, and the ability to control mobile strike operations.

RECONNAISSANCE

A-45. Attack reconnaissance aircraft are employed to support the commander's scheme of maneuver and significantly extend the battlespace of both the HBCT and echelons above the HBCT. Attack reconnaissance aircraft help to locate the threat, building and sharing the common operational picture (COP), enhancing force protection, enabling freedom of movement, clearing the way for air assault and aerial mining missions, securing routes for aerial/ground resupply, and allowing the commander to focus combat power at the decisive point and time. Sensor video recording capability can provide the supported commander excellent reconnaissance and battle damage assessment (BDA) information.

A-46. Attack reconnaissance assets can fight for information. They can work through and counter enemy deception efforts, provide an expedient and reliable means of assessing terrain that the enemy is trying to configure to his advantage, further develop the situation, and effectively disseminate real-time information to commanders. The organic weapon systems of attack reconnaissance aircraft enhance the synergy achieved through the employment of external fires and effects that gives commanders at all levels a robust counterreconnaissance capability.

See Section IV for more details on conducting close combat attack operations.

SECURITY

A-47. The aviation task force supporting the HBCT and the ARB can conduct security operations. Each can accomplish screen, guard, and cover security operations with augmentation for the latter two operations. Security operations are particularly valuable

during early entry operations when the COP is degraded and when the dynamics of the battlefield change faster than expected. The combination of attack reconnaissance aircraft and unmanned aerial vehicles (UAVs) enable commanders at all levels to quickly move or deploy interactive and interpretive intelligence collectors over great distances to provide early warning and gain and disseminate a timely picture of the battlefield. These aircraft can quickly transition from a reconnaissance/counterreconnaissance or security mission to an economy-of-force or attack mission to provide reaction time, maneuver space, and protection for air-ground operations. The RAS gives the corps the added flexibility to conduct operations throughout its entire area of operations.

AIR ASSAULT AND AIR MOVEMENT

A-48. Aviation brigade utility and heavy helicopter assets provide the maneuver commander the ability to sustain continuous offensive or defensive operations and to conduct brigade-level air assaults. Air assault operations extend the tactical reach of the maneuver commander, negate effects of terrain, seize key nodes, attain the advantage of surprise, and dislocate or isolate the enemy. The aviation brigade at the UEx level has the organic capability to air assault the dismounted elements of a combined arms battalion and its required support equipment in a single lift and to provide air assault security. Forward arming and refueling points (FARPs) emplaced by lift aircraft and ground assets enable aviation to support and sustain operations throughout the area of operations. Additionally, heavy-lift helicopters are capable of transporting internal and external cargo in a variety of configurations to meet the CS and CSS requirements of both the HBCT and echelons above HBCT.

COMMAND AND CONTROL

A-49. The Army airborne command and control system (A2C2S), a UH-60-based package, represents a significant enhancement to the commander's ability to command and control forces. The A2C2S has five operational roles:

- Battle command on the move platform.
- Ground tactical CP.
- Jump tactical operations center (TOC).
- Early entry CP.
- First responder during national disasters.

A-50. On-board communications linkages allow the commander to be continuously in contact with committed forces, untethered to a static operations center, maintain SU, issue and receive fragmentary orders (FRAGOs) with graphics, synchronize fires and maneuver, and extend his coverage throughout the entire battlespace. A2C2S are normally found in the general support aviation company of the aviation brigade.

MEDICAL EVACUATION/CASUALTY EVACUATION

A-51. Evacuation of casualties is the responsibility of the health service support (HSS) system. Air evacuation is the preferred method of evacuation of seriously wounded and ill soldiers. The division aviation brigade has an organic aeromedical evacuation company. Air ambulance assets of the aeromedical evacuation company can collocate with medical organizations, the aviation task force or higher to provide air ambulance support throughout the corps AO. MEDEVAC aircraft are equipped with medical personnel and equipment that enables en route care of casualties. Utility and heavy helicopter units conduct CASEVAC operations when medical aircraft are inadequate or not readily available.

PERSONNEL RECOVERY

A-52. Joint doctrine defines personnel recovery (PR) to include combat search and rescue (CSAR); search and rescue (SAR); survival, evasion, resistance, and escape (SERE); and coordination of forcible recovery operations. All component commanders are responsible for establishing and coordinating recovery operations. For the HBCT, the UEy has additional communications linkages and detection capabilities, which may enable the rescue operation to be performed more safely and efficiently within the constraints of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC). The UEy then augments subordinate elements with the required assets to accomplish the mission. UEy PR operations will be conducted primarily in support of their own operations (downed Army aircrew recovery) and provide mutual PR support at both the intra- and inter-service levels as required. Additionally, PR contingencies will be incorporated into all mission plans, special instructions will be issued for each plan, and the brigade will be prepared to generate PR support requests.

DOWNED AIRCRAFT RECOVERY

A-53. Downed aircraft recovery operations are coordinated at division and corps level by the aviation support battalion. The general support aviation battalion of the combat aviation brigade at UEx level or the UEy aviation support brigade will normally accomplish the mission with minimal risk to the Soldiers involved in the operation.

REAR AREA OPERATIONS

A-54. Maneuver sustainment and support operations are normally conducted in the rear area. Ground maneuver forces may or may not be in the rear area. Aviation units provide a flexible mix of capabilities to effectively handle the full range of threats to the rear area. Reconnaissance, attack, and lift capabilities provide agile, responsive support of rear area operations and may be performed by aviation units above the HBCT level.

AERIAL MINE DELIVERY

A-55. Mine delivery operations are generally controlled at the UEx or UEy level. Aerial mine delivery is an assault helicopter mission that may be conducted by assault helicopter battalion assets at either level. The aviation brigade has the capability, with proper coordination, to support a division mission or to support a corps mission anywhere in the area of operations.

AERIAL SUSTAINMENT

A-56. Aerial sustainment is the movement of equipment, materiel, supplies, and personnel by utility, heavy, and fixed-wing assets for operations other than air assault and combat support. Aviation provides air movement of personnel, equipment, ammunition, water, parts, and supplies and performs CASEVAC and aviation maintenance. These air movements are considered CSS missions because aviation forces are not task organized with combined arms forces, nor do they move combat or CS forces or assets whose primary mission is to engage and destroy enemy forces.

A-57. HBCTs and infantry BCTs have significantly different needs and requirements. Aerial sustainment through direct support (DS) and general support (GS) is critical for light, airborne, and air assault forces. Resupply of key ammunition and parts is critical for the HBCT.

A-58. Aviation taskings through command channels allow rapid transition between combat, CS, and CSS missions, keeps aircrews better informed, and permits simultaneous execution of all three mission types with the same set of aircraft.

A-59. The tempo of resupply operations can dramatically impact combat operations. It is essential that aircraft utilization be optimized. The goal is to maximize the number of turns during each shift. This can only be accomplished through coordination and training.

SECTION IV – AIR-GROUND INTEGRATION

A-60. Air and ground assets require effective integration to conduct operations successfully and minimize the potential for fratricide and civilian casualties. Integration starts at the home station with the implementation of effective tactical SOPs, habitual relationships, and training. It continues through planning, preparation, and execution of the operation.

PLANNING OPERATIONS WITH ARMY AVIATION ASSETS

A-61. Planning considerations for operations that include aviation assets are similar to those of any tactical operation. The two primary factors are the higher commander's intent and the factors of METT-TC, but others, such as CSS and risk analysis, must be integrated from the start. Two specific areas in the planning process are of critical importance to the squadron: request procedures for aviation support and the integration of aviation and ground forces.

A-62. Integration of the combat power of aviation and ground maneuver forces is extremely important because air and ground forces do not always attack along the same axis or have identical objectives. The planning for such operations must capitalize on the strengths of each combat system. In whichever role the aviation assets are used, the plan must be all encompassing and ensure coordination of effort.

A-63. Successful employment of aviation assets is possible only if aviation can communicate with the other members of the combined arms team.

TIME REQUIRED TO PLAN

A-64. Planning time is critical for every type of military mission. While aviation units can move rapidly, planning time is essential for coordination, clearing routes, mission briefings to Soldiers and leaders, and unit SOP compliance. Warning orders (WOs) maximize time available by allowing subordinate units to prepare for pending action. Planning and operations are greatly simplified by SOPs that are understood, followed, and internalized through training.

FUNDAMENTALS

A-65. To ensure effective integration, commanders and staffs must consider some fundamentals for air-ground integration. The fundamentals that provide the framework for enhancing the effectiveness of both air and ground maneuver assets include the following:

- Understanding capabilities and limitations of each force.
- Using SOPs.
- Establishing habitual relationships.
- Conducting regular training events.
- Establishing effective C2.
- Maximizing and concentrating the effects of available assets.

- Establishing employment methods.
- Coordinating direct and indirect fires.
- Developing synchronization.

A-66. Employment of attack aviation with armored forces requires coordinated force-oriented control measures that allow aviation forces to fix and weaken the enemy at extended ranges and then to reinforce ground unit fires. This type of employment requires constant practice and close coordination.

COMMAND AND CONTROL

A-67. Aviation assets normally remain under aviation brigade or battalion control. Subordinate battalion and company commanders operate on the command network but coordinate detailed actions on other nets or face-to-face. The commander ensures the focus of subordinate elements remains synchronized while executing various missions. He also clarifies coordination priorities and issues orders to each subordinate element, particularly on support issues, such as FARP. This does not preclude direct coordination between ground and aviation elements.

AIR-GROUND CONTROL

A-68. An alternate method of C2 is the formation of air-ground task forces or teams, which is a temporary relationship to deal with a specific situation. OPCON is the normal command relationship. Specific employment guidelines must be established before operations. Air-ground teams are best used when decentralized company operations are required. Based on METT-TC, control may reside with either the ground or air commander. Rehearsals are essential.

SECTION V – AVIATION SUPPORT DURING CLOSE COMBAT

A-69. Close combat is inherent in maneuver and has one purpose—to decide the outcome of battles and engagements. It is carried out with direct-fire weapons and supported by indirect fire, close air support (CAS), and nonlethal engagement means. Close combat defeats or destroys enemy forces or seizes and retains ground. The range between combatants may vary from several thousand meters to hand-to-hand combat. During close combat, attack reconnaissance aircraft may engage targets that are near friendly forces, thereby requiring detailed integration of fire and maneuver of ground and aviation forces. To achieve the desired effects and reduce the risk of fratricide, air-ground integration must take place down to company, platoon, and team levels. Close combat engagements also require a higher training standard for aerial weapons delivery accuracy.

CLOSE COMBAT ATTACK

A-70. For aviation units, close combat attack is defined as a hasty or deliberate attack in support of units engaged in close combat. During CCA, armed helicopters engage enemy units with direct fires that impact near friendly forces. Targets may range from a few hundred meters to a few thousand meters. CCA is coordinated and directed by a team-, platoon-, or company-level ground unit using standardized CCA procedures in unit SOPs.

A-71. Effective planning, coordination, and training between ground units and armed aircraft maximize the capabilities of the combined arms team while minimizing the risk of fratricide. The key to success for enhancing air-ground coordination and the subsequent execution of the tasks involved begins with standardizing techniques and procedures. The

end state is a detailed SOP between air and ground maneuver units that addresses the CCA situation. This procedure is best suited for units that maintain a habitual combined arms relationship during training and war.

A-72. To prepare for close combat, basic tasks, such as how to find a ground unit's position at night, must be solved during home-station training. Operations in unfamiliar terrain must not be hampered by the question of how to find the unit. It is found by one of the various methods already practiced in training.

DIRECT FIRES CALLED BY THE GROUND COMMANDER IN CLOSE COMBAT

A-73. The air mission commander (AMC) and ground unit key leaders must consider the risk to friendly forces before weapon selection and engagement. If friendly forces may be in the lethality zone, the ground leader must be precise in describing the target that he wants aircraft to engage and should warn aircrews of the proximity of those forces. The aviation leader must be aware of his aircrew's skills in delivering fires near friendly forces.

CLOSE COMBAT ATTACK BRIEFING

A-74. The CCA briefing (Figure A-35) follows the joint standard nine-line format with minor modifications for Army helicopters. The briefing provides clear and concise information in a logical sequence that enables aircrews to employ their weapon systems. It also provides appropriate control to reduce the risk of fratricide. Figure A-36 shows an example of a briefing.

A-75. Table A-1 shows danger close ranges for armed helicopter weapons. FM 3-09.32 (FM 90-20) has additional information. Engagements at ranges danger close or short of danger close require extremely close coordination and positive identification. Crews must take special precautions when delivering direct fires on targets within these ranges but are not prohibited from delivering at ranges short of danger close. Accurate delivery of munitions is essential when engaging at danger close ranges and requires higher crew training standards.

Table A-1. Danger Close Ranges for Attack Helicopter Engagement

Weapon	Description	Danger Close In Meters
2.75-inch rockets	Rocket with various warheads. Area weapon.	200
Hellfire	Precision-guided. Point weapon.	75
20mm 25mm 30mm	Guns. Area weapons.	150

A-76. Time is a primary constraining factor for coordinating direct fires in close combat. METT-TC dictates how coordination between the commander in contact and the AMC is accomplished. Face-to-face coordination is preferred but is rarely possible in CCA situations.

A-77. In the hasty CCA to take advantage of targets of opportunity or assist ground units under pressure, coordination is usually accomplished by radio.

CLOSE COMBAT ATTACK BRIEFING	
<p>(Omit data not required. Do not transmit line numbers. Units of measure are standard unless otherwise specified. *Denotes minimum essential in limited communications environment. BOLD denotes readback items when requested.)</p>	
Terminal controller: _____	This is _____
(Aircraft call sign)	(Terminal controller)
<p>*1. IP/BP/ABF or friendly location: _____</p> <p style="text-align: center;">(Grid, known point or terrain feature)</p>	
<p>*2. Heading to target: _____ (magnetic)</p> <p style="text-align: center;">(Specify from IP/BP/ABF or friendly location)</p>	
<p>*3. Distance to target: _____ (meters)</p> <p style="text-align: center;">(Specify from IP/BP/ABF or friendly location)</p>	
<p>4. Target elevation: _____ (feet mean sea level)</p>	
<p>*5. Target description: _____</p> <p>_____</p>	
<p>*6. Target location: _____</p> <p style="text-align: center;">(Grid, known point or terrain feature)</p>	
<p>7. Type of target mark: _____ Code: _____ (day/night)</p> <p style="text-align: center;">(WP, laser, IR, beacon) (Actual code)</p>	
<p>Laser to Target Line: _____ degrees</p>	
<p>*8. Location of friendlies: _____</p> <p style="text-align: center;">(Omit if previously given--grid, known point, or terrain feature)</p>	
<p>Position Marked By: _____</p>	
<p>9. Egress direction: _____</p> <p style="text-align: center;">(Cardinal direction not over threats)</p>	
<p>Remarks (as appropriate): _____</p> <p>_____</p> <p style="text-align: center;">(Threats, restrictions, danger close, attack clearance, SEAD, abort codes, hazards)</p>	
<p>Time on target (TOT): _____</p> <p>or time to target (TTT): Standby _____ plus _____ hack.</p>	
<p>Note: When identifying position coordinates for joint operations, include the map datum data. DESERT STORM operations have shown that simple conversion to latitude/longitude is not sufficient. The location may be referenced on several different databases; for example, land-based versus sea-based data.</p>	

Figure A-6. Close Combat Attack Checklist

ENGAGEMENT

A-78. A potential target may seem lucrative because of its apparent location and activity, but visual acquisition and activity do not mean positive identification. If there is no immediate threat from a specific target and it is not positively identified, aircrews do not shoot until all possible measures to identify are taken. Before the armed helicopter team engages, the target must be confirmed by the aircrew and friendly unit in contact.

A-79. During engagement, open communication and continuous coordination with friendly ground elements are required to ensure the desired effect. Coordination of the direct and indirect fires from all participants produces the most efficient results in the least amount of time with the least risk to all. This coordination includes CAS and any nonlethal methods that may be employed.

Tiger 6, this is Eagle 26, over.

Eagle 26 is five minutes southeast of IP Blue, with 30 mm, rockets, and Hellfire. Prepared to copy over.

This is Tiger 6, over.

**Roger. From IP Blue:
Heading: 030 degrees
Distance: 1.5 kilometers
Estimated elevation: 1,200 feet
Machine-gun bunker
Target location: DR123456.**

Will mark with white phosphorous when you are ready, need two minutes lead time.

Friendly location: BP Catfish marked by smoke. After initial engagement, reposition to ABF October and be prepared to reengage on order.

This is Eagle 26, roger, standing by to identify your smoke.

Figure A-7. Example of a Close Combat Attack Brief

BATTLE DAMAGE ASSESSMENT/REATTACK

A-80. The AMC provides a BDA to the ground commander who determines if a reattack is required to achieve his desired end state. Support continues until the desired effect is achieved.

EMERGENCY COORDINATION MEASURES

A-81. Aviators may be required to assist ground personnel who are not fully familiar with aviation assets. Key personnel who habitually handle coordination for aviation support may become casualties or simply not be available. These situations require close attention, careful communications, and initiative on the part of the aviator to place fire on targets or deliver other support as necessary. An assault pilot may be required to coordinate for an attack mission or call for indirect fire support. An attack pilot may have to assist in extracting personnel.

A-82. Pilots must ask appropriate questions of the requestor, with emphasis on positive identification of location. Possible questions follow:

- Where is ground unit's position? What are the GPS coordinates? Are those coordinates verified with another GPS?
- Can the ground unit mark its position with smoke, tracers, or other methods? (If smoke is used, aircrew verifies color after deployment.)
- What assistance does the ground unit need (FS, extraction, or resupply)?
- Where is the target? What are the grid coordinates or the relationship of the target to a readily identifiable natural or manmade feature?
- How far is the target from the ground unit and in what direction is it? If the observer is not familiar with meters, aircrews ask the observer to try football or soccer field lengths to estimate distances.
- What is the target? Is the target personnel, vehicles, equipment, or buildings? What is the size of the enemy force, and what is it doing?

A-83. Aviators may have to fly helicopters near friendly troops to deliver ordnance onto the target. Factors that can reduce the potential for fratricide include the following:

- Precision-guided munitions.
- Fire support coordination measures.
- Planned or hasty coordination and control measures.
- Knowledge of the ground tactical plan.
- Knowledge of the exact location of friendly troops.
- Knowledge of the exact location of aircraft.
- Positive identification of targets.
- Familiarity between the supported unit and the aviation unit.

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Appendix B

Command Post Operations

As discussed in Chapter 3, the heavy brigade combat team (HBCT) organizes command posts (CPs) to assist the commander in commanding and controlling the HBCT. By organizing into CPs, the brigade distributes its staff, computers, and communications capabilities across the area of operations (AO) making them more survivable and expanding the commander's span of control. This appendix summarizes and augments the staff duties and responsibilities found in FM 6-0. It also describes the brigade's communication and computer architecture and provides tactics, techniques, and procedures (TTP) to use these systems to enhance battle command.

SECTION I – COMMAND POST DISTRIBUTION

B-1. To best direct operations, CPs are organized by purpose and function and are distributed across the HBCT's AO to extend the brigade's effective span of control, improve communication, increase survivability, and enhance mobility. The brigade normally fields Command Groups, a Tactical Command Post (tracked and lean), and a Main Command Post (wheeled and robust). There is no designated Rear Command Post in the HBCT. CPs provide the physical facilities, personnel and systems that allow the commander to see the battle, control and synchronize forces, communicate orders, plan operations, and position Sustainment. The commander has the flexibility in manning and equipment to operate distributed or consolidated dependent on the mission or operation. Full Army Battle Command System (ABCS) suites provide the commander with access to critical information from anywhere on the battlefield in near real-time. He has the ability to leverage information; access an accurate common operational picture (COP); quickly and precisely process, analyze, and disseminate battlefield information; and provide updated mission orders in a timely manner. The commander can continually interact with the staff, influencing the action from anywhere in the battle space.

HBCT COMMAND STRUCTURE

B-2. *Brigade Commander*. The commander has complete responsibility and accountability for the HBCT and its actions. This includes the authority and responsibility for effectively using all available resources for planning, organizing, coordinating and controlling all military forces in accomplishing assigned missions. He provides his subordinates with missions, resources and a clear statement of his intent.

B-3. *Deputy Brigade Commander (DCO)*. The HBCT commander defines the DCO's role, duties, and relationship with the staff and subordinate commanders, and normally assigns specific tactical tasks and responsibilities that require command oversight. In high intensity conflict, these may include river crossing operations, passage of lines, or overseeing a critical tactical task at a distant point on the battlefield. In stability operations and support operations, he can assist the commander by participating in meetings or negotiations with local officials, or supporting government and private agencies. The DCO also oversees the

HBCT's sustainment system to ensure proper anticipation and linkage between current and future operations. Due to the HBCT's expanded battle staff and the complexities of the contemporary operating environment (COE), he can add his experience and judgment to overseeing selected staff boards and cells during the planning process to provide additional time for the executive officer to accomplish his expanded responsibilities. The DCO is prepared to assume command of the HBCT at any time. However, this assumption of command may not be automatic in the execution of tactical operations. Given the circumstances, a maneuver commander may assume immediate command as the main effort to facilitate immediate success. The operation order (OPORD) must clearly define the succession of command for a given operation.

B-4. *Executive Officer (XO)*. The XO directs, coordinates, supervises and trains the staff. The XO is responsible for all staff activities, including the military decision making process (MDMP), the intelligence preparation of the battlefield (IPB) process and the targeting process. He is responsible for the operations of the MAIN. The XO synchronizes sustainment, combat support (CS), and combat operations. He manages information flow from within the HBCT to include commander's critical information requirements (CCIR). Additionally, because of the XO's relationship with the commander and deputy commander, he understands the commander's intent better than, or at least as well, as subordinate commanders. The XO is prepared to assume command of the HBCT at any time.

B-5. *Command Sergeant Major (CSM)*. The CSM is considered a member of the commander's personal staff by virtue of his being the senior non-commissioned officer (NCO) of the HBCT. He is responsible for providing the commander with personal, professional and technical advice on enlisted Soldier matters and the NCO support chain as a whole. The CSM's tactical duties vary according to the commander's desires.

COMMAND GROUPS (CG)

B-6. The purpose of the Command Groups is to support the Commander and Deputy Commander when they are excising command and control (C2) away from the tactical command post (TAC) or MAIN. Command Group 1 (CG1) supports the Commander and Command Group 2 (CG2) supports the Deputy. The actual configuration of personnel, equipment and capabilities the commander and deputy use is METT-TC dependent. It may or may not mirror the authorized command group structure. The CGs are not permanent organizations and are organized based on the mission. CG1 is formed anytime the HBCT commander relocates to control an operation separately from either the TAC or MAIN. The commander will determine the battlespace location of his CG. Mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC) dependent, the commander may fight the "battle" from his CG and position himself at the decisive point to observe, influence, sense the fight, and ensure communications. He must ensure he has communications with subordinate commanders and is able to make his personal presence felt on the battlefield.

B-7. The DCO's CG complements the commander's CG in the direction of C2 of the HBCT. CG2 is formed when the HBCT commander requires it to control an operation or the commander feels an additional personal presence is necessary to influence operations with rapid decisions and orders. The DCO uses the same considerations as the commander in positioning his CG on the battlefield. The CGs will normally deploy mounted, with enhanced survivability via the Bradley Fighting Vehicle (BFV). When the CGs are not established, personnel fill staff positions in the MAIN. Figure B-1 shows a potential CG1 (using the full authorized MCG1 equipment and manning) organization for combat in a high intensity combat environment. In stability operations or support operations; fire and effects, maneuver, and maneuver and support personnel may be replaced with civil affairs and public affairs personnel. Composition of the CGs is METT-TC dependent and also varies

based upon the manning levels, and proficiency of the staff. Standard Operating Procedures (SOP) will aid in a seamless staff transition to form these command groups. In every case, the TAC and MAIN staffs work to provide necessary and critical information to the CGs via a “pull/push” information process.

TACTICAL COMMAND POST (TAC)

B-8. This CP is a lean and forward employed command post organized when the commander must be positioned away from the MAIN location for an extended period, when METT-TC factors do not permit the commander access to MAIN support or when the MAIN is moving. This CP is focused on assisting the commander with command and control of current operations. It is commander focused and execution centric for intelligence, fires and effects and maneuver. Usually, or in accordance with commander guidance, the HBCT S3 is normally responsible for the CP. 24/7 capability is not an overriding consideration in forming the TAC.

B-9. The organization of the TAC CP is simpler, smaller, and more austere than the MAIN. It operates in distinctive functional sections that allow synchronization for maneuver, ISR, and fires and effects. Sustainment requirements and issues are provided to and monitored by the sustainment section of the MAIN. Required sustainment information or action is then initiated or “pushed” forward to the TAC. Its connectivity to the more robust MAIN allows for efficient collaboration to ensure it gets the required information necessary for the commander’s decision- making process. TAC can conduct distributed, collaborative, and simultaneous decision-making to translate decision into action. This allows rapid decision-making focused on the current fight and the ability to maintain the initiative. The ABCS suite and enhanced communications allow efficiency and access to the MAIN and external sources. It also has elements of the Network Integration Cell (NIC) for command, control, communications and computers (C4) support. The TAC is composed of tracked vehicles (M577/M1068) specially equipped to provide forward command and control functions. Its small size allows for high mobility as it relies on frequent displacement and low magnetic signature to maintain security.

B-10. The composition of the CP allows for battlefield visualization; direction, integrated employment, and prioritization of HBCT efforts and resources; maintaining an accurate common operational picture (COP); synchronizing current tactical operations; coordinating the entire nodal staff operations and recommending and providing priority intelligence requirements (PIR) and commander’s critical information requirements (CCIR); and integrating all functional elements. It can provide the net control station for the HBCT command net and backup net control station for the operations and intelligence (OI) net. The TAC provides a forward location for issuing orders and may provide a short-term planning facility.

MAIN COMMAND POST (MAIN)

B-11. The MAIN is the commander’s principal command and control facility. The HBCT XO is responsible for supervising all staff activities and functions within this CP. It operates from a relatively secure position and moves as required to maintain control of the operation. In linear operations, the TAC may locate vicinity a subordinate CAB Tactical Operation Centers (TOC) and, if possible, out of enemy medium artillery range. In non-linear and non-contiguous environments, it locates where it can best support HBCT operations and is least vulnerable to potential enemy actions. The BTB Commander is responsible for HBCT CP security, to include MAIN security. The HBCT HHC Commander normally serves as the BTB Commander’s on-site representative for the MAIN.

B-12. The MAIN integrates and synchronizes the staff mission functions of maneuver and maneuver support; ISR; fires and effects; sustainment; and C4. It also includes the HBCT’s

planning cell. The MAIN monitors all operations, coordinates with higher and adjacent units, and provides in-depth analysis of information and intelligence to provide recommendations to the commander. If the TAC is not employed, the MAIN controls tactical operations. The MAIN is the focal point for intelligence operations in the HBCT and provides situational understanding to the commander by monitoring, analyzing, and disseminating information and intelligence to the commander. It will also monitor and anticipate commander's decision points and CCIR. Note that the sustainment section is part of the MAIN CP since the HBCT has no separate rear CP. Based upon METT-TC, the commander may direct the sustainment cell co-locate with the BSB CP. Figure B-1 provides the composition of the CP and highlights those mission tasks executed by the CP.

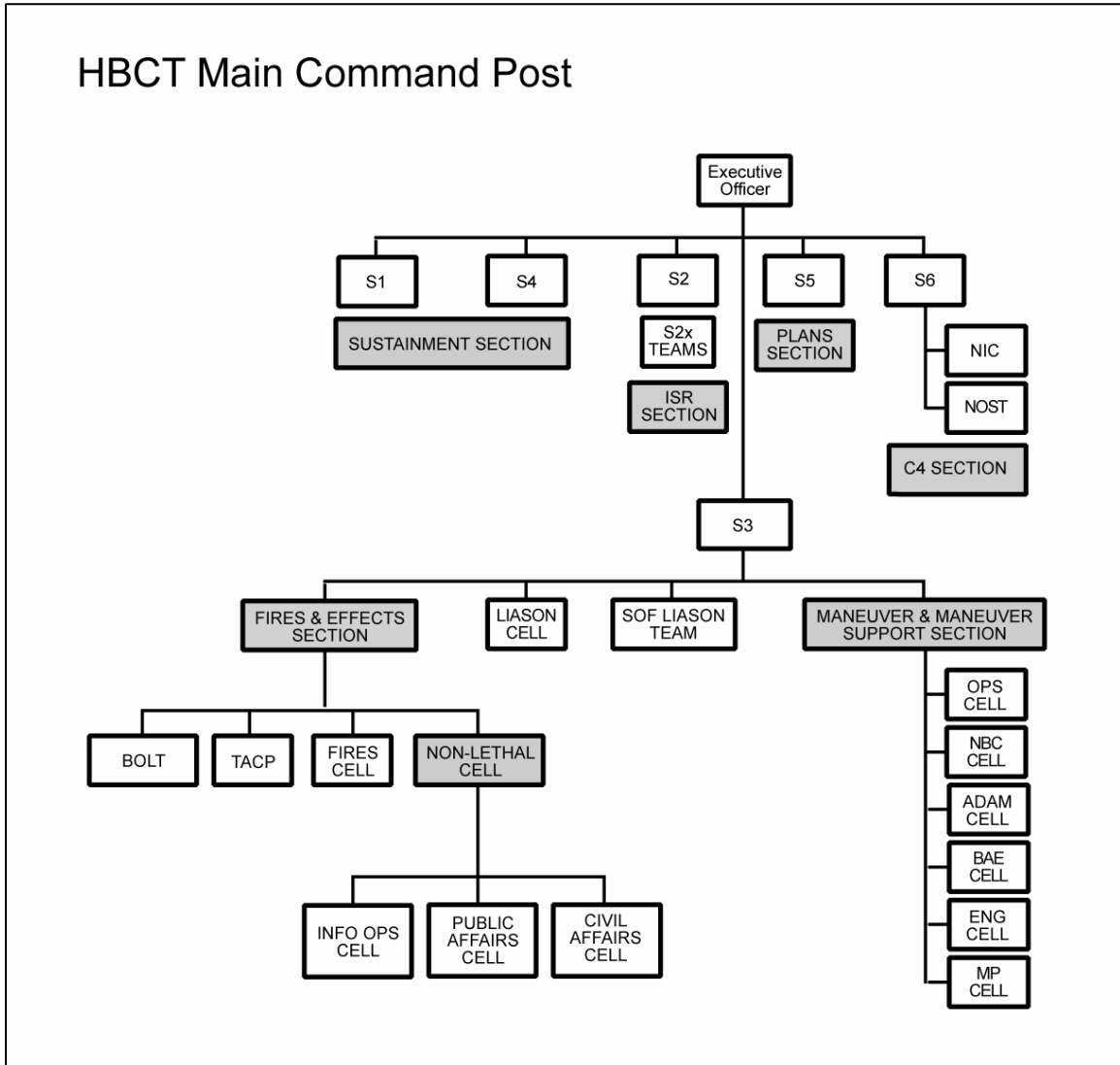


Figure B-1. Main Command Post (MAIN)

B-13. The command group may also operate from the Army airspace command and control system (A2C2S) helicopter for limited periods of time. The unit of employment x (UEx) Aviation Brigade provides this asset. The A2C2S is a UH-60 aircraft configured with ABCS workstations and communications systems to allow a small command group to conduct operations over extended distances. The A2C2S has the benefit of being able to move rapidly about the battlefield, quickly cover long distances, use altitude to extend line of sight (LOS) communications, and facilitate rapid link ups for face-to-face coordination. The aircraft is equipped with generators that allow for continued C2 operations from stationary ground locations.

SECTION II – THE HBCT STAFF

B-14. As described in FM 6-0, the brigade staff is organized into the coordinating staff, special staff and personal staff. The HBCT staff has been significantly enhanced with organic personnel previously attached by task organization to the HBCT for operations.

Figure B-2 highlights those personnel that allow staff expertise for command, control, communications, computers; information superiority; ISR; maneuver and maneuver support; effects (both lethal and non-lethal); sustainment; and other enabling tasks to enable the HBCT commander to plan and execute missions across the full spectrum of operations with organic personnel structure.

STAFF ORGANIZATION

B-15. As described in FM 6-0, the brigade staff is organized into the coordinating staff, special staff, and personal staff. Figure B-2 shows the staff organization for the HBCT staff.

B-16. The coordinating staff is composed of the commander's principle assistants responsible for one or a combination of broad fields of interest (personnel, intelligence, operations, logistics, planning, and communications). They help the commander coordinate and supervise the execution of plans, operations, and activities. Collectively, through the XO, they are accountable for the commander's entire field of responsibility.

B-17. The special staff assists the commander or coordinating staff in their professional or technical functional areas. In some cases, the special staff officer is a subordinate unit commander.

B-18. The personal staff works under the commander's immediate control, but may work through the XO (for example during tactical operations, the Brigade Judge Advocate is in the fires and effects section of the MAIN) or a specific coordinating staff officer for coordination and control purposes. Members of the personal staff (Chaplain, Brigade Judge Advocate, CSM) normally have a direct line of communication to the commander due to the confidential nature and broad scope of their assigned duties.

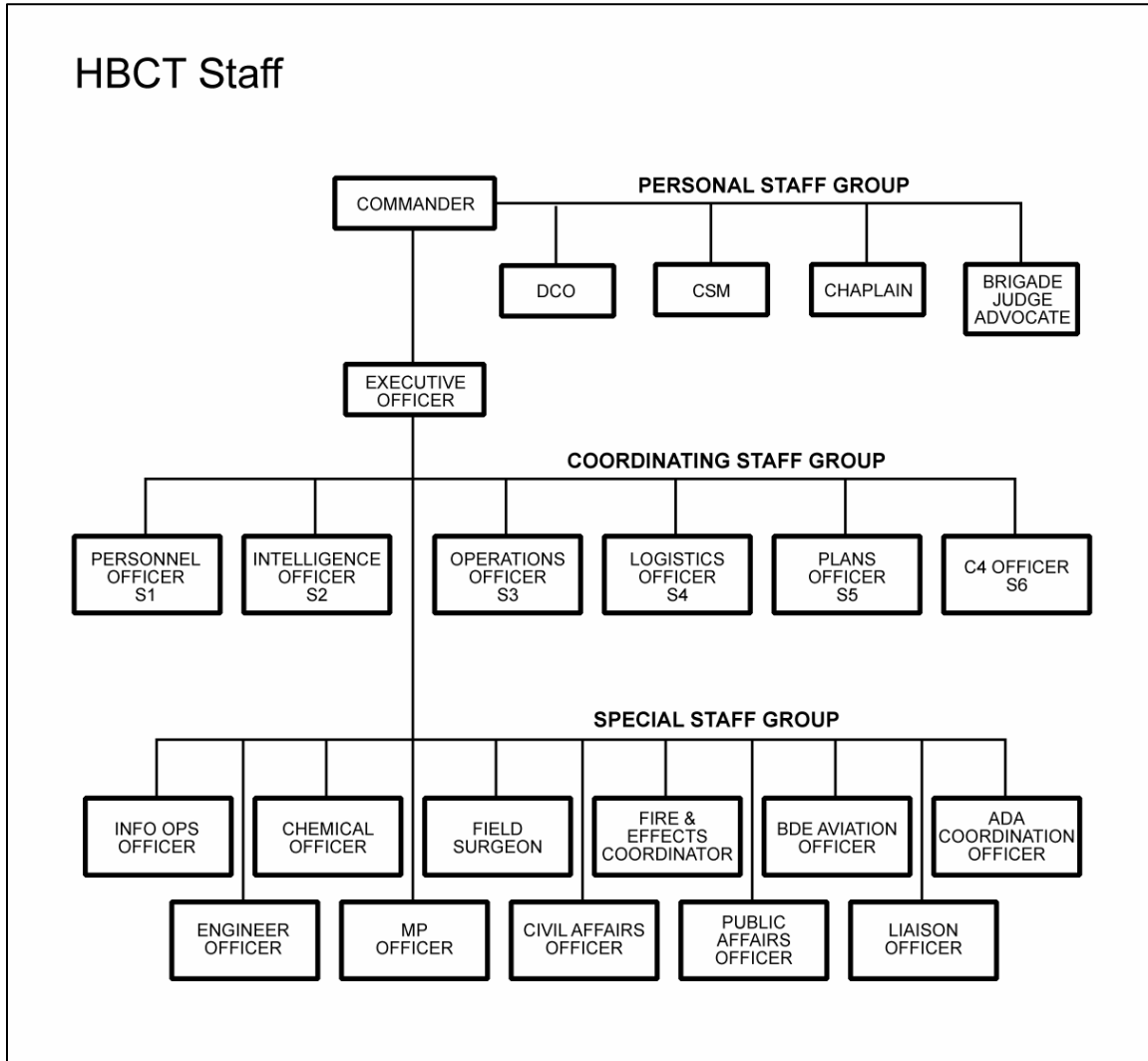


Figure B-2. HBCT Staff Organization

HBCT TACTICAL STAFF FUNCTIONS

B-19. *Maneuver and Maneuver Support (M&MS)*. The M&MS function is the responsibility of the HBCT S3. The M&MS section serves as the principal maneuver and maneuver support planner, coordinator and executor in the HBCT TAC and MAIN both internally and with higher echelons. This section ensures synchronization of maneuver and all maneuver support assets to include engineers, military police, army airspace command and control (A2C2), aviation operations and NBC.

B-20. *Intelligence, Surveillance and Reconnaissance (ISR)*. This section is the functional responsibility of the HBCT S2. It is responsible for all matters concerning intelligence, surveillance and reconnaissance. Included in this section is the S2X team which functions as the coordinator for all human intelligence (HUMINT) and counter intelligence (CI) functions in the HBCT. Chapter 4 provides more detailed information per the information, surveillance, and reconnaissance (ISR) function. The ISR function is present in both the TAC and MAIN .

B-21. *Fires and effects.* The HBCT Effects Coordinator (ECOORD) (formerly the Fire Support Coordinator) is responsible for this staff function via the fires and effects section. He is responsible for all lethal and non-lethal effects planning, coordination, and execution for the HBCT. He advises the commander on the capabilities and employments of fires and effects and is responsible for gaining the commander's guidance for desired effects and their purpose. This section provides support for both current and future operations and is present in both the TAAC and MAIN. The section is composed of a lethal effects cells to include a targeting and counterfire element (fires cell) and a Tactical Air Control party (TACP); and non-lethal cells to include an Information Operations (IO) cell, public affairs cell, civil affairs cell and the HBCT Staff Judge Advocate cell.

B-22. *Sustainment.* This function includes all matters concerning human resources that include personnel services and readiness; logistics planning and execution; and personnel and logistics situational awareness. The HBCT S1 and S4 are responsible for this staff function. The HBCT Brigade Surgeon is also in the sustainment section.

B-23. *Command, Control, Communications and Computers (C4).* This function is the staff responsibility of the HBCT S6 and includes all matters concerning network operations. Network operations include network management, information assurance and information dissemination management.

COMMAND POST FUNCTIONS (REFERENCE FIGURE B-1)

B-24. Sustainment Section (Figure B-1).

- S1. Responsible for the all matters concerning human resources that include personnel readiness and personnel services. The S1 manages personnel strength and replacement; works with the Filed Surgeon to plan health services; coordinates morale support activities; coordinates financial and postal services; maintains the awards program; oversees the administration of discipline, law, and order with the Provost Marshall (if present) and Brigade Judge Advocate; and manages casualty operations management.
- S4. Responsible for coordinating the integration of supply, maintenance, transportation and services for the HBCT. He is the link between the support unit and his commander plus the remainder of the staff. The S4 ensures logistics visibility. The S4 develops the logistics support plan to support operations with the BSB commander and coordinates the MSR and logistical support areas. Inherent in his responsibilities are recommending basic loads and supply requirements; recommending the ammunition required supply rate (RSR) to the S3; coordinating all classes of supply (except CL VIII); coordinating equipment recovery, evacuation and repair; conducting planning for operational movement control and mode and terminal operations; coordinating with the CA cell for host nation support; coordinating services including water purification, mortuary affairs, aerial resupply, laundry, shower, and food preparation; and coordinating battlefield procurement and contracting.
- Brigade Surgeon Section. The brigade surgeon section (BSS) ensures the FHP (Force Health Protection) annex of all orders is developed and provides the medical estimates. The brigade surgeon and his staff are responsible for the technical control of all medical activities in the brigade area. Force health protection for the brigade is planned and monitored by the BSS. The brigade surgeon is a special staff officer to the brigade commander, and works in close coordination with the brigade staff. He uses the brigade S1's casualty and loss estimates and the brigade S2/S3's mission plan to develop a plan for FHP that will provide the most effective and efficient use of medical resources assigned or supporting the brigade. The brigade surgeon is also responsible for coordinating GS and DS relationships of organic

medical units and of other medical units or elements under OPCON of the brigade. During the planning phase of the brigade surgeon section (BSS):

- Provides the FHP estimate, patient estimates, and medical threat input for the commander's estimate.
- Reviews the OPLAN and contingency plans to identify potential medical hazards associated with the location and climatic conditions.
- Determines procedures, techniques, and limitations in the conduct of routine medical care, emergency medical treatment, and advanced trauma management. This includes planning and coordinating for:
 - The system of treatment and medical evacuation, including medical evacuation by Army ground and air ambulance.
 - Dental services.
 - Preventive medicine services.
 - Combat operational stress control.
- The brigade surgeon is also responsible for coordinating GS and DS relationships of organic medical units and of other medical units or elements under OPCON of the brigade. See FM 4-02.21 for information on the BSS.
- The medical communications for combat casualty care (MC4) system will assist the FHP cell and the BSS in performing their responsibilities through the collection, integration, and transmission of medical information. These sections will have near real-time information on the status of medical units, brigade unit medical readiness information, casualty evacuation, medical supplies, and medical treatment.

B-25. The S3 is the responsible staff officer for the Maneuver and Maneuver Support section, the Fires and Effects section, the HBCT liaison cell, the SOF liaison cell and supervision of the TAC when employed. He is responsible for preparing, coordinating and disseminating SOPs, orders, and directives to which other staff sections contribute. He synchronizes all tactical operations to include reviewing and coordinating subordinate plans and actions and sustainment operations, and he assists the commander in controlling preparation for and executing operations. He recommends priorities for allocating command resources and support and coordinates and directs terrain and airspace management. This includes the coordination for Army Airspace Command and Control (A2C2) in conjunction with the close air support or Joint Air Attack Team missions to higher headquarters and immediate requests to the TACP for submission to the air support operations center.

MANEUVER AND MANEUVER SUPPORT SECTION.

B-26. Operations Cell. The current operations cell monitors and controls operations throughout the HBCT AO and maintains the COP. It coordinates with higher, subordinate, and adjacent units, analyzes information and provides recommendations to the commander. The current operations cell normally manned by staff battle captains, interfaces extensively with the M&MS section, Fires and Effects section and other staff elements to ensure operational synchronization.

B-27. Chemical Defense Cell. Responsible for the use of chemical assets and NBC defense and smoke operations. Provides technical advice on MOPP levels, troop safety criteria, operational exposure guidance and biological warfare defense measures. He also recommends COAs to minimize friendly or civilian vulnerability and assesses probability and impact of nuclear, biological, chemical (NBC) related casualties; conducts NBC IPB analysis and recommends IR to the S2; plans, supervises and coordinates NBC decontamination operations; prepares, manages and distributes NBC messages; and coordinates with the S4 on logistics related to chemical defense equipment and supplies.

B-28. Air Defense Management (ADAM) Cell. The Air Defense Officer (ADO) and his ADAM cell provide the commander and staff with special area expertise operating from the MAIN. The ADAM cell is responsible for planning, coordinating, integrating and controlling air and missile defense for the HBCT, to include developing air defense plans, air defense artillery task organization, scheme of air defense operations, and reconnaissance and surveillance planning support. The ADAM cell provides, to the brigade command and staff, air defense early warning (EW), third dimension situational understanding (SU) and the aerial component of the COP. This cell provides technical oversight of any ADA assets and units not directly task organized to the HBCT's subordinate units. To accomplish its mission, the ADAM cell links into the integrated air defense system through direct coordination with the air defense coordinators above HBCT level, the Battlefield Coordination Detachment (BCD), and the Area Air Defense Commander (AADC).

B-29. Brigade Aviation Element (BAE) Cell . The BAE is a planning and coordination cell whose major function is to incorporate aviation into the ground commander's scheme of maneuver. The BAE focuses on providing employment advice and initial planning for aviation missions, unmanned aerial vehicles (UAV), airspace planning and coordination, synchronization with the Air Defense Manager, the air liaison officer (ALO) and the fires and effects coordinator (ECOORD). The BAE also coordinates directly with the AVN BDE or the supporting aviation task force (TF) for detailed mission planning.

- The BAE does not take the place of aviation task force (TF) involvement in the planning process. It assists the BCT in aviation planning and provides the AVN Bde or the supporting aviation TF leadership with BCT mission information.
- The BAE is organized and equipped to support the BCT, and consists of a sufficient number of personnel for 24-hour operations. It uses the Army Battle Command System (ABCS), which can network with the joint planning and communications architecture. As of this writing, the BAE is composed of a major, a captain, a senior warrant officer and three enlisted men.
- The BAE is involved in the mission from receipt of the warning order (WARNO) from higher through planning; movement to the port of embarkation (POE); deployment; reception, staging, onward movement, integration into the force (RSOI), the MDMP, combat operations, redeployment, reintegration, reconstitution and retraining (R4).
- The BAE provides:
 - Integration and synchronization of aviation into the BCT commander's scheme of maneuver.
 - Focus on incorporating aviation into the commander's plan.
 - Coordinates directly with aviation brigade(s).
 - Close integration/synchronization with the air liaison officer (ALO) and ECOORD (fires and effects coordinator).
 - Employment advice and planning for the reconnaissance and attack elements, assault helicopters, airborne command and control assets, heavy helicopters, medical evacuation (MEDEVAC) helicopters, and unmanned aerial vehicles (UAVs).
 - Army airspace command and control (A2C2) planning, coordination, and airspace deconfliction for combined arms, joint, interagency and multi-national (JIM) operations.

AVIATION LNO TEAMS

- Although the BAE will conduct many of the functions traditionally performed by liaison officers (LNO); aviation LNO teams will remain a critical part of the process and thus must be staffed appropriately.

- While the BAE is organic to the HBCT staff,; aviation LNO teams represent the supporting aviation TF at a designated maneuver headquarters for the duration of a specific operation.
- If collocated with the BAE, the LNO team will normally work with the brigade aviation officer as a functioning addition to the BAE staff section. Effective employment of LNOs is imperative for coordination and synchronization. Often aviation LNO teams will coordinate with the BAE and proceed to a supported ground maneuver battalion. An example would be an aviation LNO team in support of an infantry battalion performing an air assault to seize a key piece of terrain as a part of a mechanized BCT scheme of maneuver.

B-30. MP Cell. The MP Provost Marshal resident in the MP cell provides oversight of organic MP assets and serves as a special staff officer to the commander. The MP cell provides staff planning guidance pertaining to the prioritization of MP functions of maneuver/mobility support, area security, law and order operations and EPW/Internment/Resettlement Operations. The cell coordinates with the BTB during mission planning and execution for employment of the organic MP platoon. They also perform coordination with PVO/NGO, host nation, joint, Coalition and contractor agencies and higher echelon police activities.

B-31. Engineer Cell. The HBCT Engineer Officer leads the Engineer Cell. This cell plans and coordinates all engineer support within the HBCT AO to include access to topographic support and terrain analysis. The cell also battle tracks engineer related current operations. The cell serves as a link to the supporting engineer assets (if augmented).

B-32. Fires and Effects Cell. The Effects Coordinator (ECOORD) leads the Fires and Effects cell of the MAIN. If he forward employs with the TAC, the assistant ECOORD assumes control of the section. The ECOORD is responsible for all fires and effects planning and coordination for the HBCT. He advises the HBCT commander on the capabilities and employment of fires and effects and is responsible for obtaining the commander's guidance for desired effects and their purpose. The FEC is focused on both current and future operations and serves to integrate lethal fires with non-lethal effects to include information operations (IO), electronic warfare, psychological operations (PSYOPS), civil affairs and public affairs. The FEC consists of a fires cell (targeting and counter-fire), the tactical Air Control Party and a non-lethal cell composed of public affairs, civil affairs and IO personnel. The staff judge Advocate (SJA) also resides in this section and provides legal support to the section and the HBCT. The commander's primary means to plan, integrate and orchestrates fires and effects is via the FEC.

FIRES AND EFFECTS CELL – MAIN CP

B-33. Fires and Effects Cell. This cell's mission is to direct the execution of the targeting process (detect, deliver, and assess) and to execute counterfire for the HBCT. Both missions are critical to the success of HBCT operations. This cell must be proactive when executing the counterfire program to significantly reduce or eliminate enemy indirect fire capabilities before they can be brought to bear against HBCT forces. Targeting functions include collecting and processing battlefield information and intelligence to identify targets; disseminating targeting information; requesting and analyzing combat damage reports; providing assessments that inform and are integrated back into ongoing targeting process; employing target acquisition assets; coordinating and controlling radar zone coverage for HBCT counterfire radars; providing input into reconnaissance and surveillance planning and execution; and processing valid target information for supporting fires and effects assets (including IO) to execute in accordance with the effects plan.

BRIGADE OPERATIONAL LAW TEAM (BOLT)

B-34. The Brigade Judge Advocate, along with the OPLAW Judge Advocate and Paralegal NCO form the Brigade Operational Law Team. This team normally locates in the Main CP with the IO element however; it can be deployed forward in whole or in part as directed by the BCT Commander. The Brigade Judge Advocate serves both as a personal staff officer to the BCT Commander and a special staff officer. The BOLT provides legal advice during the MDMP and all other planning and targeting sessions conducted by the BCT staff. The members of the BOLT serve as subject matter experts on rules of engagement (ROE) and Rules of Interaction (ROI), targeting, international law, law of armed conflict (including treatment of detainees, enemy prisoners of war [EPWs], civilians on the battlefield, and other noncombatants) and all other legal aspects of operations. The BOLT provides or coordinates, as necessary, with other legal offices for legal services in military justice, administrative and civil law, contract and fiscal law, claims, and legal assistance. The Paralegal NCO provides administrative and paralegal support to the judge advocates in the BOLT and supervises the paralegals in HBCT battalions. This NCO is responsible for establishing voice and digital linkage with UEx headquarters legal support elements.

B-35. IO OPS Cell. The IO officer leads the IO cell. It includes a PSYOPS and Electronic Warfare element. This cell coordinates IO and other non-lethal effects in support of HBCT operations and integrates and synchronizes IO elements into the HBCT plans. These operations include the degradation of enemy C2, military deception, counter-deception, operations security, information assurance, computer network defense, and use of CI teams. The IO officer works closely with the S3 and conducts close coordination with the S2, S6, and Civil and Public Affairs officers as required. The IO officer supervises the PSYOPS and EW teams and special IO teams. This cell will coordinate with the UEx to ensure augmentation for such functions as special information programs, computer network attack and counterpropaganda and ensure their synchronization into the effects plan.

B-36. Tactical Air Control Party (TACP). The HBCT has two TACPs that are responsible for coordinating tactical air assets and operations for the HBCT. The senior Air Force officer fills the role as the Air Liaison Officer (ALO) for the HBCT. He supervises the TACPs and is responsible for personnel and forward air controllers. The TACP coordinates close air support with the fires and effects section and the S3 and works with the ADAM cell to manage airspace in the HBCT's AO to include UAVs and deconfliction with USAF aircraft and aircraft from other Services. A TACP will normally forward deploy with the TAC.

B-37. Civil Affairs (CA) Cell. The HBCT CA officer leads the CA cell. This cell has the responsibility to enhance the relationship between military forces and civilian authorities and personnel in the AO. They will maintain liaison with other U.S. government agencies; host nation civil and military authorities; and non-governmental, private, and international organizations. They will assist the HBCT IO cell with information operations, and coordinate, integrate, and synchronize host nation support operations and supervise CA units in the HBCT AO. This cell plans humanitarian assistance and disaster relief.

B-38. Psychological Operations (PSYOP) Cell. The PSYOP officer advises the commander on Psychological Operations actions (PSYACTs), PSYOP enabling actions, and targeting restrictions. These actions and restrictions minimize adverse impacts and unintended consequences, and enhance successful mission accomplishment. In addition, the PSYOP officer also advises the commander on influencing attitudes and behavior to obtain compliance or noninterference with military operations. These actions facilitate military operations, minimize needless loss of life and collateral damage, and further the objectives of the United States and its allies

B-39. Public Affairs (PA) Cell. The HBCT PA officer leads the PA cell. This cell provides coordination of public affairs and strategic messaging advice and counsel to the commander.

They further coordinate requests for PA support from the UEx or higher echelon command; provide support to all accredited media operating in the AO; and provide advice to the commander and the fires and effects coordinator on the impact of targeting on public relations.

B-40. *Liaison Cell.* During operations and normal daily activity, these liaison teams provide liaison between units to help facilitate communications, preserve freedom of action and maintain flexibility. Liaison ensures that the HBCT, along with adjacent commands, remain aware of respective tactical situations by providing them with exceptional, critical, or routine information; verification of information; and clarification of operational questions. Liaison teams also provide a digital communications link and COP to analog units that are not yet equipped with a comparable ABCS capability.

B-41. *SOF Liaison Team.* The HBCT may be augmented with a SOF liaison team to provide the HBCT with information and intelligence collected by SOF teams; effects coordination, integration and synchronization of SOF elements into the operational and effects plan; and provides advice to the HBCT commander and staff elements.

B-42. *ISR Section.* The HBCT S2 leads the ISR section. This section is responsible for all matters of military intelligence, counterintelligence and security operations. Included in the ISR section is the S2X team. This team functions as the coordinator for all HUMINT and CI functions within the HBCT. The S2X is the intelligence staff officer for these activities and provides focus and technical support for all CI and HUMINT operations. He ensures collection, analysis and dissemination of HUMINT and CI related intelligence and information is in concert with the commander's CCIR. The ISR cell gathers, analyzes and disseminates information collected on the enemy, terrain and civilian population. This cell works with current operations and future operations personnel as well as the reconnaissance squadron commander, S3, and S2 to plan and synchronize the reconnaissance and surveillance plan in support of HBCT PIR. They also work with the Fires and Effects section in the execution of targeting and combat damage assessment. Key functions include coordinating the IPB for staff planning, decision making and targeting; maintaining the running estimate; coordinating with the staff and recommending PIR and CCIR; nominating collection tasks for the HBCT's collection assets; supporting the planning for reconnaissance and surveillance operations in coordination with the XO, S3, Reconnaissance squadron and MICO commander; providing all-source intelligence that answers the PIR; maintaining the current situation regarding enemy and environmental factors and updating the IPB and intelligence estimate; and identifying and evaluating intelligence collection capabilities as they affect the AO security, counter-surveillance, signal security, security operations and force protection.

B-43. *Plans Section.* The HBCT Plans section is led by the S5. This section is responsible for maintaining a current and projected view of the situation and plans future operations based on orders from higher echelons, projected outcomes of the current operations and the HBCT commander's guidance. This section consists of maneuver, engineer, intelligence and logistics planners and can be augmented from the MAIN based on mission planning requirements.

B-44. *Command, Control, Communications and Computers (C4) Section.* The S6 leads the S6 section and is the senior signal officer within the HBCT AO. The S6 maintains overall authority and responsibility for all network operations within the AO. The S6 and NSC commander operate in close communication, resulting in a unity of effort for communications support to the HBCT. The NSC commander reports all network associated issues to the S6 when deployed to ensure continuous support to the HBCT commander's critical information requirements. The HBCT S6 and his staff plan the command, control, communications and computers (C4) support for the HBCT command posts and subordinate units organic to,

assigned to, or operating within the HBCT AO. The HBCT S6 works closely with both the UEx G6 and the NSC commander. The HBCT S-6:

- Recommends C4 network priorities for battle command (e.g., changing bandwidth allocation to support the HBCT Main effort: a maneuver battalion reinforced with additional intelligence, surveillance, and reconnaissance [ISR] assets).
- Conducts communications infrastructure management in conjunction with the UEx G6, and the UEy supporting brigade to comply with GIG requirements.
- Advises the commander, staff, and subordinate commanders on C4 operations.
- Plans, configures, manages, and monitors the tactical operations center (TOC) LAN and tactical Internet (TI) for all HBCT command posts.
- Supervises the activities of the NETOPS cell in the HBCT signal company.
- Monitors and makes recommendations on all technical C4 operations.
- Prepares, maintains, and updates C4 operations estimates, plans, and orders and coordinates such efforts with the G6 and signal company.
- Provides the brigade network operations and security center (NOSC) with direction and guidance during preparation of network plans and diagrams, establishing the information network (wide area network [WAN]).
- Provides signal unit operations sections with unit locations, organizational status, and circuit/data requirements.
- Works issues on information systems equipment and personnel requirements analysis due to Modified Table of Organizations and Equipment (MTOE) changes.
- Plans integration of battle command and other information systems.
- Develops, changes/updates, and distributes signal operating instructions (SOIs).
- Coordinates with signal offices of higher, adjacent, allied, and coalition units. Prepares/Publishes C4 operations standard operating procedures (SOPs) for HBCT command posts. Plans and coordinates with higher and lower headquarters regarding information systems upgrade, replacement, elimination, and integration.
- ICW the HBCT S2 and the information operations (IO) officer, performs C4 operations vulnerability and risk assessments.
- Monitors information dissemination that changes battlefield operations system (BOS) priorities and control measures.
- Coordinates, plans, and directs all IA activities (AR 25-2 and unit SOP provide details on IA activities).
- Ensures automation systems and administration procedures for all automation hardware and software employed by the HBCT are compliant with the GIG procedures and standards or Army specifications.
- Coordinates, plans, and manages HBCT frequency spectrum both internal and external to the HBCT.
- Plans and manages the HBCT information network with the strategic NETCOM supporting brigade, the UEx G6, the regional DISA support team, or the supported J6.
- ICW the strategic supporting arm of the GIG, plans and manages HBCT IA systems (firewalls, intrusion detection systems, and access control lists).
- Plans and manages HBCT CS/IDM procedures (user profiles, file and user priorities, and dissemination policies).
- Plans and manages all IA/CND operations to include, but not limited to, key management distribution, information assurance vulnerability alert (IAVA) compliance, intrusion detection device management and operations, and compliance with all directives outlined in AR 25-2.

- Deploys range extension assets to maintain connectivity and reliability of the HBCT communications network.
- Evaluates network requirements to determine needs for unmanned aerial vehicles (UAVs) and communications relay requirements.
- Executes all NETOPS responsibilities in support of the unit mission.

B-45. *Unit Ministry Team (UMT)*. This team consists of the HBCT Chaplain and his assistant. The HBCT Chaplain is responsible for coordinating the religious assets and operations within the command. The Chaplain is the confidential advisor to the commander for religious matters. He normally operates from the MAIN CP and coordinates with the HBCT S1.

SECTION III – COMMAND POST OPERATIONS

COMMAND POST POSITIONING

B-46. When planning an operation, the staff should develop a C2 plan that addresses the initial and subsequent positioning of each CP. The plan should also include the composition of the command group for each phase of the operation, including likely branches and sequels. The movement and positioning of the CPs, command group, and supporting communications architecture and digital network should be integrated into war gaming and rehearsals. CPs are positioned where they can best balance the need for security and force protection with the requirements to maintain both digital and FM-VOICE communications. This may require a centralized position during operations in a noncontiguous AO or during stability or support operations. Conversely during operations in a SSC or MCO, CPs may be required to locate well forward and be prepared to move frequently in support of mobile offensive operations. Regardless, the CP should not set up along likely threat air and ground avenues of approach and will displace as necessary to ensure survivability and continuous battle command.

B-47. The general positioning of any CP should consider several factors including:

- Security.
- Trafficability of terrain.
- LOS (for both communications and UAV operations).
- Terrain for passive security (cover and concealment) and signal masking.
- Accessibility while avoiding main avenues of approach.

B-48. The main CP must be positioned where it can maintain communications with the command group and subordinate CPs. While it is the UEx's responsibility to maintain communications with the HBCT, the MAIN CP should position to enable this effort.

COMMAND POST SECURITY

B-49. CPs must secure themselves against a wide range of threats to include conventional attacks by mounted or dismounted forces, artillery and air attack, electronic attack, terrorist threats, or weapons of mass destruction). CPs rely primarily on passive measures to avoid detection, but must have well-developed SOPs to react to contact if located. Consider the following OPSEC/INFOSEC measures when positioning CPs:

- Do not erect signs advertising CP locations.
- Maintain noise and light discipline.
- Limit traffic to the CP.

- Post a security force to protect the CP. The security force may consist of personnel organic to the CP but may be augmented by combat forces tasked to secure the CP by the BTB commander.
- Establish security force fighting positions as in any defensive position and maintain a 360-degree perimeter. Construct a detailed overlay depicting CP security measures, fighting positions, range fans, routes, etc.
- Plan indirect fire targets along high-speed avenues of approach.
- Establish a CFZ over the CP location.
- Position the security force far enough out from the CP to prevent threat direct fires on the CP, and equip the security force with AT weapons.
- Rehearse the execution of the perimeter defense.
- Disseminate near and far recognition signals to all subordinate units of the CP and control access to the CP. The S2 provides guards with an access roster.
- Designate a rally point and an alternate CP location in the event of artillery or air attack.
- Position vehicles in an orderly and dispersed fashion.
- Ensure vehicles, tents, and generators are appropriately camouflaged.
- Limit media access to main CP. Escort media at all times.
- Obtain a threat vulnerability assessment if the CP is occupying a permanent location or base camp.

DISPLACING THE COMMAND POST

B-50. While all CPs have some ability to conduct C2 on the move, they lose many of the capabilities they have when stationary. Therefore, CPs normally controls operations from a static location. When forced to move during an operation or due to threat activity, MAIN control is given to the TAC and some key personnel may displace to the TAC to man the critical battlefield operating systems. The tactical situation and unit SOP may specify whether a CP moves by echelon or in a single march unit. Normally, the MAIN CP will hand the battle over to the TAC CP and displace by echelon using the following technique:

- MAIN conducts a battle update brief for the TAC and transfers the battle.
- The first echelon eavesdrops while moving to the new location.
- The second echelon continues to execute CP responsibilities.
- The first echelon establishes itself at the new location, and updates its SU from the second echelon.
- The first echelon assumes responsibility for CP operations and the second echelon displaces.
- During movement, messages to the CP should be minimized. This may require reconfiguration of auto-send and auto-forward functions to route traffic to the TAC CP during main CP displacement.
- When the second echelon is established, TAC conducts a battle updating briefing (BUB) for MAIN and if required, personnel displace back to MAIN.

COMMAND POST BATTLE DRILLS

B-51. Every CP must be able to react to a variety of situations during operations. The specific actions taken by a CP should be well defined in unit SOPs and rehearsed during training. Typical action drills include:

- Threat Air Attack. MAIN will not normally engage threat aircraft until confirmation that the CP is compromised. M240 and M2 fire as directed by the shift

NCOIC. MAIN personnel not on duty will assume security positions and engage using small arms.

- Threat Ground Attack. Engage dismounted threat immediately and then send a SPOTREP to the MAIN. The shift NCOIC designates a rally point for the reaction force to meet, then leads the patrol against the threat. AT-4 fires will be directed in volleys against threat vehicles. M240 and M2 will shift as directed to destroy the threat. Ensure visiting personnel and vehicles are included and briefed on the defensive plan.
- NBC Attack. Personnel don their protective masks and assume MOPP 4 upon hearing the M8A1 chemical alarm or other signal determined by the unit SOP. The shift NCOIC ensures that everyone inside and out has initiated MOPP 4 status. The shift NCOIC then supervises the execution of M256 kit testing and unmasking procedures.
- Indirect Fire Attack. Shift NCOIC directs the MAIN to displace to an alternate location. Control of the battle is transferred to the TAC. Vehicles evacuate the MAIN as soon as antennas are detached. Trail party will return to police up any abandoned equipment, conduct crater analysis, and send shell report higher.
- Electronic Protection (EP). If the radiotelephone operator (RTO) or MAIN NCOIC, or Battle Captain suspects that one or more of its nets are compromised, or the target of EA, he initiates trouble shooting procedures and informs the battle captain. If troubleshooting procedures fail to correct the communications problem, the battle captain concurs that the net is being jammed, and the jamming will affect the unit mission—the battle captain initiates EP procedures. The battle captain announces the EP attack code word over the jammed net and all operators switch to ALT 1 setting (per signal operation instructions [SOI]) and reestablish communications. The S6 assesses the extent of degradation to the communication and digital networks and takes corrective actions. The S2 coordinates with the MI company commander to update threat databases and to nominate targets for potential non-lethal attacks. Upon reestablishment of secure communications, the brigade forwards an interference report to the division spectrum management office. Interference is resolved at the lowest possible level of the DOD component chain of command, using component organic resources to resolve interference incidents where possible.

SHIFT CHANGE BRIEFINGS

B-52. During continuous operations, a CP will normally operate in shifts. To ensure continuous, uninterrupted operations, the staff conducts a shift change briefing. The purpose of the brief is to educate the incoming shift on the current status of the brigade, significant activities during the previous shift, and to prepare them to deal with upcoming decisions and events. While the format for the brief is a matter of SOP, it should address the following:

- Intelligence:
 - Significant enemy actions during last shift.
 - Any changes in PIRs.
 - Current enemy situation and ECOA that remains valid.
 - Limited visibility and weather update.
 - UAV and Joint collection operations.
- S3:
 - Task organization changes.
 - Changes to mission, FRAGOs, or execution of branches and sequels.
 - Friendly situation two levels higher.

- Current subordinate unit status.
- Significant friendly actions during last shift.
- Current CCIR and answers to CCIR received during previous shift.
- Activities scheduled during next shift (timeline).
- Anticipated planning requirements.
- S4:
 - Current logistical status (LOGSTAT).
 - MSR status.
 - Logistical “Warstoppers”.
- S1:
 - Status of key personnel.
 - Casualty information.
 - Changes in unit readiness.
 - Significant personnel actions.
 - Changes in medical coverage.
 - Safety.
- ECOORD:
 - Current FSCMs.
 - Current lethal and non-lethal systems status
 - ADA.status and coverage
 - A2C2 update.
- Engineers. Obstacle/survivability update.
- MP. Rear area security.
- Chemical. MOPP posture.
- S6:
 - Current communications and network status.
 - Location of key leaders.
- HBCT HHC Commander:
 - CP logistical issues.
 - CP security.
 - Displacement plan and proposed jump locations.
- S3 SGM. Priority of work for CP.

B-53. The shift change brief is not intended to be an information brief for the commander, although it may be useful for him to attend. If he does attend, the primary focus must remain the smooth transition between shifts. The XO orchestrates the brief, with each staff section briefing their area of responsibility. It is normally conducted as a face-to-face meeting with all CP personnel in attendance.

THE BATTLE UPDATE BRIEF

B-54. The BUB is often conducted shortly before an operation begins to summarize changes made during the preparation phase and as a result of the ISR collection effort. The BUB is similar in content to the shift change brief but has a battle-focus, and has a much different audience. The BUB is an information brief to the brigade and subordinate commanders. Its purpose is to ensure that all the key personnel are operating from a common understanding of the situation.

B-55. During the brief, the staff presents their area of responsibility, and subordinate commanders brief their current situation and operations conducted in their AO. The brief

may be conducted at one centralized location, but is usually done over FM-VOICE radio, joint network node (JNN) conference call or via video teleconference (VTC). The BUB should follow a specific script to keep transmissions short, ensure completeness, and ease note taking. The BUB has a similar format and content as the shift change brief but omits the administrative data normally presented by the S3 SGM and the HHC commander.

SECTION IV – C4 ARCHITECTURE

B-56. Commanders require effective communication to successfully conduct operations. Fundamental to C2 is the reporting of combat information and orders. A robust FM voice and digital communications network that can transmit over extended battlespace is essential for successful operations. Communications is easily interrupted by obstructions to LOS, other systems operating in the same electromagnetic spectrum, atmospheric conditions, and enemy electronic attack. Planning for successful communications is increasingly complex and requires detailed planning by every staff member, not just the S6. Planning should:

- Include a detailed communications LOS analysis (a communications modified combined obstacle overlay [MCOO]).
- Provide redundancy in means of communications.
- Ensure subordinates understand the commander's intent so that they know what to do if communications are lost.
- Plan communications architectures in detail, including the use of retransmission, digital network linkages, and C2 node placement.
- Develop and distribute an overlay that depicts all retrains, digital network links and C2 nodes in the brigades AO. This commo overlay enables communications node/terrain management deconfliction, prevents fratricide, and provides for an increase in communication efficiency by reducing communications signature, profile, and RFI.
- Define the initial task organization and expected changes to establish and maintain the TI.
- Follow proper signal and COMSEC procedures.
- Keep digital orders, overlays, and messages concise to avoid overloading the TI and digital systems.
- Establish SOPs which define when and what communications will be transmitted digitally and which will be transmitted by FM-VOICE.
- Establish alternate communications procedures.

COMMUNICATIONS RESPONSIBILITIES

B-57. The traditional responsibilities for establishing communications (higher to lower, supporting to supported, reinforcing to reinforced, left to right, etc.) remain valid. However, with many digital communications systems, all participants have roles that must be executed to establish and maintain communications. The fundamental rule is that all soldiers have a responsibility to establish and maintain communications. The traditional responsibilities are listed below:

- Senior to Subordinate. A senior unit is responsible for establishing communications with a subordinate unit. An attached unit of any size is considered subordinate to the command to which it is attached.
- Supporting to Supported. A supporting unit is responsible for establishing communications with the supported unit.
- Reinforcing to Reinforced. A reinforcing unit is responsible for establishing communications with the reinforced unit.

- Passing to Stationary. Forward passage of lines.
- Stationary to Passing. Rearward passage of lines.
- Lateral Communications. Responsibility for establishing communications between adjacent units may be fixed by the next higher commander or SOP. If responsibility is not fixed by orders, the commander of the unit on the left is responsible for establishing communications with the unit on the right. The commander of a unit positioned behind another unit establishes communications with the forward unit.
- Restoration. Regardless of the responsibility, all units take prompt action to restore lost communications.

MEANS OF COMMUNICATION

B-58. HBCTs use the full spectrum of communications means. Planning data for communications systems and sensors found in the HBCT can be found in Table B-1.

DIGITAL

B-59. The ABCS is a network of computer systems that allow for advanced reporting, orders and graphic sharing, and database management. A complete overview of the ABCS systems and detailed capabilities will be discussed later.

RADIO FM-VOICE COMMUNICATIONS

B-60. Combat operations normally depend on radio as the primary means of communication for both voice and digital traffic. Net discipline and SOP minimize needless traffic. To avoid detection by threat direction-finding equipment, CPs use all other means of communication to supplement the radio and minimize emissions. Once in contact, the primary means of communication will be FM voice. Radio communications include communications in FM, AM, UHF, and VHF spectrums.

Table B-1. Communications and Surveillance System Planning Data

Short name	Full Name	Planning range (voice)	Planning Range (data)*	Freq Band	Freq Range	Low data rate	High Data Rate	Line of sight	TAC SAT	Global Positioning System	Notes
EPLRS	Enhanced Position Location Reporting System		3-10 km	UHF	420-240 MHz	14400 bps	100+ kbps	Yes		Yes	Primary means of FBCB2 data transmission
SINCGARS	Single Channel Ground and Airborne Radio System Manpack Short Range Vehicular Long Range Vehicular	5-10 km 5-10 km 10-40 km	1-10 km 1-10 km 3-35 km	VHF	30-87.975 MHz	1800 bps	-	Yes			Secondary means for FBCB2 data transmission
NTDR	Near-Term Data Radio		10-20 km	UHF	225-450 MHz		200 kbps	Yes		Yes	CP to CP data transfer
AN/PSC-5	UHF/VF Manpack LOS and DAMA/SATCOM terminal	1-3 km (LOS) unlimited (TACSAT)	1-3 km	UHF	225-400 MHz	16000 bps		Yes	Yes		Can provide retrans for SINCGARS
MSE	Mobile Subscriber Equipment	Area	Area	UHF	225-400 MHz	16000 bps		Yes			Signal Bn maintains MSE network
AN/TSQ-190(V)	TROJAN Special Purpose Intelligence Remote Integrated Terminal		Unlimited				512 kbps	No	Yes		Primary means of sending video feeds from UAV
LRS	UAV Launch and Recovery Station		50 km	VHS				Yes			
GCS	UAV Ground Control Shelter		125 km	VHF				Yes			Aerial retrans extends range by 75 km
IREMBASS	Improved Remotely Monitored Battlefield Sensor System		15 km	VLF	138-153 MHz			Yes			Detection range 50 m dismounts 250 m wheel 350 m track
GSR	Ground Surveillance Radar		10 km	j-band	16-16.5 GHz			Yes			Detection range 5 km dismounts 10 km vehicles
* Ranges are greatly reduced by using higher transmission rates.											
Note: IREMBASS and GSR are not organic to the HBCT.											

COMMERCIAL LINES AND CELL PHONES

B-61. Commercial lines are used when approved by higher headquarters. Careful consideration must be given to securing commercial lines using devices like the STUIII and limiting classified material sent over non-secure lines and on cell phones. Threat forces may rely heavily on local communications networks.

SOUND AND VISUAL

B-62. Sound and visual signals are in the SOI or the unit SOP. Signals not included in the SOI may be established by SOP or in the OPORD. The battlefield will have many sound and visual cues that become increasingly important in complex and urban terrain. Commanders and staff planners must carefully determine how sound and visual signals will be used and authenticated. Sound and visual signals include pyrotechnics, hand-and-arm, flags, metal-on-metal, sirens, and ABCS alarms.

MESSENGERS AND LIAISON OFFICERS

B-63. Messengers are used between the CPs, BSB, and higher and lower headquarters in the event of communications failures or enemy jamming. Liaisons are sent to higher headquarters to speed the passage of information between CPs. The use of LNOs becomes increasingly important as digitally equipped units operate with non-digitally equipped units and may require the digital unit to send LNOs to subordinate units in addition to its higher headquarters in order to give subordinate units access to the digital COP.

WIRE

B-64. Wire is normally used for internal communications within the CP, support areas, and assembly areas. It may become a primary means of communication in a base camp or cantonment area.

WHEN TO EMPLOY FM-VOICE VERSUS DIGITAL COMMUNICATIONS

B-65. Whether to use FM-VOICE or digital means for communication is a function of the situation and SOPs. Even though both systems are critical for effective C2 at all levels, FM-VOICE will remain the primary method for control in non-digitally equipped units, and at company level and below during operations. Some general considerations can help guide the understanding of when to use which mechanism and at what time.

B-66. FM-VOICE is the primary method of communications when maneuver elements are in contact and time is a critical factor. Staffs at brigade and battalion level must remain sensitive to the difficulty and danger of utilizing digital systems when units are moving or in contact and not expect digital reports under those conditions. Battalions and HBCT staff must continue digital database and COP updates. Digital systems are used for reporting combat information when not in direct fire contact. Company/troop CPs serve as the critical link in turning the FM-VOICE reports received by units in contact into the digital reports that generate the COP on FBCB2. Other general guidelines:

- Initial contact at any echelon within the brigade should be reported on FM voice; this alerts the net that a digital threat SPOTREP will follow as soon as possible.
- Elements on the move (not in CPs) will utilize FM voice unless they can stop and generate a digital message or report.
- Emergency logistical requests, especially CASEVAC requests, should be initiated on FM voice with a follow-up digital report if possible.
- Reconnaissance elements moving or in contact should transmit threat SPOTREPs on FM voice; their higher headquarters should convert FM-VOICE reports into digital SPOTREPs to generate SU.
- Calls for fire on targets of opportunity should be sent on FM voice; team FISTs submit digitally to Advanced Field Artillery Tactical Data System (AFATDS).
- Planned calls for fire from FISTs in the initial part of an engagement should be sent digitally.
- Routine logistical reports and requests should be sent digitally.

- Routine reports prior to and following combat should be sent digitally.
- Orders, plans, and graphics should be sent digitally, accompanied by an FM voice call to alert recipients that they have critical information being sent to them. Additionally, the transmitting element should request a verbal acknowledgement of both receipt and understanding of the transmitted information by an appropriate soldier (usually not the computer operator).
- Obstacle and NBC-1 reports should be sent initially by voice followed by digital reports to generate a geo-referenced SU message portraying the obstacle/contaminated area across the network.

BRIGADE EXTERNAL COMMUNICATIONS

B-67. The HBCT communicates on UEx nets as illustrated in Table B-2 and discussed below.

UEX AREA COMMON USER SYSTEM

B-68. C4 support to the UEx is an integrated network of C4 systems. The ACUS, combat net radio (CNR) system, tactical internet (TI), and broadcast systems are the distribution systems that form the WAN for the UEx. The hub of the UEx's C4 system is JNN. The node centers (NC) are the hubs of the MSE network providing internodal connectivity. The ACUS is the primary system for voice and data communications in the division area. The UEx signal support installs, operates, and maintains network. It provides the interlocking network of communications facilities providing provides the means to exchange information throughout the division. Individual circuits within the network are terminated by common user telephones, facsimile machines, and data terminals that are user-owned, -installed, and -operated. The network is built on a series of communication nodes providing C4 support to headquarters and units operating in the brigade area. CPs are connected to two or more nodes to ensure redundancy, reliability, and survivability of communications. The ACUS provides a limited mobile individual call capability as well as a conference call. The net is capable of passing secure traffic and provides reach-back capability to division or ARFOR headquarters.

UEX COMMAND NET

B-69. The UEx command net is a secure FM voice net, controlled by the UEx G3. It is a backup means to the UEx area common user system. The HBCT CGs, TAC, and MAIN will monitor.

UEX OPERATIONS AND INTELLIGENCE NET

B-70. . The UEx OI net is a secure FM voice net, controlled by the UEx G2. The HBCT CGs, TAC and MAIN.

UEX FIRE SUPPORT NET

B-71. .The UEx fire support net is a secure digital net, controlled by the UEx FEC from the UEx main CP. The HBCT MCG and CPs 1 and 2 will monitor.

UEX ADMINISTRATIVE/LOGISTICS NET

B-72. The UEx A/L net is a secure FM voice net, controlled by the UEx G4 from the UEx Sustainment Brigade CP in the BSA. It is a backup means to the UEx's area common user system. The HBCT MAIN and BSB CP will monitor.

TACTICAL SATELLITE COMMUNICATIONS NETWORK

B-73. The HBCT CPs, maneuver battalion CPs, and the reconnaissance squadron have organic TACSAT communication terminals that link them to the TACSAT communications network. This network is used to provide critical C2 communications between the UEy and its subordinate maneuver units, echelons above UEy, and national command authorities, giving the HBCT reach-back capabilities. The terminals normally position with the MAIN or UAV launch site (to provide the broadband capability, and operate under the control of the HBCT S6).

BRIGADE INTERNAL COMMUNICATIONS

B-74. The HBCT operates on its internal nets described below and illustrated in Table B-2.

BRIGADE COMMAND NET

B-75. The command net is a secure FM-VOICE net, controlled by the S3 at the MAIN. It is used to C2 the HBCT. All organic and attached units and supporting units operate in this net. The command net is used to send combat critical information to the commander or the S3 and to allow subordinate commanders and the HBCT commander to talk to each other.

Table B-2. UEx and HBCT Nets

STATION\ NET	UEx CMD FM- VOICE	UEx JNN	UEx TACSAT	UEx OI FM- VOICE	HBCT TACSAT	HBCT CMD FM- VOICE	HBCT O&I FM- VOICE	HBCT FS FM- VOICE	HBCT FS (DIG)	HBCT ADMIN LOG FM- VOICE
CGs	X	A	A		N	X	X	X		
TAC	X	A	A	X	A	X	X	X		
MAIN	X	A	A	X	A	N	N	N		
BSB CP	X	A				X	A	A		N
RECON SQD CP				A	A	X	X	X	X	X
Maneuver Battalions		A			A	X	X	X	X	A
Fires BN		A			A	X	X	X	N	X
ADA BTRY						X	A	A		A
BTB CP					A	X	X	X		X
N - Net control station. X - Enter net. A - Enter net as required. O - Monitor.										

BRIGADE OPERATIONS AND INTELLIGENCE NET

B-76. The OI net is a secure FM-VOICE net, controlled by the HBCT S2 section of CP 2. All routine tactical reports and other intelligence matters are sent on this net. This net should

be used to free the command net for command and combat critical traffic. The Recon Squadron, MI Company, and subordinate S2s are users of this net.

BRIGADE ADMINISTRATIVE/LOGISTICS NET

B-77. The A/L net is a secure FM-VOICE net, controlled by the BSB CP. This net is used for A/L reports and coordinating logistics and rear area security operations. The BSB, HBCT S4, subordinate battalion S1/S4s, and attached 1SGs operate on the A/L net.

BRIGADE FIRE CONTROL NET

B-78. The fire support net is a FM-VOICE and digital net controlled by the FEC in the MAIN. It is the primary means of calling for indirect fires or CAS for the HBCT. Battalion FSEs, MAIN, CGs, TAC, the Fires battalion and supporting artillery units are users of this net.

BRIGADE RETRANS TEAMS

B-79. The HBCT has three retrans teams in the Signal company of the BTB, which can retrans any of the HBCT nets. Each team has the capability to retrans one FM-VOICE net using SINCGARS, and to serve as a link in the TI with its EPLRS. The S6, in coordination with the HBCT S3, positions retrans teams in the HBCT AO balancing the need to maximize LOS and range with the requirements of local security.

COMMUNICATIONS SECURITY

B-80. The HBCT's OPSEC program is managed by and is the responsibility of the S3. He analyzes the commander's concept of the operation to determine the EEFI that must be protected from exploitation by threat intelligence. The S3 and S2 develop appropriate security measures; based on their assessment of threat intelligence collection capabilities and on the friendly indicators that may compromise the EEFI. These OPSEC measures are primarily procedural in nature and include:

- Signals security (SIGSEC) to protect operational information by practicing (COMSEC) and electronic security techniques.
- Information security to prevent disclosure of operational information through written, verbal, or graphic communications.
- Physical security that consists of physical measures that protect personnel; prevent unauthorized access to equipment, facilities, materiel, and documents; and guard against espionage, sabotage, damage, or theft.

B-81. COMSEC involves physical security, crypto security, and transmission security. COMSEC procedures must be covered in the unit SOP.

B-82. Physical security protects the crypto system and classified documents (including plain-language copies of messages and carbons) from capture or loss. Before an area is vacated, soldiers inspect for messages, carbons, cipher tapes, and copies of maps or orders. Wire lines are patrolled to prevent threat tapping. When SOI codes or cryptographic equipment is lost or captured, the unit reports the facts promptly to the next higher command. The SOP must contain instructions for destruction of equipment and classified documents to prevent their capture or use by the threat. Complete SOIs should not be carried forward of the main CP. When necessary, the S6 distributes extracts for use by forward elements. The SOP establishes priority for issue of SOIs and extracts.

B-83. Crypto security is maintained by using operations codes, numerical encryption devices, secure voice devices, and other secure communications equipment. The S6 will

maintain cyrpto security “fills” for EPLRS and SINCGARS radios as well as Pluggers and other ancillary systems.

B-84. Transmission security limits the threat's ability to listen to radio signals. Any signal transmitted can be intercepted and jammed by the threat. All transmissions should be short and treated as if the threat were listening. Net discipline is the responsibility of all users, but the net control station is responsible for policing the net. Brevity codes, the terrain index reference system (TIRS), and coded reports all serve to reduce net traffic and increase security.

SECTION V – TACTICAL INTERNET ARCHITECTURE

B-85. This portion provides information on the digital C2 systems and architecture that supports C2 operations.

ARMY BATTLE COMMAND SYSTEM COMPONENTS

B-86. The ABCS is made up of the ABCS subcomponents, the Force XXI Battle Command BDE and Below (FBCB2) System, and the TI. ABCS, including the Maneuver Control System (MCS), All Source Analysis System (ASAS), Advanced Field Artillery Tactical Data System (AFATDS), Air and Missile Defense Workstation (AMDWS), and the Combat Service Support Control System (CSSCS) are the primary digital communication systems between brigade and battalion CPs. FBCB2 is the primary digital system for communication and transmission of SU data at battalion and below. Also available in the HBCT CP is the Digital Topographic Support System (DTSS) and the Tactical Airspace Integration System (TAIS). The functions these elements provide are discussed below.

FORCE XXI BATTLE COMMAND, BRIGADE AND BELOW

B-87. FBCB2 is the foundation system for ABCS and the TI. Mounted on many of the vehicles in a battalion, each system is linked to a GPS and a SINCGARS or EPLRS radio. Each FBCB2 generates and transmits its own position location. Collectively, the FBCB2 systems generate the threat icons picture. Operators utilize FBCB2 to generate threat SPOTREPs that creates the majority of the threat icon picture at the tactical level. The messaging, reporting, and orders/graphics capabilities of the system support battle command for each battlefield functional area. FBCB2 provides situational awareness to the soldier/platform level; displays “geo-referenced” spot reports, calls for fire and NBC 1 reports; order and overlay creation and dissemination; and logistics and personnel reports. The FBCB2 has no joint interface.

B-88. FBCB2 receives data across the TI via the internet controller (INC). The INC is a tactical router built into the SINCGARS. The EPLRS data radio and the SINCGARS data/voice radio transmit/receive digital information between vehicles. This communication architecture is discussed in greater detail in the TI portion of this chapter.

B-89. The ABCS discussed below have embedded battle command (EBC) software that allows interface with FBCB2.

MANEUVER CONTROL SYSTEM

B-90. MCS is the hub of the ABCS components in a CP. It is the primary system for the creation and dissemination of orders, graphics, and operations related reports. MCS automatically receives friendly forces positioning data generated by FBCB2 equipped systems of subordinate units resulting in the threat icon (friendly) picture. There are limitations in the automatic generation of threat icons. Obviously, forces that are not equipped with FBCB2 or are not transmitting to the TI will not automatically appear in the

SU picture and must be manually input into MCS by the operations section. Operators may also manually input blue icons via FBCB2. At the brigade, MCS performs these primary functions:

- Receives orders and graphics from higher and adjacent units.
- Creation and dissemination of orders and graphics to subordinate, higher, and adjacent units. Near-term ability to interface graphics and orders to FBCB2 is limited.
- Extracts information from other systems to display a picture of the battlefield which may include:
 - Friendly and enemy SU.
 - Terrain.
 - Friendly graphics.
 - Artillery range fans.
 - ADA umbrellas.
 - Obstacles and contaminated areas.
 - Weather.
 - LOGSTAT.
 - Sends and receives reports.

B-91. The MCS includes collaborative planning tools (conferencing, chat, whiteboard) to allow integration of information horizontally and vertically.

ALL-SOURCE ANALYSIS SYSTEM

B-92. ASAS supports intelligence operations, providing linkage to strategic and tactical intelligence sensors and sources. ASAS primary functions include:

- Data access, data basing, and correlation capabilities
- Creation and dissemination of intelligence reports, templates, and annexes
- Receipt of intelligence reports from a variety of sources including FBCB2 and other digital systems; display and management of the threat icons picture (enemy SA)
- Collection management and IPB functions
- Support of targeting functions
- Linkage to JSTARS and UAV
- Receives and displays imagery from national, theater and tactical sources

B-93. The ASAS system is located in the S2 section at the TAC and MAIN. The S2 uses ASAS to receive intelligence reports from all sources and to create and manage the correlated threat icons picture. This information is then disseminated to other ABCS systems. Additionally, the S2 routinely sends the threat SU picture he generates down to subordinate units who receive it on FBCB2. He also sends the threat SU picture to the UEx where it is integrated into the UEx level threat SU picture by the G2 section.

ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM

B-94. AFATDS provides automated capabilities to control fire and effects support operations. Located at the FEC (Fires and Effects section) in the MAIN as well as the CGs and the TAC, the system provides the ability to:

- Create and disseminate fire support orders, graphics, and control measures
- Receive and process calls for fire from other digital systems and target acquisition radars
- Manage mission allocation
- Monitor firing unit status and locations

- Transmit and receive reports and free text messages
- Display the threat icons pictures from MCS and ASAS
- In conjunction with ASAS, provide integrated fires/IEW management
- Weapon-target pairing based on target type, commander's guidance, unit availability, weapon status and ammunition availability

AIR AND MISSILE DEFENSE WORKSTATION

B-95. AMDWS alerts maneuver forces of enemy air strikes and Theater Ballistic Missile (TBM) impact points and launch origins for attack operations and provides for sensor to shooter early warning and cueing. It displays the COP real time tracking of hostile, friendly and neutral fixed and rotary wing aircraft, UAVs, and TBMs and depicts active air control orders, sensor and weapon coverage, fire unit status, and missile expenditure.

BATTLE COMMAND SUSTAINMENT AND SUPPORT SYSTEM (BCS3)

B-96. BCS3 provides a near real time, continuous graphical representation of the current situation within the AO to include all friendly and enemy (known and suspected) locations, identification, and unit status. The situation is displayed over topographic details selected by the user from a menu of available mapping features. The user will tailor the detail and scale of the display. BCS3 provides the Logistics Common Operational Picture (LCOP) and displays the LCOP to maneuver and logistics commanders with enhanced briefings and data management capabilities. The current logistical data is augmented with analytical and decision support tools that enables the commander to make well informed decisions very rapidly and effectively to support today's fight and tomorrow follow-on actions.

GLOBAL COMBAT SERVICE SUPPORT ARMY

B-97. GCCS-A provides logistics ordering and management functions for all classes of supply and replaces the unit level logistical system-ground (ULLS-G) and ULLS-S4 systems. As important, it provides interface between ABCS and the Joint COP. It further provides planning, execution and monitoring of mobilization, deployment, sustainment and redeployment of Army forces.

RELATED SYSTEMS

B-98. In addition to the TI (discussed in the next segment), there are several related software or hardware systems that work in conjunction with or as a part of ABCS.

TACTICAL OPERATIONS CENTER SERVERS

B-99. The MAIN servers are a system that acts as a router for the CP, distributing any C2 messages to the appropriate ABCS component in the CP. The MSIN server software is normally resident on an MCS and ASAS system.

INTEGRATED METEOROLOGICAL SYSTEM

B-100. Integrated Meteorological System (IMETS) provides Army warfighters directly usable weather effects information for both friendly and enemy systems integrated with the operational picture. The weather analysis portion of IPB is automated by IMETS with a direct interface to the ABCS using the CTP Overlay-Provider and IMETS Overlay-Provider applications. The staff can access IMETS data or, if not connected to the TOC LAN, can request specific information or analysis through G2/S2 channels.

DIGITAL TOPOGRAPHIC SUPPORT SYSTEM

B-101. DTSS provides tactical decision aids (mobility analysis, intervisibility/line of sight profiles, environmental/climatology, terrain elevation and special purpose products and provides resource status summaries displaying current logistics information by class of supply, item, unit color charts or tabular reports. Products can be accessed via the MCS.

AUTOMATED NUCLEAR, BIOLOGICAL, AND CHEMICAL INFORMATION SYSTEM

B-102. Automated Nuclear, Biological, and Chemical Information System (ANBACIS) is used to report NBC strikes/warnings and to predict the contamination areas associated with such strikes. The software is loaded on select MCS computers.

VIDEO TELECONFERENCING

B-103. One of the most efficient and powerful C2 tools that have emerged is the ability to conduct VTCs between CPs. The capability will normally reside at the main CP within a UEx. It is not organically available between the HBCT and its subordinate unit CPs, but can rapidly be added to a CP. VTCs allow for quick updates, briefings, planning conferences, and diagramming of on-going and future operations. The speed and clarity this provides commanders and their staffs may be the most significant C2 tool for coordination between the HBCT and UEx CPs. It can also be extremely useful between HBCT and subordinate battalion CPs in relatively static operations such as stability operations and support operations.

BATTLE PLANNING AND VISUALIZATION CONCEPT DEMONSTRATOR

B-104. The battle planning and visualization (BPV) is a powerful computer model that assists commanders and staffs to conduct the MDMP. The program assist the staff in COA development, COA analysis (wargaming), and COA comparison by creating scenarios that employs unit/weapon combat values, force ratio analysis, simulates tactical engagements and combat losses, and reconstitution events. COA can be viewed in two or three dimensions and replayed with varying conditions to assist in wargaming.

CI/HUMINT AUTOMATED TOOL SET

B-105. CI/HUMINT automated tool set (CHATS) is a hardware and software suite designed to meet the unique mission requirements of Army CI/HUMINT teams from MI companies operating in the field. CHATS provide CI agents and interrogators the capability to collect, process, and disseminate information obtained through investigations, operations, debriefings and document exploitation. Software applications include translation software, imagery capability, and link analysis tools. CHATS also provide the capability for team level mission management with case, tasking, intelligence oversight, and source management tools. CHATS will interface with the ASAS remote workstation (RWS) employed in support of the HBCT ACT elements. A subsystem of CHATS is the individual tactical reporting tool (ITRT). The ITRT is a portable, lightweight automation tool similar to a Palm Top computer to be used by the individual CI agent or interrogator. The primary function of this device is message preparation and dissemination. The ITRT will receive, store specific overlays, templates, map backgrounds, and annotate digital imagery. CHATS and ITRT are key to the timely preparation and dissemination of intelligence information produced by CI and interrogation teams.

TACTICAL AIRSPACE INTEGRATION SYSTEM

B-106. The TAIS is an automated Army airspace command and control planning and deconfliction of airspace control measures. It automates A2C2 operations for monitoring

real-time airspace situation and deconflicting immediate Airspace Control means Requests. It is a modernized air traffic service capability for improved situational awareness and communications.

DISTRIBUTED COMPUTING ENVIRONMENT

B-107. The distributed computing environment (DCE) is used to integrate software components on several different workstations across a network. Each ATTCS subcomponent provides a service to the other battlefield functions area (BFA) ATTCS. The computer or workstation providing a service is referred to as the server, while the computer or workstation using that service is referred to as a client. It is important to note that every workstation can be a server to every other workstation. For example, DCE allows any one of the ATTCS workstations to client into the MCS maps and overlays server to view the common picture. It also enables the separate ATTCS systems to client into the ASAS secondary imagery server.

ARMY BATTLE COMMAND SYSTEM COMMUNICATIONS OVERVIEW

B-108. While each of the components of the ABCS is a powerful C2 tool individually, it reaches its full potential when linked by a local area network (LAN), a WAN, or the TI.

LOCAL AREA NETWORK

B-109. The LAN is a data communications network that interconnects digital devices and other peripherals. Individual systems are linked and distributed over a localized area to allow communication between computers and sharing resources. Two or more computers linked by software and connected by cable are considered a LAN. A LAN includes:

- Digital devices (computers, scanners, printers, and other peripherals).
- A communications medium that exchanges data from one device to another.
- Network adapters that provide devices with an interface to the communications medium.

B-110. Digital systems within a CP are normally connected on a LAN. However, routers on the LAN allow addressees to change as needed for jump and/or split operations. A tactical LAN is configured to interconnect various CP shelters. Staff leaders must ensure the LAN cables are properly connected to their shelter/system and to the previous and next shelter/system. The S6 is the LAN manager for the brigade and has approval authority over all systems connected to their LAN. The LAN manager is responsible for physically establishing, connecting, and maintaining the operation and for troubleshooting the LAN. He is also responsible for ensuring the LAN is connected to the WAN.

WIDE AREA NETWORK

B-111. A WAN connects several LANs and allows for the transmission of large amounts of data over extended distances. Digital CPs use the WAN to connect to higher, adjacent, and subordinate unit LANs using one of the following types of communications systems:

- JNN network
- Global broadcast service
- NTDR

B-112. The LAN connects to the WAN at a gateway located in a node center. The HBCT S6 and supporting signal section are responsible for connectivity to the SEN and WAN operations.

TACTICAL INTERNET

B-113. The TI provides timely, reliable, and secure battlespace information. The TI provides seamless communications connectivity that is necessary to for delivering SU and C2 data to digital battlefield systems. The TI consists of tactical radios (SINGGARS and EPLRS) linked by routers that allow digital systems to inter-operate in a dynamic battlefield environment. The FBCB2 communicates with ABCS systems via the TI.

B-114. . The TI provides for the digital communications for echelons at brigade and below. The primary components of the TI are:

- *EPLRS*. EPLRS provides data only communications (vehicle position information, network coordination, and data communications) capability.
- *SINGGARS*. SINGGARS provide data and voice communications capability.
- *INC*. The INC is built into the SINGGARS radio mount and provides routing interface between EPLRS and SINGGARS. The INC controls information traffic routing.
- *NTDR*. The NTDR links the TI to the ABCS at UEx, brigade, and battalion CPs. The NTDR network provides the primary data transmission system for the CPs ABCS at levels brigade and below.
- *Enhanced MSE*. The enhanced MSE supports and links mobile and wire subscribers for the exchange of command, control, communications, computers, and intelligence (C4I) information in the tactical environment.
- *Precision Lightweight Global Positioning System Receiver (PLGR)*. The PLGR is the primary positioning system used in the TI.
- *S6 Vehicle*. The S6 vehicle provides the S6 a platform to monitor and manage the TOC LANs and the TI.
- *FBCB2*. The FBCB2 is a battle command information system designed for units performing missions at the tactical level. FBCB2 integrates with each of the BOS to provide seamless battle command capability with increased battlefield operational capabilities.

SERVERS

B-115. . There are three types of servers used for passing SU and C2 EPLRS server. Not every platform is EPLRS equipped. Non-EPLRS platforms pass data via the INC through SINGGARS to their respective EPLRS server. Every platform is associated with an EPLRS server through which all SU and C2 data is routed. Platforms within an autonomous system constantly evaluate the server data quality. If a specific server becomes degraded, client platforms automatically search out a higher quality server.

- *CP Servers*. Battalion and brigade CP servers interface with the ACUS using the NTDR and MSE.
- *Battalion/Brigade Server*. The CP 2 server is the software router through which information is routed from higher, adjacent, and lower elements into the ABCS systems in the CP. At the CP, the CP 2 server interfaces with the CP 2 INC, CP 2 LAN, and CP to CP Data Network. The FBCB2 can collapse multiple unit icons under a single icon. The battalion/brigade servers disseminate the center of mass of the parent battalion to other battalion/brigade servers within their own brigade. The battalion/brigade server also disseminates the center of mass of other brigades down to their subordinate units.
- *Intra-brigade Servers*. These servers disseminate and receive brigade center of mass to and from neighboring brigades.

COMPUTER NETWORK SECURITY

B-116. . The information architecture on the battlefield contributes significantly to the war fighting capabilities of units on the battlefield. The digitized battlefield brings a new threat, CNA. CNA includes operations the threat undertakes to disrupt, deny, degrade, or destroy information resident in computers and networks. To protect against CNA, security architecture is being developed involving security technologies including firewalls, intrusion detection systems, in-line network encryptors, and host security.

SECTION VI – STANDING OPERATING PROCEDURES CONSIDERATIONS

B-117. . This portion contains information regarding digital operations that is relevant in establishing a brigade SOP. The brigade must establish a strong set of guidelines and enforce them on subordinate units to ensure the standardization required to maintain a COP.

FILTER SETTINGS

B-118. . To achieve a COP, all FBCB2 and ABCS systems in the HBCT should have standardized filter settings. This is particularly important for the threat icon picture so that as information about icons ages, the system purges them at the same time throughout the HBCT. Standard filter settings, based upon the nature of the threat's operation should be established in unit SOPs and be the same throughout the HBCT. For threat offensive operations, the filter settings should be short and for threat defensive operations the setting times should be longer, reflecting the more static nature of the threat picture. Table B-3 provides an example of possible filter settings.

Table B-3. Example of Filter setting standing operating procedures

MISSION	STALE	OLD	PURGE
Counterrecon	20 min	40 min	1 hour
Recon	30 min	1 hours	4 hours
Threat Attack	10 min	20 min	1 hour
Threat Defense	30 min	1 hour	1 hour
Urban Operations	5 min	10	60

B-119. Standard filter setting may also have to be adjusted based on the terrain the unit is operating in as well as the mission. In compartmentalized, difficult terrain, longer settings are more appropriate. In the wide-open, fast paced operations in the desert, shorter settings more accurately reflect the current picture. The HBCT should anticipate the threats transition for offensive to defensive operations, and issue directives to change filter settings as requires.

B-120. The standardization of threat icons filter settings is of equal importance in maintaining a common SU picture throughout the brigade. FBCB2 provides three methods for updating individual platform locations—time, distance, and manually. When the system is fully operational, it will automatically update blue icons using either time and or distance traveled based on the units situational filter settings. These settings should be standardized across the force based on both the mission and the function of the unit/platform. Combat vehicles and systems that move frequently should have shorter refresh rates while static vehicles such as CP should have longer refresh rates. Tailoring the frequency of these automatic updates reduces the load on the TI, freeing it for other types of digital traffic.

B-121. The HBCT must also establish an SOP detailing what non-digital units are tracked by manually generating and moving icons on the digital systems. The SOP details how often these positions are reported and updated, and fixes responsibility for executing these tasks.

ENEMY REPORTING

B-122. While it is technically possible for every system in the HBCT to input digital SPOTREPs, the ABCS and FBCB2 systems would quickly get bogged down in duplicate reports and multiple sightings. To prevent this, the brigade establishes reporting protocol that limits where SPOTREPs get forwarded to and requires leaders to make decisions on what data is passed to higher and adjacent echelons. For example, the HBCT may require battalion S2s to analyze all reports from the battalions before they are fed to higher and adjacent unit databases, while all reports from the reconnaissance squadron are immediately passed. The HBCT must balance the need for real time combat information with the negative effects of data overload.

STANDARDIZED REPORTS

B-123. The HBCT sets a schedule for submitting routine standardized reports (commander’s SITREP, LOGSTAT). The SOP established the message group, digital medium, and time window for submission. The SOP should stagger reports to limit the strain on the TI caused by multiple units reporting simultaneously.

CHARTS AND STATUS BOARDS

B-124. Staff sections maintain charts and status boards with current information in the MAIN at all times. The status boards may be analog or digital. Regardless, the on-duty section NCOIC is responsible for updating their sections boards. The S3 NCOIC has overall responsibility for completeness and accuracy of all MAIN visual display boards. Staff sections should routinely print hard copies of status reports and overlays for use in case of digital system failure and for historical records and AARs. The TAC should have access to identical versions of the MAIN tracking charts to ensure continuity during battle handover.

FILING SYSTEMS AND NAMING CONVENTIONS

B-125. For interoperability and to minimize confusion, the HBCT SOP should define the naming convention and file folder system for all reports, orders, overlays, and message traffic. This will significantly reduce time and frustration associated with locating information generated by other CPs or between shifts as operators go on and off duty.

COLOR STANDARDS

B-126. Digital systems provide an increased number of colors available for the creation of graphic overlays and informational displays. When the HBCT deviates from standard color conventions, the HBCT SOP should clearly define the use of nonstandard colors, and assign colors for subordinate unit use.

DATABASES

B-127. C2 systems will inevitably migrate towards a web-based capability, allowing information to be stored in a database and accessed by multiple users. When a staff member generates a new product he may send the traffic to specific locations and then post it to his home page for general consumption. Posting a document to a home page does not constitute communications. Potential users must be alerted that a new document has been posted. Products posted to the website should be kept simple. Complex briefings with decorative graphics can quickly overload the ability to transmit data. Data posted to homepages should be screened for classification and controlled by passwords as appropriate.

GRAPHICS AND ORDERS

B-128. The HBCT SOP should define the technical process for creating, collating, and transmitting orders and overlays. At a minimum, the MAIN should keep the operations overlay, SITTEMP, and fire support overlay, current in both analog and digital formats. The BSB CP has the additional task of maintaining the sustainment overlays.

B-129. All ABCS systems effectively support the creation and transmission of orders and graphics. The HBCT staff will normally develop their portion of the order and send them to the S5 plans MCS where they are merged into a single document and transmitted to subordinate, higher, and adjacent units. When creating orders, remember that the TI does not have unlimited bandwidth. Orders and graphics must be concise to reduce transmission times. Orders transmitted from MCS to the FBCB2 system are limited to the size constraint of the FBCB2 orders format.

B-130. Graphics and overlays should be constructed with the same considerations for clarity and size. SU reduces to some degree the need for control measures, but the staff must always consider the integration of analog units and that SU may not always be available to all elements. When creating graphics consider the following:

- Use multiple smaller overlays to speed transmission times. System operators can open only the overlays they need and display them simultaneously. For example,

all routes and checkpoints could be on one overlay and all boundaries could be on another. This would allow an operator to “turn off” overlays to temporarily relieve screen clutter.

- BOS overlays should use the operations overlay as the basis of creating their overlays. This reduces redundancy by eliminating the need to reproduce boundaries and other common control measures and limits file size.
- The battle captain or XO spot checks all overlays prior to transmission to ensure accuracy and preventing the need to transmit changes or corrections.
- Transmit graphics as they are created with WOs to avoid a large data dump when the order is completed.
- Graphics created in ABCS.

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Appendix C

Field Processing Detainees

PURPOSE

C-1. This appendix provides guidance on field processing detainees.

GENERAL

C-2. There will be times when U.S forces capture and detain Detainees or other individuals who may pose a threat to US personnel or security.

C-3. Detainee is a term used to refer to any person captured or otherwise detained by an armed force (JP 1-02AR 190-8, FM 3-19.40, and international law (including the Law of War and the Geneva Conventions) address legal requirements, policy, procedures, planning factors, and responsibilities for handling detainees. The Geneva Conventions Relative to the Treatment of Prisoners of War and Relative to the Protection of Civilian Persons in Time of War are the Geneva Conventions most applicable in detainee operations.

C-4. Detaining personnel carries with it the responsibility to guard, protect, and account for them. All persons captured, detained, or otherwise held in US armed forces custody must receive humane care and treatment. Further, to the extent permitted by the military situation, all detainees must be afforded protection from the effects of the conflict. US forces are obligated to protect detainees against all acts of violence to include murder, rape, forced prostitution, assault, theft, insults, public curiosity, photographing, filming/videotaping for other than administrative purposes, bodily injury, and reprisals of any kind. The inhumane treatment of detainees is prohibited and is not justified by the stress of combat or by deep provocation.

C-5. Any act or allegations of inhumane treatment by US or Coalition/Allied personnel or by other persons must be promptly reported through the chain of command to HQDA as a serious incident report, thoroughly investigated, and where appropriate, remedied by corrective action. Inhumane treatment is punishable under the Uniform Code of Military Justice. Abuse detracts from mission accomplishment and intelligence collection efforts.

SECTION I – PLANNING FOR DETAINEE OPERATIONS

C-6. Detainee operations are resource intensive and highly sensitive. Holding detainees longer than a few hours requires detailed planning to address the extensive requirements of the Geneva Conventions for proper administration, treatment, protection, security, and transfer of custody of detainees. CJTF/Division level commanders may authorize holding detainees at the point of capture for extended periods that exceed evacuation standards outlined in JP 3-63 and FM 3-19.40. In cases where detainees are held at the point of capture, for reasons other than exigent circumstances, the custodial unit will provide the same standards of protection and care as a designated internment facility per AR 190-8. Commanders responsible for handling detainees should—

- Include military police in their task organization (DoDD 2310.1 states that detainees shall be turned over to military police as soon as possible).

- Ensure clear delineation of the interdependent and independent roles of those Soldiers responsible for custody of the detainees and those responsible for any interrogation mission.
- Ensure resources necessary to provide the support required by regulation and law.
- Routinely consult their supporting Brigade Operational Law Team (BOLT) during the planning and execution of detainee operations.
- Additional planning considerations may include: site selection of collection point/holding area, construction materials (engineer support), sanitation requirements, medical support, transportation considerations, public affairs, and legal support.

SECTION II – FIELD PROCESSING DETAINEES

C-7. Provided necessary resources are available, MP will normally operate a Detainee Initial Collection Point (DICP) or a Detainee Holding Area (DHA) from which hold to detainees. Detainees are held at the DICP for no more than 24 hours and held at the DHA for no more than 72 hours. Subsequently, detainees are transported to a Strategic Internment Facility (SIF) where they are given an internment serial number (ISN).

C-8. Processing begins when US forces take custody of an individual whose liberty has been deprived for any reason (capture, internment, temporary restriction). The term “point of capture” refers to the location where US forces first take custody of an individual. Field processing is accomplished at the point of capture and aids in security, control, initial information collection, and in providing for the welfare of detainees.

C-9. Capturing units field process detainees using the method outlined in Table I-1.

Table C-1. 5 Ss and T Method of Detainee Field Processing

Action	Description
Search	<p>Search each captive for weapons, items of intelligence value, and items that would make escape easier or compromise US security interests. Confiscate these items. Prepare a receipt when taking property. Note: When possible, conduct same gender searches. When not possible, perform mixed gender searches in a respectful manner. Leaders must carefully supervise Soldiers to prevent allegations of sexual misconduct.</p> <p>Captives may keep the following items found in a search:</p> <p>Protective clothing and equipment that cannot be used as a weapon (such as helmets, protective masks and clothing) for use during evacuation from the combat zone.</p> <p>Retained property, such as ID cards or tags, personal property having no intelligence value and no potential value to others (such as photos, mementos, etc.), clothing, mess equipment (except knives and forks), badges of rank and nationality, decorations, religious literature, and jewelry. (Personal items, such as diaries, letters, and family pictures may be taken by MI teams for review, but are later returned to the proper owner).</p> <p>Private rations of the detainee.</p> <p>Confiscate currency only on the order of a commissioned officer (AR 190-8) and provide a receipt and establish a chain of custody using DA Form 4137 (<i>Evidence/Property Custody Document</i>) or any other field expedient substitute.</p>
Silence	Silence the detainees by directing them not to talk. Gags may be employed if necessary (ensure detainee can breath after application).
Segregate	Segregate detainees based on perceived status and positions of authority. Segregate leaders from the remainder of the population. Segregate hostile elements such as religious, political, or ethnic groups hostile to one another. For their protection, normally segregate minor and female detainees from adult male detainees.
Safeguard	Safeguard the detainees. Ensure detainees are provided adequate food, potable water, clothing, shelter, and medical attention. Ensure detainees are not exposed to unnecessary danger and are protected (afforded the same protective measures as the capturing force) while awaiting evacuation. Do not use coercion to obtain information from the captives. Provide medical care to wounded and/or sick detainees equal in quality to that provided to US forces. Report acts or allegations of abuse through command channels, to the supporting judge advocate, and to the US Army Criminal Investigation Command.
Speed to a Safe Area/Rear	Evacuate detainees from the battlefield as quickly as possible, ideally to a collection point where military police take custody of the detainees. Transfer custody of all captured documents and other property to the US forces assuming responsibility for the detainees.
Tag	<p>Use DD Form 2745 (<i>Enemy Prisoner of War (EPW) Capture Tag</i>) or a field expedient alternative and include the following information:</p> <p>Date and time of the capture.</p> <p>Location of the capture (grid coordinates).</p> <p>Capturing unit.</p> <p>Circumstances of capture. Indicate specifically why the person has been detained. Use additional documentation when necessary and feasible to elaborate on the details of capture:</p> <p>Documentation should answer the five Ws –who, what, where, why, and witnesses.</p> <p>Use a form, such as a DA Form 2823 (<i>Sworn Statement</i>) or an appropriate field expedient, to document this information.</p> <p>List all documents and items of significance found on the detainee.</p> <p>Attach Part A, DD Form 2745, or an appropriate field expedient capture card to the detainee's clothing with wire, string, or another type of durable material. Instruct the captive not to remove or alter the tag. Maintain a written record of the date, time, location, and personal data related to the detention. Attach a separate identification tag to confiscated property that clearly links the property with the detainee from whom it was seized.</p>

SECTION III – RESOURCES FOR FIELD PROCESSING OF DETAINEES

C-10. Documenting details surrounding the detention and preserving evidence aid in determining if further detention is warranted, in classifying the detainee, in developing intelligence, and in prosecuting detainees suspected of committing criminal acts. Record these details on the DD Form 2745 (Figure C-3), DA Form 2823, DA Form 4137 (Figure C-1) locally developed forms, or other appropriate field expedient substitutes. When the detaining units suspects a detainee may be responsible for a war crime or some other inhumane act, document the following information —

- Full name, rank, and unit of the Soldier who captured the detainee.
- Circumstances surrounding the detention.
- Indicate and describe any apparent injuries (photograph if feasible). Explain how injuries occurred.
- Thorough description of victims and witnesses. Take statements from these individuals to document their observations and knowledge of the incident.
- Descriptive information for all vehicles or other equipment related to the detention.
- Thorough description of any contraband. Ensure all seized items are recorded on a DA Form 4137 or appropriate field expedient substitute and that a chain of custody is maintained as property is transferred. Photograph contraband if it cannot accompany the detainee, e.g. an improvised explosive device destroyed on site.
- Full name, rank, unit or organization, phone number, and other contact information for any interpreter or other person present during the detention.
- Any information the detainee volunteers.

PERSONNEL

C-11. MP Soldiers shall be in the task organization for a mission likely to result in detaining personnel.

C-12. Consider including interpreters or linguists to support the operation. These assets can assist greatly in tactical questioning and screening of detainees.

C-13. Ensure Soldiers know to consult with their supporting Brigade Operational Law Team (BOLT) for advice on compliance with legal requirements. Detainees at all times shall be treated in a humane manner, regardless of the circumstances or environment.

SUPPLIES AND EQUIPMENT

C-14. The following items may be helpful in searching and securing detainees, safeguarding their property, and ensuring the safety of Soldiers:

C-15. Plastic bags may be used to segregate, store, and protect a detainee's property.

C-16. Permanent markers may be used to annotate identifying information on containers of detainee property.

C-17. Flexi-cuffs (national stock number 8465-0007-2673) may be used to restrain detainees. Employ restraints in a humane manner.

C-18. Flexi-cuff cutters should be used to cut flexi-cuffs. Do not use knives or other cutting devices. Flexi-cuff cutters are designed to prevent injury.

C-19. Latex or rubber gloves should be provided to Soldiers for their protection.

C-20. Goggles with lenses blackened or cloth may be used to blindfold detainees for security reasons and not for punishment.

C-21. Still and video cameras may be used to document the scenes where individuals were detained, detainee injuries, and evidence.

REFERENCES AND FORMS

C-22. A few references and forms will aid in maintaining required information about the detainees, accountability of property, and proper treatment of detainees. The most important of these items are [DD Form 2745](#) (Figure C-3), DA Form 2823, [DA Form 4137](#) (Figure C-1), and AR 190-8. Chapter 7, Internment and Resettlement, of FM 3-19.40 also provides information useful to any Soldiers capturing or handling detainees. Army forms can be accessed at the Army Publishing Directorate website (<http://www.apd.army.mil/>). Because access to such forms may not be feasible at the point of capture in an operational environment, leaders must ensure they are familiar with the essential information that must be documented and be prepared to use appropriate field expedient substitutes to record such information.

EVIDENCE/PROPERTY CUSTODY DOCUMENT		OFFICIAL SEQUENCE NUMBER		
<small>For use of the forces and AF 18D-08 and AF 18E-01. The processing agency is US Army. Evidence is to be returned to the sender.</small>		LFO REPORTING FOR NUMBER		
RECEIVING AGENCY		LOCATION		
NAME, GRADE AND TITLE OF PERSON FROM WHOM RECEIVED <input type="checkbox"/> DU USER <input type="checkbox"/> OTHER		ADDRESS (Include ZIP Code)		
LOCATION FROM WHERE OBTAINED		PERSON OBTAINED	TIME/DATE OBTAINED	
ITEM NO.	QUANTITY	DESCRIPTION OF ARTICLES <small>(Include make, serial number, model and special marks if applicable)</small>		
CHAIN OF CUSTODY				
ITEM NO.	DATE	RELEASED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	

DA FORM 4137, 1 JUL 78 USAFPE 01.00

Replaces DA FORM 0127, 1 Aug 70 and DA FORM 0127 of Army Tech Manual 18 Sep 76 (Which are Obsolete)

DOCUMENT NUMBER _____ LOCATION _____

Figure C-1. DA Form 4137, Evidence/Property Custody Document (Front)

ITEM NO.	DATE	CHAIN OF CUSTODY		PURPOSE OF CHANGE OF CUSTODY
		RELEASED BY	RECEIVED BY	
1		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
		SIGNATURE	SIGNATURE	
		NAME, GRADE OF TITLE	NAME, GRADE OF TITLE	
FINAL DISPOSAL ACTION				
RELEASE TO CARE OF OTHER				
OTHER				
FINAL DISPOSAL AUTHORITY				
ITEMS ON THIS DOCUMENT, PERTAINING TO THE INVESTIGATION INVOLVING				
REQUIRE AS EVIDENCE AND MAY BE DEPOSED AS INDICATED ABOVE.				
WITNESS TO DESTRUCTION OF EVIDENCE				
THE SPECIFICS LISTED AT ITEM NUMBERS				
CUSTODIAN, IN MY PRESENCE, ON THE DATE INDICATED ABOVE.				

DA Form 4137, Rev. 11-00

Figure C-2. DA Form 4137, Evidence/Property Custody Document (Back)

1. DATE AND TIME OF CAPTURE		2. SERIAL NO. 0256001 A	
3. NAME		4. DATE OF BIRTH	
5. RANK	6. SERVICE NO.		
7. UNIT OF EPW		8. CAPTURING UNIT	
9. LOCATION OF CAPTURE (Grid coordinates)			
10. CIRCUMSTANCES OF CAPTURE	11. PHYSICAL CONDITION OF EPW	12. WEAPONS, EQUIPMENT, DOCUMENTS	

DD FORM 2745, MAY 96 REPLACES DA FORM 5976, JAN 91,
USABLE UNTIL EXHAUSTED.


1. DATE AND TIME OF CAPTURE		2. SERIAL NO. 0256001 B	
3. NAME		4. DATE OF BIRTH	
5. RANK	6. SERVICE NO.		
7. UNIT OF EPW		8. CAPTURING UNIT	
9. LOCATION OF CAPTURE (Grid coordinates)			
10. CIRCUMSTANCES OF CAPTURE	11. PHYSICAL CONDITION OF EPW	12. WEAPONS, EQUIPMENT, DOCUMENTS	

DD FORM 2745, MAY 96 REPLACES DA FORM 5976, JAN 91,
USABLE UNTIL EXHAUSTED.

1. DATE AND TIME OF CAPTURE		2. SERIAL NO. 0256001 C	
3. NAME		4. DATE OF BIRTH	
5. RANK	6. SERVICE NO.		
7. UNIT OF EPW		8. CAPTURING UNIT	
9. LOCATION OF CAPTURE (Grid coordinates)			
10. DESCRIPTION OF WEAPONS, SPECIAL EQUIPMENT, DOCUMENTS			

DD FORM 2745, MAY 96 REPLACES DA FORM 5976, JAN 91,
USABLE UNTIL EXHAUSTED.

Figure C-3. DD Form 2745, Enemy Prisoner of War (EPW) Capture Tag (Front)



**ENEMY PRISONER OF WAR (EPW)
CAPTURE TAG (PART A)**

For use of this form, see AR 190-8.
The proponent agency is DCSOPS.

Attach this part of tag to EPW. *(Do not remove from EPW.)*

1. **Search** - For weapons, military documents, or special equipment.
2. **Silence** - Prohibit talking among EPWs for ease of control.
3. **Segregate** - By rank, sex, and nationality.
4. **Safeguard** - To prevent harm or escape.
5. **Speed** - Evacuate from the combat zone.
6. **Tag** - Prisoners and documents or special equipment.

DD FORM 2745 (BACK), MAY 98

UNIT RECORD CARD (PART B)

Forward to Unit
(Capturing unit retains for records.)

Use string, wire, or other durable material to attach the appropriate section of this form to the EPW's equipment or property.

DD FORM 2745 (BACK), MAY 98

**DOCUMENT/SPECIAL EQUIPMENT
WEAPONS CARD (PART C)**

Attach this part of tag to property taken. *(Do not remove from property.)*

As a minimum, the tag must include the following information:

- Item 1. Date and time of capture *(YYYYMMDD)*.
- Item 8. Capturing unit.
- Item 9. Place of capture *(grid coordinates)*.
- Item 10. Circumstances of capture *(how the EPW was captured)*.

DD FORM 2745 (BACK), MAY 98




Figure C-4. DD Form 2745, Enemy Prisoner of War (EPW) Capture Tag (Back)

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Appendix D

Media on the Battlefield

Practical Considerations

Commanders must plan on the media being present throughout their operational area and embedded in unit operations. Modern news reporting provides instant coverage of military operations and can turn minor tactical events into international events with strategic implications. National and international media coverage will result in defense policy decisions at the highest level, profoundly influence external public support, and impact the behavior of all audiences – military and civilian—within the operation’s area of interest. Effectively planned, resourced and executed, media activities can be a force multiplier, leveraging global influence, and enhancing command credibility. Media operations also can be a disaster if they are not planned, resourced or executed properly. Engaging the media serves the best interests of the Army, your soldiers and their families as you share the story of the mission you are executing. Media operations is a related activity to information operations (IO) and therefore media coverage and IO plans must be mutually coordinated and synchronized to ensure that they are complementary and do not result in IO Fratricide—where one message kills another message.

SECTION I – FUNDAMENTALS OF DEALING WITH THE MEDIA

D-1. Supporting media operations fulfills the Army’s obligation to keep the American people and the Army family informed. It helps establish confidence in America’s Army and its readiness to conduct operations in peacetime and war. Newspapers, magazines, radio, television and electronic media are independent conduits of information to the world. They provide news, analysis, interpretation and commentary and serve as a forum for ideas, opinions and public debate. What appears in the media shapes perceptions, attitudes and opinions, and can have a direct impact on mission success.

D-2. The vast majority of both civilian and military media representatives are committed to providing responsible, accurate, balanced coverage. Although there are exceptions, most media representatives are focused on achieving a credible information presentation. To accomplish this, media representatives investigate issues, ask tough, challenging questions, and pursue verifiable answers. They seek information, interpretation and perspective on operations. The level of knowledge of military operations will vary among the media and it will take patience and maturity to share the confidence of your unit operations while ensuring OPSEC and translating operational details into a form that is understandable by the media and their audience. Army leaders at all levels need to educate media

representatives and support their efforts to provide an accurate, balanced and credible presentation of timely information.

D-3. The challenge for commanders, and personnel supporting media at unit level, is to plan and execute tactical operations, safeguard friendly forces while ensuring that the media have the opportunity to get their message out. The need to plan for media coverage in tactical operations derives from the fact that in most situations media representatives will be present in an area of operations before the arrival of Army forces and will not leave until the mission is complete. The media will know the area of operations, key personalities and opinion leaders and because they are covering the story as it evolves, will have an understanding of, and opinion about, the military, political, and social situation. You can work with the media or have them work against the command message and suffer the consequences. Not engaging the media means that they will tell their story without your input.

D-4. Media representatives will cover the deployment of Army forces, their arrival in the area and their initial conduct, and remain as long as the story is of interest. Some home station media will be interested in deploying with local units and being “embedded” with them. Commanders should refer all media requests to the BCT and UEx Public Affairs sections with the full understanding that accredited media will probably be escorted down to Battalion level to get the Soldier’s story. The UEx commander will only allow embedded media in units that he has confidence will take care of the media and stay on the command message (Public Affairs Guidance (PAG)). Media may build long term relationships with units and their leaders that endure past current circumstances. Joe Galloway’s (United Press International) close ties to 1st Squadron 7th Cavalry from their action in the Ia Drang Valley in Vietnam continues forty years after the battle.

D-5. There are three types of media that a Battalion commander may engage in the operational area.

- Embedded – They reside with a unit for an extended period (defined in Operation Iraqi Freedom as 72 hours or more). Embedded media are governed by ground rules that define working relationships.
- Accredited/registered–They have been vetted by the PA staff at brigade level or above, and are normally issued written credentials reflecting coordination to cover units within the command.
- Unilateral–They are media that do not seek military public affairs credentials or registration. Absent credentials, unilaterals are only accorded the access granted to local nationals.

SECTION II – PUBLIC AFFAIRS ELEMENTS

D-6. The austere staffed PA sections organic to BCT and UEx headquarters will nearly always be overwhelmed trying to meet media requirements. More than 65 percent of the total public affairs force and 85 percent of the deployable PA TOE unit structure is positioned in the U.S. Army Reserve and Army National Guard. These reservists must be seamlessly integrated with the active component and focused on supporting the overall Army goals and objectives. Media operations, therefore, rely on augmentation from units in the field to accomplish the Army battlefield PA mission.

D-7. In headquarters without organic PA sections (Battalions and some Brigades), the commander is responsible for PA and must plan as well as execute PA operations. The appointment of the right officer or senior NCO to plan for and supervise the execution of the battalion public affairs program is critical to the success of the Information Operations Plan.

The DoD Media Guidelines below lay out in general terms the command responsibilities for media operations in the unit area. Regardless of the echelon, the PA section's primary responsibility is to assist the commander in accomplishing his mission.

SECTION III – PUBLIC AFFAIRS GUIDANCE (PAG)

D-8. PAG is the operational tool that guides unit commanders regarding IO plans and policy as well as the command message during major military operations, exercises, and contingencies. Upon receipt of the warning order, the commander should request PAG from higher headquarters. PAG may be included in alert notification or operational orders. Commanders must insure that they understand PAG and adhere to the UExs Information Plan.

D-9. The essential elements of PAG for operational commanders are:

- **References:** List the essential documents, messages, or policies on which the PAG is based.
- **Information:** This paragraph should describe significant or anticipated problems associated with the operation. The information in this paragraph is not for release and will remain classified.
- **Public Affairs Approach:** The PAG will recommend the PA approach—either passive or active—the UEx commander will usually make the final decision on the command PA approach.
 - **Active Approach.** This involves efforts made to stimulate public or press interest, such as distributing press releases and advisories. This paragraph also states who will make the initial announcement of the operation, the preferred method, and the preferred time and date. The active approach is recommended whenever media coverage of units is desired (e.g., major training exercises).
 - **Passive Approach.** No action is taken to generate media and/or public interest in an issue or activity, except in response to specific inquiries. If a passive approach is desired, the PAG will specify that the guidance is for response to query (RTQ) only. The PAG also specifies who is authorized to respond for the command. For example: "Only commanding general may RTQ." To de-emphasize an event, it is best to authorize release or RTQ at the lowest possible level.
- **Questions and Answers:** This paragraph contains a list of probable Q&As that enable the user to respond to the majority of anticipated questions. They should not be given to media as handouts in their entirety and should be tailored to the situation and unit activities (if they apply).
- **Contingency Statement:** This paragraph contains a statement to be used before the release of the final PAG. For example, as a matter of policy, we do not discuss troop movements or operations until they have been formally announced.

SECTION IV – DOD MEDIA GUIDELINES

D-10. The DoD Media Guidelines, issued as Change 3 to DoD Directive 5122.5, provide the following guidelines for coverage of DoD combat operations:

- Open and independent reporting will be the principal means of coverage of U.S. military operations.
- Pools are not to serve as the standard means of covering U.S. military operations. But pools may sometimes provide the only feasible means of early access to a military operation (based on the ability to move and safeguard the media). Pools

should be as large as possible and disbanded at the earliest opportunity—within 24 to 36 hours when possible. The arrival of early access pools will not cancel the principle of independent coverage for journalists already in the area.

- Even under conditions of open coverage, pools may be appropriate for specific events, such as those at extremely remote locations or where space is limited.
- Journalists in a combat zone will be credentialed by the U.S. military and will be required to abide by a clear set of military security ground rules that protect U.S. forces and their operations. Violation of the ground rules can result in suspension of credentials and expulsion from the combat zone of the journalists involved. News organizations will make their best efforts to assign experienced journalists to combat operations and then make them familiar with U.S. military operations.
- Journalists will be provided access to all major military units. Special operations restriction may limit access in some cases.
- Military public affairs officers should act as liaisons but should not interfere with the reporting process.
- Under conditions of open coverage, field commanders will permit journalists to ride on military vehicles and aircraft whenever feasible. The military will be responsible for the transportation of pools.
- Consistent with its capabilities, the military will supply PAOs with facilities to enable timely, secure compatible transmission of pool material and will make these facilities available whenever possible for filing independent coverage. In cases when government facilities are unavailable, journalists will, as always, file by any other means available. The military will not ban communications systems operated by news media organizations, but electromagnetic operational security in battlefield situations may require limited restrictions on the use of such systems.

SECTION V – OPERATIONAL GUIDELINES

D-11. Before accepting media into the operational area, the commander must insure that:

- Media are not exposed to classified information. If media will accompany units on combat operations there must be agreement on the restriction on the release of operational information. Commanders must consider the FFIR as a baseline of what is not releasable.
- Know the definitions:
 - On the record—reporter uses everything you say and attributes it to you by name and title.
 - Off the record—reporter should not use any thing you say. Go off the record only if the information is vital to the reporters understanding of the situation. However, some media consider nothing to be off the record.
 - Background—the reporter will use the information but will not attribute it to you. The term *An Army spokesman* may be used based upon agreement between you and the reporter.
- Media must agree not to release casualty information and comply with the directives and timelines associated with the release of casualty information (24 hours following the confirmed notification of Next of Kin).
- Media are safeguarded and not allowed to constitute an operational risk to friendly forces.
- Media understand that violation of the operational guidelines may result in the loss of accreditation and military support (only General Court-Martial Authority can withdraw accreditation).

- Media are de-briefed with the reminder of the operational sensitivity of the information that they have been exposed to, based on their association with the unit.
- Media Do's—
 - Take every opportunity to tell your units story.
 - Set the ground rules for the interview and terminate the interview if you feel that the ground rules have been violated.
 - Be ready to answer the questions (who; what; when; where; and why).
 - Discuss only matters of which you have personal knowledge. You may talk about individual responsibility, expertise, and personal experiences. You may also discuss unclassified information about general missions, training, weapons and equipment and transportation. You may use your name and hometown in interviews, but you also have the option to use only your first or last name or refuse to be identified at all.
 - Approximate numbers of vehicles, aircraft, equipment, and personnel involved in operations. Specific numbers are not authorized for release at unit level.
 - If you can not answer a question explain why, (I don't know....I won't speculate I can't answer that because of security concerns).
 - Remember that everything you say is on the record. Once the words leave your mouth there is no way to get them back in your control.
 - Verify the media' identity and credentials before talking to them.
 - Be cautious about what you say to ensure that your words can not be twisted into a sound bite or taken out of context.
 - Be ready to report to your higher headquarters the questions asked and the answers provided.
 - Immediately report to higher headquarters any unregistered media you encounter.
 - Stay in your lane. Which really means only discuss what you have direct personal knowledge of, don't speculate, and make sure that you stay on message as stated in the PAG.
- Media Don'ts—
 - Do not lie or attempt to use the media as part of a deception plan.
 - Do not discuss political or foreign policy matters.
 - Do not discuss the rules of engagement (ROE) or rules on use of deadly force.
 - Do not discuss operational capabilities; exact numbers; troop strength; size; location and unit disposition; or future operations.
 - Do not speculate, repeat rumors, or answer hypothetical questions.
 - Do not confiscate camera or sound equipment, film or recording medium, notebook or videotapes from the media. If you believe that media has captured a sensitive event, immediately report that belief to your commander.
 - Do not allow the media to be armed. It is a violation of The Hague and Geneva Conventions and media lose their status as non-combatants if armed. Protective body armor is encouraged so that they gain appreciation for what Soldiers are equipped with.
 - Do not allow the media to photograph or interview detainees or prisoners.
 - Do not allow the media to photograph special operations or intelligence personnel or equipment due to OPSEC.
 - Do not allow media to report on ongoing rescue or recovery operations for missing personnel.

- Do not allow the media to violate operational noise or light discipline (including smoking).

SECTION VI – EMBEDDED MEDIA

D-12. Embedding media at battalion level is now routine, so coverage of your operations can be a force multiplier as you gain positive coverage for your community, strengthen local media relations and improve morale for your soldiers and their families. Before accepting embedded media, commanders need to know the rules to stay out of trouble.

EMBEDDING RULES

D-13. **Transportation.** Congress gave DOD very stringent guidance on using government aircraft to fly media anywhere. Here are some of the important points from AR 360-1, *Army Public Affairs Program*. Take a moment to review them before making any commitments to local media:

- Military transportation will not compete with commercial carriers when the public affairs objectives of the proposed travel can be accomplished through the use of commercial carriers.
- Travel or transportation may be authorized in connection with an assignment to cover an Army program or operation when travel is an integral part of the story and is provided on a space-available basis.
- Non-local travel by all news media representatives must be approved by OASD-PA.
- All local travel or transportation requests for national media must be brought to the attention of HQDA OCPA.
- Travel or transportation for public affairs purposes must be primarily in the interest of DA or the DoD.
- No commitment of military transportation for public affairs purposes will be made until the request has been coordinated and approved.
- Invitational Travel Orders covering transportation will be issued by the command with primary interest.

D-14. If you prepare each news media travel request, (local or non-local) in accordance with AR 360-1, it will stand up to both congressional and public scrutiny.

D-15. **Support.** Keep these points in mind as you develop your planning and coordination checklist:

- The deploying unit must agree to sponsor the media when they deploy and while they are in country.
- The deploying unit must agree to provide aircraft seats on the unit's flight to the area of operations in coordination with the supporting USAF command.
- The deploying unit agrees to provide media escorts (to go with them and stay with them). Accredited media will be accorded all courtesies and privileges as equivalent grade of O-4 for messing and billeting. However media will carry their own bags and provide all of their professional materials and supplies.
- The UEx and UEy headquarters must agree to support the media and coordinate approval from the joint task force public affairs.
- Before any warning or execute orders are ever issued, survey your media and find out who may be interested in going with your unit should they be deployed. Let them know in advance what will be required.

- Up-to-date visa and passport.
- Immunizations and statement of medial health.
- Basic military training (first aid and actions under direct/indirect fire).
- Personal and professional equipment.
- Approximate costs, to include a return commercial flight if military flights are not available.
- Signing Hold Harmless and Not to Sue Agreements as well as agreement to reimburse for any lost or damaged government issued equipment (helmet, body armor, protective mask, etc).
- Signing release from responsibility agreement with each service that provides transportation (Army helicopters, Air Force, Marine Corps and Navy transports).
- Once theater requirements have been confirmed, the UEx should prepare Invitational Travel Orders (ITO) for media who will likely be embedded.
- Have a plan that will ensure coverage of your unit from your embedded media and work with your higher headquarters to market products coming out of theater insuring that the media messages support the UEx Information Plan.
- All unit members must be familiar with PAG, embedding ground rules, the role of embedded media, and what actions to take if classified or sensitive information is disclosed.

D-16. The sample request below for embedded media lays out much of the coordination and support agreements required to gain approval from Department of the Army.

SAMPLE Request

FROM CRD THIRD INF DIV FT STEWART GA//PAO//
HQ DA WASHINGTON DC//SAPA-POPD//
INFO JCS/SECDEF WASHINGTON DC//OASD/PA/DPL//
USCINCCENT MACDILL AFB FL//PAO//
COMUSARCENT-CDRUSATHIRD FT MCPHERSON GA//PA//
USCINCTRANSCOM SCOTT AFB IL//TCPA//
USACOM NORFOLK VA//JO1PA//
UNCLAS

SUBJ: REQUEST FOR APPROVAL OF NON-LOCAL MEDIA TRAVEL TO SWA AND TRAVEL CLEARANCES RMKS/1. THIS HQ PROPOSES TO EMBED MEDIA WITH A DEPLOYMENT OF THE 3D ID SCHEDULED TO DEPLOY TO THE SWA THEATER OF OPERATIONS ON APPROXIMATELY XX MAR ON AN AIR FORCE CRAFT. REQUEST APPROVAL AND THEATER AND COUNTRY CLEARANCES FOR THE NON LOCAL TRAVEL OF THE FOLLOWING NEWS MEDIA FROM FORT STEWART TO SWA AND POTENTIAL RETURN. REQUEST THEATER CLEARANCE FOR NEWS MEDIA REPRESENTATIVES (NMRS) AND MEDIA TRAVEL IN AND OUT OF THE OPERATION SOUTHERN WATCH AREA OF OPERATION.
PERTINENT INFORMATION IS IN NAME/ORGAN/SSAN/PASSPORT NUMBER FORMAT.

Jim Doe COLUMBUS (GA) LEDGER-ENQUIRER/SSN 000-00-000 US PASSPORT 111-11-98
Susan Doe/SAVANNAH (GA) SAVANNAH TIMES/SSN 001-01-001
US PASSPORT 111-12-98
Steve Smith/CPT/HQ, 2^D BDE, 3 ID/ESCORT OFFICER

SSN 234-23-2345

2. MEDIA HAVE AGREED TO REMAIN WITH THE UNIT FOR APPROXIMATELY TEN DAYS AND WILL PROVIDE CRITICALLY NEEDED HOMETOWN, FORT STEWART AND ARMYWIDE COVERAGE OF 3D ID TO FAMILIES, THE FORT STEWART CIVILIAN WORK FORCE AND THE AMERICAN PUBLIC. REPORTERS HAVE AGREED TO COVER PORTIONS OF AIR FORCE SUPPORT TO 3D ID UNITS WHILE IN TRANSIT. REPORTERS WILL TRAVEL ON A USAF C5 FROM HUNTER ARMY AIRFIELD TO SWA. REPORTERS WILL STAY WITH THE 3D ID IN BASE CAMP. 3D ID PAO HAS AGREED TO SUPPORT MEDIA TRANSPORT IN AND OUT OF THE BASE CAMP TO COVER FIELD TRAINING AND UNIT OPERATIONS IN THEATER.

3. UNIT COMMANDER AND THE ASSIGNED ESCORT OFFICER HAS ENSURED REPORTERS WILL COMPLETE THEATER SPECIFIC IRT PRIOR TO DEPARTURE. REPORTERS HAVE PASSPORTS, VISAS, ACCREDITATION, IMMUNIZATIONS AND APPROPRIATE CLOTHING AND EQUIPMENT. FORT STEWART PAO WILL PREPARE INVITATIONAL TRAVEL ORDERS UPON RECEIPT OF TRAVEL APPROVAL. MAJ XXXX, 3D ID PAO, WILL ESCORT MEDIA IN TRANSIT. REPORTERS WILL ACCOMPANY AN MP COMPANY IN TRANSIT.

4. REPORTERS HAVE BEEN BRIEFED THAT DEPLOYMENT DATE MAY FLUCTUATE AND RETURN FLIGHTS ON MILITARY AIRCRAFT MAY NOT BE FEASIBLE. REPORTERS HAVE AGREED TO PAY IN FULL FOR TRANSPORTATION BACK TO THE UNITED STATES.

5. WHEN MEDIA FLIGHT IS APPROVED AND TRAVEL CLEARANCES GRANTED, REQUEST THAT AMC PA GRANT MMO/MEGP STATUS, INCLUDING AUTHORIZATION FOR REPORTERS TO GATHER MATERIAL, FILM, VIDEO AND/OR STILL PHOTO COVERAGE ON AMC MISSIONS IN SUPPORT OF OPERATION XXXXXX. REPORTERS WILL OBSERVE ALL USAF SAFETY REGULATIONS PER DOD INST. 4515.3r. TRAVEL IS ON A NON-REIMBURSABLE, NON-INTERFERENCE WITH MISSION BASIS. MEDIA WILL NOT BE GIVEN ACCESS TO CLASSIFIED INFORMATION OR MATERIALS.

6. FOCUS OF MISSION REMAINS REGIONAL/HOMETOWN NEWS COVERAGE OF 3D ID SOLDIERS PARTICIPATING IN OPERATION XXXXXX WHILE PROVIDING REPORTERS WITH A COMPLETE ORIENTATION ON THE COMPLEXITIES OF MILITARY DEPLOYMENTS, INCLUDING THE TRANSCOM/AMC MISSION. TRAVEL BY MILITARY AIRCRAFT IS AN INTEGRAL PART OF THE STORY AND REPORTERS INTEND TO INTERVIEW CREWMEMBERS, PILOTS, FLIGHT ENGINEERS, AND LOADMASTERS DURING FLIGHTS, AND ALCC GROUND STAFF AT ENROUTE STATIONS. ESCORT OFFICER WILL BRIEF AIRCREW MEMBERS THAT REPORTERS ARE PRESENT AND THAT CONVERSATIONS OR ACTIONS OF THE CREW MAY RESULT IN ARTICLES, PHOTOS OR VIDEO PRESENTATIONS.

7. ACCREDITED MEDIA WILL IS ACCORDED ALL COURTESIES AND PRIVILEGES AS EQUIVALENT GRADE OF O-4 FOR MESSING AND BILLETING.

8. POC AT THIS HQ IS MR XXXXXX, COMM (404) 464-5686 OR DSN 367-5686.

Appendix E

Army Airspace Command and Control

Army Airspace Command and Control (A2C2) elements form a vertical and horizontal channel through which airspace control requirements, plans, orders, and information are coordinated, disseminated, and synchronized with the tactical plan.

The term Army airspace does not signify ownership of any airspace contiguous to the battlefield or any other geographical dimension. Airspace is a joint medium for all friendly combatants. Each joint force component may operate aerial vehicles and weapons systems within the airspace with maximum freedom consistent with priorities, the degree of operationally acceptable risk, and the joint force commander's intent. The executive agent for airspace control is the Airspace Control Authority (ACA) who is usually the Joint Force Air Component Commander (JFACC).

SECTION I – AIRSPACE INTERFACE

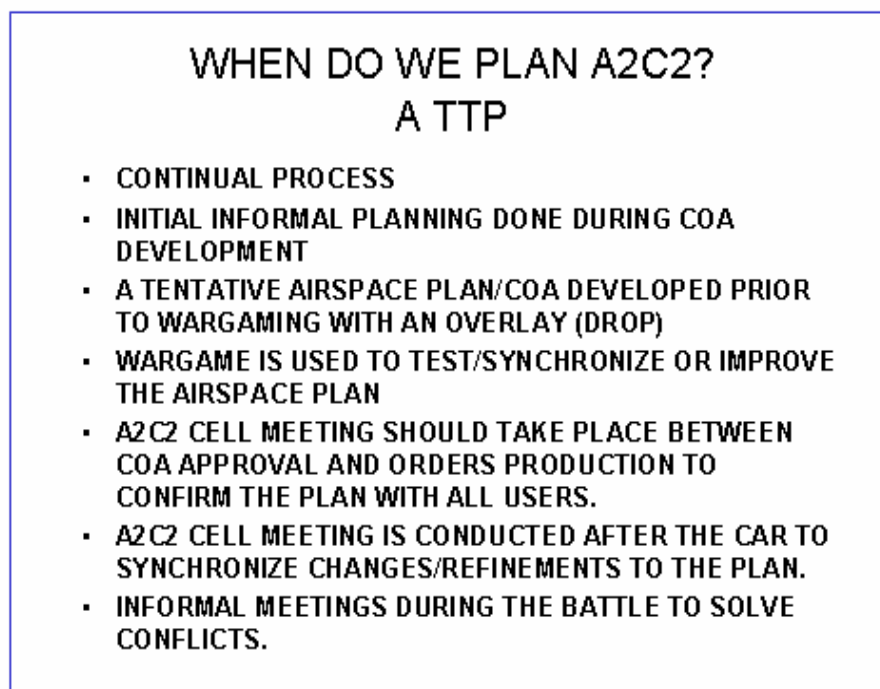


Figure E-1. When do We Plan A2C2?

E-1. The A2C2 system is the airspace management component of the Army Air Ground System (AAGS). It outlines the Army's integration of airspace usage and C2 within the framework of the Theater Air Ground System (TAGS). These systems, in whole or in part, are placed in each echelon from maneuver brigade to numbered army. This appendix summarizes these systems and the communication mediums used to accelerate the airspace control authority's objectives. AAGS is the control system for synchronizing, coordinating, and integrating air operations. It provides the means to initiate, receive, process, and execute requests for air support and to disseminate information and intelligence produced by aerial assets.

E-2. AAGS interfaces with elements from other services to function as a single entity in planning, coordinating, deconflicting, and integrating air support operations with ground operations. The Army elements of the AAGS consist of Command Post's, Effects Coordinators, Air and Missile Defense elements, Aviation Elements, the BCT's Air Defense and Airspace Management/Brigade Aviation Element (ADAM/BAE), UEx A2C2 cells, UEy A2C2 Section and coordination/liaison elements.

SIMULTANEOUS USE

E-3. A2C2 maximizes the simultaneous use of airspace. At decisive moments, commanders are able to exploit all available combat power—synchronized in time, space, and purpose. Potential users of the aerial dimension of the battlefield include not only Army aviation but also Air Defense (AD), Military Intelligence (MI), maneuver UAVs, Fire Support (FS), and joint and combined air and ground forces.

FRATRICIDE AVOIDANCE

E-4. Effective airspace management and control minimize the risk of fratricide and increase overall force effectiveness. The A2C2 system provides an effective conduit for timely bidirectional communication between the airspace control authority (ACA) and all friendly airspace users. The air tasking order (ATO), published daily by the ACA, directs tactical identification, friend or foe (IFF) use and assignments in each theater, as well as projecting ground combat movements. The ACO notifies appropriate Air-Ground Operations System nodes of the effective times, altitudes, distances, and the controlling agency for all airspace control measures. It may also include fire support coordinating measures, air defense control measures, and any other pertinent airspace information deemed necessary by the Airspace Control Authority to limit fratricide and maximize combat effectiveness.

ARMY AIRSPACE USERS

E-5. A2C2 is the integration by the S/G3 of conflicting airspace requirements from, all airspace users (Air Defense, Fire Support, Military Intelligence, Special Operations units, Airborne, aviation and ground maneuver. These functions involve detailed coordination and integration to enable effective use of close air support (CAS), indirect fire, organic and augmenting Air Defense, tactical fire and maneuver operations (to include Army aviation) as well as UAV operations. Brigade, battalion, and company commanders; Effects coordinators; ALOs; and FACs directly involved in localized combat operations perform A2C2 functions established by higher echelons such as the UEx A2C2 element. However, the ADAM/BAE is the key element at the BCT level for synthesizing and integrating the brigade's airspace for combat operations.

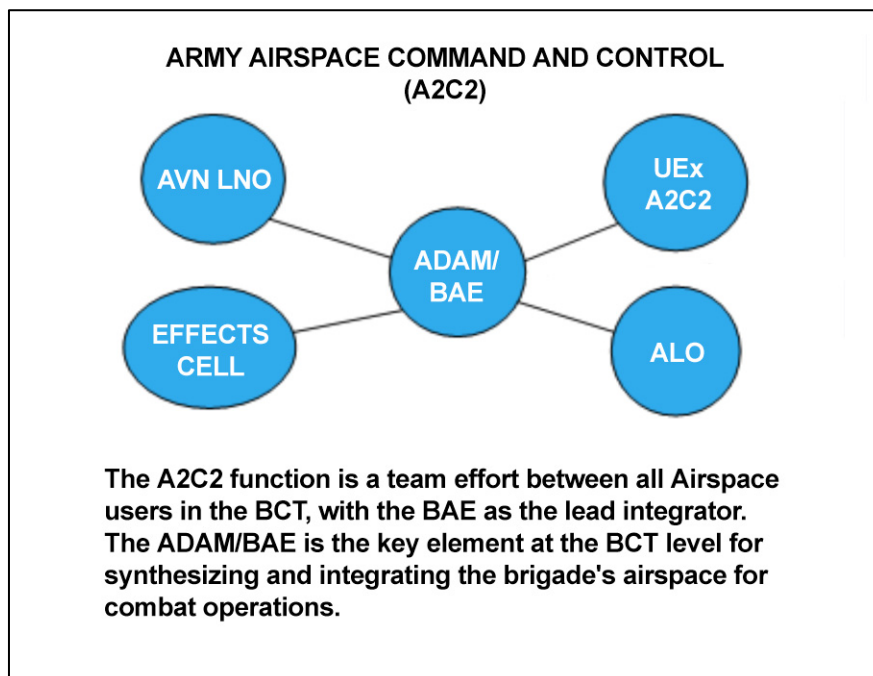


Figure E-2. A2C2 Staff Coordination

SECTION II – ARMY AIRSPACE COMMAND AND CONTROL STAFF RESPONSIBILITIES

E-6. A2C2 requires a coordinated staff effort to accomplish the functional activity of airspace control. This process—coupled with the near-real-time collection and dissemination of information—increases combat effectiveness by promoting the safe, efficient, and flexible use of airspace.

E-7. The Battlefield Coordination Detachment (BCD) is the ARFOR coordination detachment located at the Joint Air Operations Center (JAOC). The BCD relays and interprets Army needs for air support and deconfliction to the JAOC. The A2C2 element representing the joint forces land component commander is located in the BCD. The A2C2 representatives work within the operations and plans divisions of the BCD. The BCD A2C2 representative, in coordination with the JAOC combat plans division, approves or disapproves notification for Army airspace requests, orders, and recommendations. Additionally, the BCD A2C2 representative provides the current joint forces air component commander's airspace utilization priorities, control measures or restrictions, and all other elements of information necessary for the UEy or UEx to maintain a complete A2C2 picture.

E-8. The UEy contains an A2C2 cell that deconflicts UEy airspace for TACAIR support, Army aviation, unmanned aerial vehicles, Air Defense Artillery, FA, and EW assets. The A2C2 Cell is the primary airspace POC for subordinate UExs and Commands/BCTs/Bdes under the control of the UEy. The A2C2 cell provides support to the A2C2 NCO in the Fires and Effects Directorate. The A2C2 cell supports the G5 in the UEy Main with both deliberate and contingency airspace planning, develops the A2C2 architecture, establishes A2C2 interface into the Joint Interface Network, develops and submits Army requirements for the joint Airspace Control Plan (ACP), and publishes and maintains the A2C2 annexes to plans and orders. The A2C2 cell is responsible for building the UEx input to the joint airspace control order (ACO) and coordinates with other UEy sections for input to the Air

Tasking Order (ATO). The A2C2 Cell is responsible for airspace control activities supporting the UEy and is capable of interfacing directly with the JTF, other components, or Battlefield Coordination Detachment.

E-9. The UEx has two A2C2 cells, one in either TAC. The TAC 1 A2C2 cell supports the G5 with both deliberate and contingency airspace planning, develops the A2C2 architecture, establishes A2C2 interface into the Joint Interface Network, develops and submits Army requirements for the joint Airspace Control Plan (ACP), and publishes and maintains the A2C2 annexes to plans and orders. The TAC 1 A2C2 cell oversees the TAC 2 A2C2 cell and is responsible for overseeing the coordination, integration, and regulation of UEx airspace. TAC 1 A2C2 cell is responsible for building the UEx input to the joint airspace control order (ACO) and coordinates with other UEx sections for input to the Air Tasking Order (ATO). The TAC 1 A2C2 Cell is responsible for airspace control activities supporting the TAC. The TAC 1 A2C2 Cell is the primary airspace POC for subordinate BCTs/Bdes under the control of TAC 1. When the UEx is under the control of a UEy, the TAC 1 A2C2 cell will coordinate all planned airspace requirements with the UEy A2C2 cell while keeping the TAC 2 A2C2 cell informed. The TAC 1 A2C2 cell will monitor all of TAC 2's immediate airspace requirements. The TAC 1 A2C2 cell contains personnel required to support the TAC FEC. The TAC 1 A2C2 LNOs to the FEC will assist in the integration of airspace use for both planned and immediate requirements. The TAC 1 A2C2 deconflicts TAC airspace for using TACAIR support, Army aviation, unmanned aerial vehicles, Air Defense Artillery, FA, and EW assets. The TAC is capable of interfacing directly with the JTF, other components, or Battlefield Coordination Detachment if the UEx TAC is used as an operational headquarters. The TAC AC2C cell has the necessary ground to air communications capability to communicate both digitally and by voice to Army and JIM aircraft.

E-10. The TAC 2 A2C2 Operations Cell is responsible for airspace control activities supporting the TAC. The TAC 2 A2C2 Cell is the primary airspace POC for subordinate BCTs/Bdes under the control of TAC 2. The TAC 2 A2C2 cell coordinates with the UEy TAC A2C2 cell as required. In normal operations the TAC Operations A2C2 cell will coordinate immediate airspace requirements with the UEy A2C2 cell while keeping the UEx TAC 1 A2C2 cell informed. Planned airspace requirements will be submitted to UEx TAC 1 A2C2 cell for integration into the UEx's ACO submission. The TAC 2 A2C2 cell contains personnel required to support the TAC 2 FEC. The TAC 2 A2C2 cell will ensure that the TAC's airspace requirements and concept are properly articulated to the TAC 1 A2C2 Plans cell. The TAC 2 A2C2 LNOs to the FEC will assist in the integration of airspace use for both planned and immediate requirements. The TAC 2 A2C2 cell deconflicts TAC airspace for using TACAIR support, Army aviation, unmanned aerial vehicles, Air Defense Artillery, FA, and EW assets. The TAC is capable of interfacing directly with the JTF, other components, or Battlefield Coordination Detachment if the UEx TAC is used as an operational headquarters. The TAC AC2C cell has the necessary ground to air communications capability to communicate both digitally and by voice to Army and JIM aircraft.

SECTION III – BRIGADE AND BATTALION ARMY AIRSPACE COMMAND AND CONTROL REQUIREMENTS

E-11. The HBCT and IBCT A2C2 team is comprised of the Air Defense and Airspace Management/Brigade aviation element (ADAM/BAE), effects cell, and ALO providing those staff functions within the Brigade to plan and execute A2C2 for the BCT Commander. The combination of AMD and Avn personnel with their digital equipment provide the BCT with a greatly improved capability to perform A2C2 and maintain a near real-time air picture. Brigade aviation officer (BAO) a member of the BAE, is responsible for A2C2 integration of all the elements and ensures de-confliction to facilitate the flexible use of Army Airspace and further mitigate risk to prevent fratricide. All elements of the A2C2 team develop and

implement their portion of the plan for inclusion in the BCT's scheme of maneuver, working as a team to de-conflict and synchronize the plan for the best use of Army and Joint Airspace while retaining flexibility for the commander to maximize lethality. The ADAM/BAE is designed to work with a UEx or UEy A2C2 cell but is capable of independent operations when the BCT is employed independent of a UE. The ADAM/BAE is equipped to receive the Joint Air Picture and coordinate digitally directly with the Battlefield Coordination Detachment (BCD) within the Air Operations Center (AOC).

E-12. The ADAM/BAE implements and disseminates the ACOs for Brigade and below; the effects cell provides the same function for the ATO. The ADAM/BAE also develops and disseminates the Air Defense Plan, and provides the air picture and early warning functions. During the planning process the BAE is the principle Brigade staff element that plans the use of Army Aviation and UAVs and then submits air-space control means requests (ACMREQ) to the UEx A2C2 element for synchronization and de-confliction and further processing of air-space control means for inclusion in the ACO. When deployed as a separate task force, the brigade may receive tactical air control party (TACPs) and theater airlift liaison officers (TALO) to assist in mission planning for the use of Joint assets. For the ADAM/BAE, airspace management and deconfliction of UAVs present a significant challenge due to their small size, agility, and increasing density, as well as their limited ability to detect, see, and avoid other aircraft. UAVs pose an operational hazard to manned aircraft and like manned aircraft flights, UAV flights are coordinated to ensure deconfliction with other airspace users.

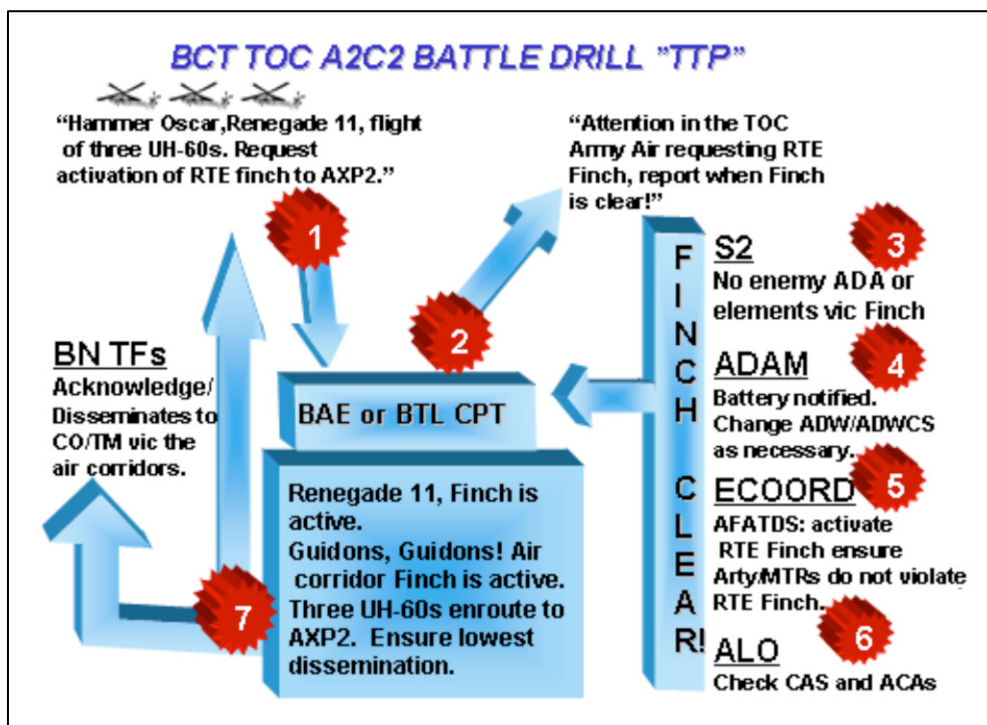


Figure E-3. Example TTP for A2C2

E-13. The Battalion and below have no formal A2C2 element, however the use of attack helicopters, unmanned aerial vehicles and beyond line of sight weapons systems makes it imperative that BN S3 AIRs, BN FSOs, AVN LNOs, augmented ADA, TACPs, and UAV Operators are aware of their impact on Army and Joint Airspace. The battalion S3 has overall responsibility for coordinating, deconflicting and managing all airspace within the battalion AO. With the proliferation of UAVs, the battalion S3 or his designated

representative, coordinates and deconflicts airspace for all battalion UAV missions. The primary link for airspace management for the battalion is the ADAM/BAE in the BCT. The battalion S3 or his representative submits airspace control means request to the BCT ADAM/BAE for processing and forwarding to the UEx A2C2 Cell. With the subordinate battalions' input, the BCT ADAM/BAE conducts close coordination with subordinate BNs and other airspace users in the BCT AOR during planning and execution of combat operations to ensure synchronization and de-confliction of airspace.

SECTION IV – ARMY AIRSPACE COMMAND AND CONTROL MEASURES (SEE FM 3-52)

E-14. Maneuver commanders at all levels exercise A2C2 within their assigned areas through the integration of positive and procedural control. Both methods of C2 are fully compatible and should be used in concert to effectively perform A2C2. Typically many positive and procedural control measures will be directed by higher command authority but some measures are available for subordinate commanders to employ for their own flexibility.

POSITIVE CONTROL MEASURES

E-15. Positive control measures are those which rely on real-time data and electronic means (ex. Radar, AWACS, IFF/SIF, and radios) to identify and communicate with airspace users. Although positive control means provide for the best overall control over airspace users, the tactical situation usually demands a mixture of both positive and procedural control means.

PROCEDURAL CONTROL MEASURES

E-16. Procedural control is a method of airspace control which relies on previously agreed upon and disseminated orders and procedures. Procedural control is accomplished through non-electronic means and may include comprehensive air defense identification procedures, rules of engagement, aircraft identification maneuvers, fire support coordinating measures, and airspace control measures.

HIGH DENSITY AIRSPACE CONTROL ZONE

E-17. A high density airspace control zone (HIDACZ) is a defined area of airspace requested by a maneuver force commander, normally UEx and above. The purpose of a HIDACZ is to reserve airspace and to control which users have access to the zone.

COORDINATING ALTITUDE

E-18. A coordinating altitude (CA) is a procedural method designed to separate fixed wing and rotary wing traffic.

RESTRICTED OPERATIONS ZONE/AREA

E-19. A restricted operations zone/restricted operations area (ROZ/ROA) is a defined volume of airspace developed for a specific operational mission or requirement. Some typical uses are to restrict air operations over Army Tactical Missile Systems (ATACMS) launch and target areas as well as unmanned aerial vehicle (UAV) launch and recovery areas.

MINIMUM RISK ROUTE / LOW LEVEL TRANSIT ROUTE

E-20. Minimum risk route (MRR) and low level transit route (LLTR) are virtually synonymous and commonly used interchangeably. MRRs/LLTRs are routes (usually recommended by a UEx or UEy commander) that represent the minimum hazard to friendly aircraft transiting through friendly ADs and controlled or restricted airspace.

STANDARD USE ARMY AIRCRAFT FLIGHT ROUTE

E-21. A standard use Army airspace flight route (SAAFR) is a route established below the coordinating altitude to facilitate the movement of army aviation assets. SAAFRs are normally located throughout UEy, UEx and Brigade Combat Team (BCT) rear areas and do not require joint approval if below the CA.

AIR CORRIDOR

E-22. An air corridor is a restricted air route of travel specified for use by friendly army aircraft and established to prevent friendly forces from firing on friendly aircraft.

AIRSPACE CONTROL ORDER, AIR TASKING ORDER, AND SPECIAL INSTRUCTIONS

E-23. The airspace control order (ACO) and ATO are the foundations of airspace operations in the joint environment. Airspace control must effectively allow combat operations without adding undue restrictions or adversely affecting the capabilities of any service or functional component.

AIR SPACE CONTROL KEY DOCUMENTS

E-24. There are several documents critical to planning for and executing airspace control. These documents are the airspace control plan, airspace control order, air tasking order, and air defense plan. A2C2 planners should know these documents.

AIRSPACE CONTROL PLAN

E-25. The ACP is developed by the ACA and approved by the JFC. It summarizes the JFC's guidance on airspace control, defines the joint force airspace control organization, and outlines the airspace control process. This plan may be published either as an annex to the basic OPLAN and OPORD or as a separate document. Because the ACP delineates the airspace control area, planners must address coordination procedures for all airspace users. See JP 3-52 for more details.

AIRSPACE CONTROL ORDER

E-26. The ACO is developed from the airspace control plan. It directs the use of joint airspace and details the approved requests for airspace control measures. The ACO is published on a cyclical basis, depending on the theater. Normally, the ACA publishes and distributes it daily. It may be part of the ATO or a stand-alone document. It may be a perpetual document with published ongoing updates. While the airspace control plan provides general guidance on airspace control, the order institutes airspace control procedures for specified periods. The ACO contains modifications to the ACP guidance and procedures, and it activates or deactivates procedural control measures. The ACO lists, but is not limited to, Airspace Control Measures (ACMs) and procedures used on or over the area of operations (see Chapter 4). It may include FSCMs and standing operating procedures.

E-27. Two important considerations when distributing the ACO are timing and dissemination means. The ACO and ATO cycles interrelate. Whatever publication and distribution means are used, it is critical to mission success that airspace users receive pertinent airspace information as early in the planning cycle as possible. FM 3-52.2 provides additional details on the ACO.

AIR TASKING ORDER

E-28. The ATO is a detailed order developed by the JFACC that describes and directs the overall air operation. This order provides the details for individual sorties to include targets,

mission timing, weapons loads, air refueling data, call signs, and special instructions (SPINS). The SPINS are free text formats included as part of the ATO. They contain essential information that highlights, modifies, or supplements data contained in other portions of the ATO. These instructions may also contain data that modifies, changes, or replaces information contained in OPODs. Such information includes airspace changes, IFF (Identification Friend or Foe) and SIF (Selective Identification Feature) assignments, control agencies, and frequencies. Developing and executing the ATO is a continuous dynamic process. JP 3-56.1 and FM 3-52.2 detail this process.

AIR DEFENSE PLAN

E-29. The area air defense commander (AADC)—with the support and coordination of the service and functional commanders—develops, integrates, and distributes the JFC-approved air defense plan. Because air defense and airspace control and management are inherently related areas, the air defense plan and the ACP should be developed together to avoid conflicts. The air defense plan includes:

- Sensor employment.
- Identification procedures.
- Engagement procedures.
- Defensive airspace control procedures (developed with the ACA).
- Weapon control procedures.
- Early warning dissemination.
- Additional information that may discuss
- Location and type of assets to be defended.
- Disposition and capabilities of enemy air and missile forces.
- Disposition and location of friendly air and missile defense forces.
- Geopolitical and other constraints that affect air defense operations.

E-30. In addition to the air defense plan, the AADC publishes a tactical operational data (TACOPDAT) message to establish air defense responsibilities or to provide supplementary air defense orders. This message may be used to report permanent changes to an OPOD or to update missile engagement zones, surveillance and defense sectors, and communication nets. The AADC also will publish an operational tasking data link message to establish relationships, configurations, coordination procedures, and other information necessary to conduct data link operations.

Appendix F

Digital Command and Control Rehearsal

BACKGROUND

An early lesson learned in the digitization of the Army is that the complex digital communications systems have to be checked for proper connectivity and functional integration throughout the entire digital architecture before the commander can digitally communicate with confidence. The digital command and control rehearsal (DC2R) was developed as a step-by-step check of the individual and collective functioning of the Army Battle Command Systems (ABCS) (the Force XXI Battle Command Brigade and Below (FBCB2) System through the Global Command and Control System (GCCS)) to validate the architecture, troubleshoot the system, and provide warmup training for the digital operators. When the DC2R is not conducted and the digital system placed under load points, system failure will frustrate both the users and commanders.

WHAT IS A DC2R?

F-1. A DC2R is a deliberate step-by-step establishment and load test of the digital communications architecture that validates the systems in the architecture and the ability to correctly pass digital messages. The technique described is only one way to approach the problem, and all units should tailor the DC2R technique to meet their requirements.

PHASE 1: VALIDATE THE ARCHITECTURE

F-2. The first step in the DC2R is to verify the digital systems architecture to ensure that there is a plan to communicate with the units in the task organization and higher headquarters. Since our internet protocol based unit addressing system does not allow for dynamic changes of units entering and leaving the task organization, the importance of validation of the digital architecture is the foundation for success. The architecture validation builds the rehearsal plan since the architecture drives the test load regarding the numbers and types of systems as well as the messaging interface required by the different ABCS (FBCB2 through GCCS). Part of the architecture validation is a system-by-system, platform-by-platform (vehicles) check to ensure that each individual system has all of the required component parts and they work. The digital architecture is a chain in that any missing link will cause the chain to fail. The diagram at Figure M-1 shows an example of the systems equipment checks that must be done to validate equipment in the architecture.

PHASE 2: CONNECTIVITY TESTING

F-3. Once the architecture has been validated, connectivity testing of the upper and lower tactical internet (TI) begins in each of the battlefield functional areas. The diagrams at Figures M-2, M-3, and M-4 show a standard TI test load of the messaging in each of the

ABCS. In the course of load testing, the quality of the messages must be affirmed. Any problems that are discovered must be recorded and resolved before the system is declared to be functioning properly. Every problem that is resolved must be retested to ensure that the fix meets the architecture standards.

PHASE 3: FIX PROBLEMS AND RECHECK

F-4. The final phase of the DC2R is to recheck each fix and then to retest the system as a whole to ensure connectivity and stability. A fix plan must be developed to ensure that problems are solved in a fashion that strengthens the digital chain. When conducting exercises based on simulations, an integration plan of the simulation and simulation feeds into the digital communications systems must also be built into the test and fix plans for the simulation-based exercise to work.

Veh #	Unit	CPU	KB	DU	Cables	Drop	PLGR	ASIP	INC	ANT	EPLRS
HQ 3											
HQ 4											
HQ 5											
HQ6											
HQ7											
HQ71											
HQ73											
HQ75											
HQ 8											
HQ 80											
HQ 81											
HQ 82											
HQ 83											
HQ 84											
HQ 85											
HQ 90											
HQ91											
HQ 92											
HQ 93											
HQ 94											
HQ 95											
JCF 23											
HQ 01											
JCF 21											
JCF 22											
A 11											
A 14											
A 21											
A 3											
A 31											
A 34		+	+	+	Plgr Cable		+	+		NU	+

EVERY COMPONENT PART OF THE SYSTEM ARCHITECTURE MUST BE PRESENT AND FUNCTIONAL FOR THE DC2R TO WORK.

Figure F-1. Example of Equipment Listing for DC2R Functions Check

Type of Task	Within	Within	Between	Both	Both	Both	Both	Within	Within	Within	
	#401 Connect to TOC Server	#402A Send Free Text Msg within TOC	#402B Send Free Text Msg to Another TOC	#403A Send Overlay	#403B Receive Overlay	#404A Send Order File via MCS-A	#404B Receive Order File via MCS-A	#405 Receive Red Picture from ASAS	#406 Live Feed from EBC	#407A Joint Units from GCCS-A	Comments
BDE TOC											
	MCS-A										
	MCS-L										
	CIC/LSD										
	ASAS										
	CSSCS										
	AMDWS										
	AFATDS										
	FBCB2										
Type of Task	Between	Between	Between	Within	Within	Within	Between	Between	Between	Between	
	#407B GCCS-A provided Joint Units from DACP	#410A Connect to Shared Directory within TOC	#410B Connect to Shared Directory in Another TOC	#411 Print Overlay to Plotter/Laser Printer	#412 Overlay from MCS-L to LSD	#413A Move/Copy Orders & Overlays to Shared Directory within TOC	#413B Move/Copy Overlays to Shared Directory in Another TOC	#414 Transfer and Overlays Via Net Meeting			
BDE TOC											
	MCS-A										
	MCS-L										
	CIC/LSD										
	ASAS										
	CSSCS										
	AMDWS										
	AFATDS										
	FBCB2										
Type of Task	Within	Within	Within	Within	Within	Within	Within	Between	Between	Between	
	#415 Configure Stale, Old and Purge Thresholds	#416 Connect MCS L to MCS-H Server	#417 Red Icons on MCS-L	#418 Blue Icons on MCS-L	#419 Post Overlay from MCS-L to MCS-H	#420 Pull Overlay from MCS-H to MCS-L	#421A Conduct Collaborative Whiteboard Session within TOC	#421B Conduct Collaborative Session Between TOCs	#422 Access Log Info from CSSCS via web client application	JVMF K05.17 sent to FBCB2	
BDE TOC											
	MCS-A										
	MCS-L										
	CIC/LSD										
	ASAS										
	CSSCS										
	AMDWS										
	AFATDS										
	FBCB2										

Must be adopted to system architecture being used in the BCT

Figure F-2. Example of ABCS Functions Check of Messages Between Systems

FBCB2 Phase II				
#	ACTION	FROM	TO	TIME
WINGMAN/SECTION ; PHASE II				
100a	SEND FREE TEXT MESSAGE, K01.01		ALL PLT FBCB2s	
100b	RECEIVE FREE TEXT MESSAGE, K01.01	ALL PLT FBCB2s		
101	SEND SPOT REPORT MESSAGE, K04.01		BN S2 ASAS	
102a	RECEIVE RED SA ICON, K05.19 (automatically posted to map)	SPAWNED SA FROM ALL CO FBCB2s		
103a	SEND POSITION REPORT, K05.01 (automatically sent)		N/A (ALL)	
103b	RECEIVE BLUE SA ICON, K05.01 (automatically posted to map)	SPAWNED SA FROM ALL CO FBCB2s		
PLATOON SGT/PLATOON LDR ; PHASE II				
100b	SEND FREE TEXT MESSAGE, K01.01		ALL PLT FBCB2s	
100a	RECEIVE FREE TEXT MESSAGE, K01.01	ALL PLT FBCB2s		
100c	SEND FREE TEXT MESSAGE, K01.01		1SG/XO/CO FBCB2	
100d	RECEIVE FREE TEXT MESSAGE, K01.01	1SG/XO/CO FBCB2		
101	SEND SPOT REPORT MESSAGE, K04.01		BN S2 ASAS BN S3 MCS	
102a	RECEIVE RED SA ICON, K05.19 (automatically posted to map)	SPAWNED SA FROM ALL CO FBCB2s		
103a	SEND POSITION REPORT, K05.01 (automatically sent)		ALL PLT FBCB2s	
103b	RECEIVE BLUE SA ICON, K05.19 (automatically posted to map)	SPAWNED SA FROM ALL CO FBCB2s		
1SG/XO (LOGISTICIAN) ; PHASE II				
100d	SEND FREE TEXT MESSAGE, K01.01		PL/PS FBCB2	
100c	RECEIVE FREE TEXT MESSAGE, K01.01	PL/PS FBCB2		
101	SEND SPOT REPORT MESSAGE, K04.01		BN S2 ASAS BN S3 MCS	
102a	RECEIVE RED SA ICON, K05.19 (automatically posted to map)	SPAWNED SA FROM ALL CO FBCB2s		
103a	SEND POSITION REPORT, K05.01 (automatically sent)		ALL CO FBCB2s	
103b	RECEIVE RED SA ICON, K05.19 (automatically posted to map)	SPAWNED SA FROM ALL CO FBCB2s		
1SG/XO (LOGISTICIAN) ; PHASE II				
100d	SEND FREE TEXT MESSAGE, K01.01		PL/PS FBCB2	
100c	RECEIVE FREE TEXT MESSAGE, K01.01	PL/PS FBCB2		
100e	SEND FREE TEXT MESSAGE, K01.01		BN S2 ASAS BN S3 MCS BN S1/S4 CSSCS BN FSE AFATDS	

**EXAMPLE OF
FBCB2 CHECKLIST**

Figure F-3. Example of ABCS Checks at the Battalion Level

#	ACTION	FROM	TO	TIME	BN	HHC	A	B	C
201	SEND/RECEIVE W007 EDC MSG	ASAS	ASAS						
202	SEND/RECEIVE C111 TACREP	ASAS	ASAS						
203	SEND S305 TIDAT	ASAS	AFATDS						
204	SEND/RECEIVE S 303 EOBSREP (SALUTE)	ASAS	ASAS						
205	SEND/RECEIVE F002 GENADMIN	ASAS	ABCS						
206	SEND/RECEIVE K1.01 FREETEXT	ASAS	ASAS/ABCS						
207	RECEIVE K4.01 SPOT/SALT	FBCB2	ASAS						
208	RECEIVE C241 MISSION FIRED REPORT, (MFR)	AFATDS	ASAS						
209	SEND RED SA TO JCDB/CTP	ASAS	ABCS						
210	CREATE HOME PAGE	ASAS	ASAS						
211	C203 GRAPHREP OVERLAY	ASAS	ASAS						
212	CONDUCT COLLABORATION/NET MEETING	ASAS	ABCS						
213	SEND K5.17 OVERLAY MESSAGE TO FBCB2	ASAS	FBCB2						
214	SEND K5.19 ENTITY DATA MSG	ASAS	FBCB2						
215	DELETE RED SA FM JCDB	ASAS	FBCB3						
216	S201 SUPPORT BATTLEFIELD GEOMETRY (SPRT.GEOM)	ASAS	ASAS/ABCS						
217	S507 RESOURCES REPORT	ASAS	MCS						
218	F014 RI (REQUEST FOR EDC)	ASAS	ASAS						
219	C281 ARTILLERY TARGET REPORT	AFATDS	ASAS						
220	D281 ARTILLERY TARGET INTEL - TARGET CRITERIA	AFATDS	ASAS						
221	F015 RESPONSE TO REQUEST FOR INFORMATION (EDC)	ASAS	ASAS						
222	MAP COLLABORATIVE OVERLAY	ASAS	ASAS						
223	224 E500 AIR EARLY WARNING	AMDWS	ASAS						
224	BLUE SA FROM EBC	MCS	ASAS						
225	SEND ASAS OVERLAY VIA OVERLAY UI	ASAS	ASAS						
226	S308 ARTILLERY TARGET INTEL - IEW TARGET COORDINATION MESSAGE	ASAS	ASAS/ABCS						
227	S309 ENEMY SITUATIONAL AWARENESS MESSAGE								
300	INITIALIZE, RECEIVE, COMMON TACTICAL Picture (CTP)								
301	SEND USMTF FREETEXT MESSAGE FROM AFATDS TO OTHER								
302	VERIFY RECEIPT OF BLUE SA FROM MCS								
303	VERIFY RECEIPT OF RED SA FROM ASAS								
304	RECEIVE FRAGO FROM MCS								
305	RECEIVE / SEND FS Para, ANNEX TEMPLATE FROM MCS								
306	RECEIVE / SEND MISSION (FIRE SUPPORT) OVERLAY								
307	CREATE FIRE SUPPORT GEOMETRY IN AFATDS, VERIFY POSTING								
308	UPDATE FIRE UNIT LOCATION IN AFATDS, VERIFY POSTING TO								
309	RECEIVE TIDAT FROM ASAS, PROCESS CFF								
312	SEND / RECEIVE FIRE SUPPORT PLAN								
313	SEND / RECEIVE FIRE PLAN								
401	Establish connectivity with TOC Server	Client	TOC Server						
402	Send USMTF Free Text Message from MCS-A to MCS-A/Other BFAs	MCS H	BFAs & 2d TOC MCS						
403	Send/Receive Overlay From MCS-H to MCS-H or other BFA	MCS H	BFAs & 2d TOC MCS						
404	Send Field Order(Word File) from MCS-H to another MCS-H or BFA	MCS H	BFAs & 2d TOC MCS						
405	Receive Red Correlated Picture from ASAS	ASAS	MCS H						
406	Establish Live feed on TOC Server from FBCB2	MCS H SERVER	FBCB2						
407	Receive Blue Location Data for Joint Units from GCCS-A via JCDB	GCCS-A	MCS H						
410	Connect to a Shared Directory within the TOC or in another TOC	MCS-L	MCS-L (Intra & Inter)						
411	Print Overlay to Plotter/Laser Jet	MCS-L	Plotter & Printers						
412	Display Overlay from MCS Light to LSD	MCS-L	LSD						
413	Copy Overlay and Orders to/from Shared Directory	MCS-L	MCS-L (Intra & Inter)						
414	Transfer Orders And Overlays Via Net Meeting FTP	MCS-L	MCS-L (Intra & Inter)						
415	Configure Stale, Old, and Purge Thresholds on MCS-Light	MCS-L	Configuration Settings						
416	Establish MCS Light connectivity to MCS-H Server	MCS-L	MCS H						
417	Receive Correlated Red From ASAS on MCS Light	MCS-L	MCS H						
418	Establish Blue Feed on MCS-Light	MCS-L	MCS H						
419	Post Overlay from MCS Light to MCS-H	MCS-L	MCS H						
420	Pull Overlay from MCS-H to MCS Light	MCS-L	MCS H						
421	Conduct Collaborative Whiteboard Session with other Workstations in Network	MCS-L	MCS-L						
422	Access Logistics Information from CSSCS via web client application	CSSCS	MCS-H						
423	Receive SIM/STIM Wraparound Blue Feed Via S507L								
600	VERIFY DATAFLOW WITH ALL CSSCS NODES	CSSCS	CSSCS						
601	SEND FREE TEXT MESSAGE	CSSCS	CSSCS/BFAs						
602	RECEIVE FREE TEXT MESSAGE	CSSCS/BFAs	CSSCS						
603	VERIFY RECEIPT OF BLUE SA FROM MCS	MCS	CSSCS						
604	VERIFY RECEIPT OF RED SA FROM ASAS	ASAS	CSSCS						
605	RECEIVE ORDERS FROM MCS	MCS	CSSCS						
606	SEND UPDATEP	CSSCS	CSSCS						
607	RECEIVE UPDATEP	CSSCS	CSSCS						
608	SEND A UNIT SUPPLY UPDATE MESSAGE (Ex. CS1-001)	CSSCS	CSSCS						
609	RECEIVE A UNIT SUPPLY UPDATE MESSAGE (Ex. CS1-001)	CSSCS	CSSCS						

Example of ABCS system checks at the Battalion level

Figure F-4. Example of ABCS Checks at the Battalion Level

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Glossary

SECTION I – ACRONYMS AND ABBREVIATIONS

A

A/EGM	attack/effects guidance matrix
A/L	administrative/logistical; administration and logistics
A/S3	assistant S3
A2C2	Army airspace command and control
AA	assembly area; avenue of approach
AAFES	Army and Air Force Exchange Service
AAIS	Army Automation Information System
AAR	after-action review
AATFair	assault/movement task force; air assault task force
AATFC	air assault task force commander
ABCS	Army Battle Command System
ABE	assistant brigade engineer
ABF	attack by fire
ABMOC	air battle management operations center
AC	active component
ACA	airspace coordination area
ACE	armored combat earthmover
ACIPS	Army Casualty Information Processing System
ACK	acknowledge
ACL	allowable cargo load
ACM	airspace coordination measure; aircraft control measure
ACP	air control point
ACT	analysis and control team
ACUS	Army Common User System
ADA	air defense artillery
ADACP	Alcohol and Drug Abuse Prevention Control
ADAM	area denial artillery munitions; area denial antipersonnel mine
ADAMS	Airborne Data Analysis and Monitoring System
ADAPC	alcohol and drug abuse prevention control

ADC	area damage control; analog-to-digital converter
ADCON	administrative control; advise all concerned
ADDS	Army Data Distribution System
ADO	air defense officer
ADP	Automated Data Processing
ADU	air defense unit
ADW	air defense warning
AECOORD	assistant effects coordinator
AFATDS	Advanced Field Artillery Tactical Data System
AFATDS-LCU	AFATDS-lightweight computer unit
AFCS	automatic fire control system
AFFS	Army Field Feeding System
AFSP	Army Food Service Program
AGCCS	Army Global Command and Control System
AGM	attack guidance matrix
AHB	assault helicopter battalion
AHD	antihandling device
AI	area of interest
AIMI	aviation intensively managed items
AIS	automation information system
AIT	automatic identification technology
ALO	air liaison officer
ALOC	administrative and logistics operations center; administrative/logistics operations center
AM	amplitude modulation
AMB	air mission brief
AMC	air mission commander; Aviation Maintenance Company; Army Materiel Command; Air Mobility Command
AMC-LSE	Army Materiel Command-Logistics Support Element
AMCM	air mission coordination meeting
AMD	air and missile defense
AMDO	air and missile defense officer
AMDWS	air and missile defense workstation
AMED	Army Medical Department
AMEDD	Army Medical Department
AMO	Automation Management Office

AMPS	Aviation Mission Planning System
AMSS	Army Materiel Status System
AMT	air movement table
ANCD	automated network control device
ANGLICO	air and naval gunfire liaison company
AO	area of operations
AOAP	Army Oil Analysis Program
AOE	Army of Excellence
AOI	area of interest
AOR	area of responsibility
APC	armored personnel carrier
APOD	aerial port of debarkation
APOE	aerial port of embarkation
AR	Army regulation; armor
ARB	attack reconnaissance battalion
ARC	attack reconnaissance company
ARFOR	Army forces
ARNG	Army National Guard
ARS	armed reconnaissance squadron
ARSOF	Army special operations forces
AS	autonomous system
ASAS	All-Source Analysis System
ASAS-L	All-Source Analysis System-Light
ASAS-RWS	All-Source Analysis System-Remote Workstation
ASCC	Army service component command
ASL	authorized stockage list
ASOC	air support operations center
ASP	ammunition supply point
ASR	air support request; alternate supply route
ASWBL	Armed Services Whole Blood Processing Laboratory
AT	antitank; antiterrorism
ATCC	air traffic control center; airborne transmitter control center
ATCCS	Army Tactical Command and Control System
ATGM	antitank guided missile
ATHP	ammunition transfer holding point

ATI artillery target intelligence
ATM advanced trauma management
ATO air tasking order
ATP ammunition transfer point (graphics)
ATS air traffic services
AUTL Army Universal Task List
AVIM aviation intermediate maintenance (graphics)
AVLB armored vehicle-launched bridge
AVN aviation
AWACS Airborne Warning and Control System
AXP ambulance exchange point

B

B bulk
BAE brigade aviation element
BAO brigade aviation officer
BAS battalion aid station
BBDPICM base-burn dual-purpose improved conventional munitions
BC battle command
BCOC base cluster operations center
BCOM battle command on the move
BCIS Battlefield Combat Identification System
BCOTM battle command on the move
BCS3 Battle Command Sustainment Support System
BCT brigade combat team
BD battlefield distribution
BDA battle damage assessment
BDAR battle damage assessment and repair
BDE brigade
BDO battledress overgarment
BER bit error rate; basic encoding rules; bit error ratio
BF battle fatigue
BFA battlefield functional area
BFC battalion fire cell
BFT binary file transfer; Blue Force Tracker
BFSB battlefield surveillance brigade

BFV	Bradley fighting vehicle
BFVS	Bradley Fighting Vehicle System
BHL	battle handover line
BHOL	battle handover line
BICC	battlefield information control center
BIDS	Biological Identification Detection System
BII	basic issue items
BIT	built-in test
BITE	built-in test equipment
BJA	baseline jamming assets
BLAST	blocked asynchronous transmission
BLOS	beyond line of site
BMIS-T	Battlefield Medical Information System-Telemedical
BMNT	beginning morning nautical twilight
BMSO	brigade medical support office
BN	battalion
BNN	battalion network node
BOLT	brigade operations legal team; brigade operational law team
BOS	battlefield operating systems [now called warfighting functions]
BP	battle position
BRS	brigade reconnaissance squadron
BRT	brigade reconnaissance team
BSA	brigade support area
BSB	brigade support battalion
BSFV	Bradley Stinger fighting vehicle
BSMC	brigade support medical company
BSOC	battalion support operations center
BSS	brigade surgical section; brigade surgeon section
BSTB	
BTB	brigade troops battalion
BUB	battle update briefing

C

CofS	chief of staff
C2	command and control
C3	command, control, and communications

C3I	command, control, communications, and intelligence
C4	command, control, communications, and computers
C4I	command, control, communications, computers, and intelligence
C4ISR	command, control, communications, computers, intelligence, surveillance, reconnaissance
C4OPS	command, control, communications, and computers operations
CA	civil affairs
CAB	combined arms battalion
CABSA	combined arms battalion support area
CACOM	(theater) civil affairs command
CAFAD	combined arms for air defense
CAISI	CSS Automated Information System Interface
CAISI/VSAT	CSS Automated Information System Interface very small aperture terminal
CANTCO	can't comply
CAR	combined arms rehearsal
CAS	close air support
CASEVAC	casualty evacuation
CASI/NES	CSS Automated Information Management Interface/Network Encryption System
CATK	counterattack
CBRN	chemical, biological, radiological, and nuclear
CBRNE-CM	chemical, biological, radiological, and nuclear, and high-yield explosive consequence management
CBRNWRS	Chemical, Biological, Radiological, and Nuclear Warning and Reporting System
CBT	combat trains (graphics)
CBU	cluster bomb unit
CCA	close combat attack
CCCP	chemical casualty collection point
CCI	controlled cryptographic items
CCIR	commander's critical information requirements
CCL	combat configured load
CCP	casualty collection point
CD	counterdrug
CDE	chemical defense equipment
CDR	commander

CE	communications-electronics
CEB	clothing exchange and bath
CERP	commander's emergency response program
CFF	call for fire
CFFZ	call for fire zone
CFL	coordinated fire line; coordination fire line
CFS	call for support
CFV	cavalry fighting vehicle
CFZ	critical friendly zone; critical fire zone
CGS	common ground station
cGy	centigray—refers to levels of radiation (1cGy = 1 Rad) 1 unit of absorbed radiation. (NATO & DoD)
CHE	container handling equipment
CHEMO	chemical officer
CHL	combat health logistics
CHS	combat health support
CHU	container handling unit
CI	counterintelligence
CIP	combat identification panel
CK	containerized kitchen
CL	closed loop; control language;computational linguistics; conversion loss; central line; chemical laser; chief of logistics; control level
CLS	combat lifesaver
CMO	civil-military operations
CMOC	civil-military operations center
CMT	common military training; career management training; critical military target
CNR	combat net radio
CNRI	combat net radio interface
Co	company (graphics)
COA	course of action
COCOM	combatant commander
COE	common operational environment
COLT	combat observation lazing team
COMMEL	communications/electronics
COMSEC	communications security

CONOPS	continuity of operations/contingency operations
CONUS	continental United States
COP	common operational picture
COSC	combat operations stress control
COTS	commercial off the shelf
CP	command post
CPHD	Copperhead
CPT	captain
CRO	combat replenishment operation
CROP	containerized roll-In/roll-out platform
CRP	common relevant picture
CS	combat support
CSM	command sergeant major
CSR	controlled supply rate
CSS	combat service support
CSSAMO	CSS automation management officer
CT	counterterrorism
CTA	common table of allowances
CTC	combat training center;
CTCP	combat trains command post
CTD	charge transfer device; concealed target detection
CTIL	commander's tracked items list
CTOC	corps tactical operations center
CULT	common use land transportation
CZ	sensor zone

D

D3A	decide, detect, deliver, and assess
DA PAM	Department of the Army Pamphlet
DA	battle damage assessment; Department of the Army
DAMMS-R	Department of the Army Movement Management
DART	disaster assistance response team (graphics)
DBSS	Defense Blood Standard System
DC	distribution company
DC2R	digital command and control rehearsal
DCO	deputy commander for operations; deputy commanding officer

DCPC	direct combat position code; direct combat probability code
DECOORD	decontamination coordinator
DED	detailed equipment decontamination
DEPORD	deployment order
DIMHRS	Defense Integrated Military Human Resources System
DISN	Defense Information Systems Network
DLIC	detachment left in contact
DMC	distribution management center
DMLSS-AM	Defense Medical Logistic Standard-Assemblage Management
DMOS	duty military occupational specialty
DNBI	disease and nonbattle injuries
DNVT	digital, nonsecure voice telephone
DoD	Department of Defense
DOD	Department of Defense
DODAAC	Department of Defense Activity Address Code
DODAC	Department of Defense Ammunition Code
DODIC	Department of Defense Identification Code
DP	decision point
DPD	deployed personnel database
DPICM	dual-purpose improved conventional munitions
DPL	distribution platoon leader
DS	direct support
DSO	domestic support operation
DST	decision support template
DSVT	digital secure voice telephone
DTD	detailed troop decontamination
DTG	date time group
DTS	data transmission system; data transfer system
DTSS	Digital Terrain Support System
DVE	driver vision enhancer
DVNT	digital voice nonsecure telephone
DZ	drop zone
E	
E	extremely high (risk)
EA	engagement area; electronic attack

EAB	echelons above brigade
EBA	engineer battlefield assessment
EBC	embedded battle command
EBO	effects-based operations
ECCM	electronic counter-counter measures
ECO	environmental compliance officer/emergency control officer
EOCA	enemy course of action
ECOORD	effects coordinator
EEFI	essential elements of friendly information
EEI	essential elements of information
EENT	ending evening nautical twilight
EFAT	essential field artillery task
EFET	essential fire effects task; essential fire and effects task
EFST	essential fire support task
eMILPO	electronic military personnel operations; electronic military personnel office
EMST	essential mobility/survivability task
EMT	emergency medical treatment
ENY	enemy (graphic)
EO	electro-optical
EOD	explosive ordnance disposal
EOH	equipment on hand
EPLRS	Enhanced Position Location Reporting System
EPLRS/TI	Enhanced Position Location Reporting System
EPW	enemy prisoner of war
ERF	environment relative factors
ESSS	external stores support system
ETA	estimated time of arrival
ETAC	enlisted terminal air controller; enlisted tactical air controller
ETACCS	enlisted tactical air command and control specialist
ETM	Electronic Tech Manual
ETM-I	electronic technical manual-interface
ETOT	extended time over target
EVNT	ending evening nautical twilight
EW	electronic warfare

F

1SG	first sergeant
F&E	fires and effects
FA	field artillery
FAADC2	Forward Area Air Defense Command and Control [Systems]
FAADC3I	Forward Area Air Defense Command, Control, Communications, and Intelligence
FAASV	field artillery ammunition supply vehicle
FAC	forward air controller
FAC(A)	forward air controller (airborne)
FARE	forward area refueling equipment
FARP	forward arming and refueling point
FASCAM	family of scatterable mines
FASMS	Forecast/Allocation Submission Management System
FASP	field artillery support plan
FBCB2	Force XXI Battle Command Brigade and Below [System]
FBCB2/BFT	Force XXI Battle Command Brigade and Below System/Blue Force Tracker
FBI	Federal Bureau of Investigation
FBSA	fires battalion support area
FCR	fire control radar
FCS	fire control system
FD	functional description
FDC	fire direction center
FDMA	frequency division multiple access
FDO	fire direction officer
FDRP	first destination reporting point
FEBA	forward edge of the battle area
FEC	fires and effects cell
FEC	fires and effects coordination element
FECE	fires and effects coordination element
FED	forward entry device
FEEM	fires and effects execution matrix
FEMA	Federal Emergency Management Agency
FESP	fires and effects support plan
FFAR	folding-fin aerial rocket
FFE	fire for effect

FFIR	friendly forces information requirements
FHA	foreign humanitarian assistance
FHP	force health protection
FHPO	force health protection officer
FID	foreign internal defense
FIST	fire support team
FLD	field (graphics)
FLE	forward logistics element
FLIR	forward-looking infrared
FLO	fighter liaison officer
FLOT	forward line of own troops
FM	field manual; frequency modulated
FMC	fully mission capable
FMI	field manual-interim
FMT	field maintenance team
FMTV	family of medium tactical vehicles
FO	forward observer
FOB	forward operations base
FOS	forward observer system
FP	force protection
FPF	final protective fires
FPL	final protective line
FPOL	forward passage of lines
FRAGO	fragmentary order
FRCP	flatrack collection point
FRG	family readiness group
FRIES	fast rope insertion/extraction system
FRS	forward repair system
FS	fire support
FSB	forward support battalion
FSC	forward support company
FSCL	fire support coordination line
FSCM	fire support coordination measure; forward support medical company
FSCOORD	fire support coordinator
FSE	fire support element

FSEM	fire support execution matrix
FSMC	forward support medical company
FSMT	forward support medical evaluation team; forward support medical evacuation team
FSO	fire support officer
FSSP	fuel system supply point
FST	forward surgical team
FSV	fire support vehicle
FTL	far target locator
FU	firing unit
FWF	former warring factions
FXXI	Force XXI

G

G/VLLD	ground/vehicle vehicular laser locator designator
GBS	ground-based sensor
GCCS-A	Global Command and Control System-Army
GCSS-A	Global Combat Support System-Army
GEMSS	Ground-Emplaced Mine Scattering System
GIG	global information grid
GMF	ground mobile forces
GOTS	government off the shelf
GPS	Global Positioning System
GRP	group
GRS	graves registration service; generalized retrieval system; general records schedules
GS	general support
GSAB	general support aviation battalion
GSAC	general support aviation company
GSE	ground support equipment
GSR	ground surveillance radar
GT	gun-target
GTN	Global Transportation Network; Global Traffic Network
GTP	ground tactical plan
GWOT	global war on terrorism

H

H	high (risk)
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HA	hasty attack; holding area
HAVECO	have complied
HAZMAT	hazardous materials
HBCT	heavy brigade combat team
HCA	humanitarian and civic assistance
HCLOS	high capacity line of sight
HCP	health care package
HE	high explosive
HEAT	high explosive, antitank
HEMTT	heavy expanded mobility tactical truck
HEP	high explosive, plastic
HERCULES	heavy equipment recovery combat utility lift and evacuation
HET	heavy equipment transport
HF	high frequency
HHB	headquarters and headquarters battery
HHC	headquarters and headquarters company
HHT	headquarters and headquarters troop
HIMAD	high- to medium-altitude air defense
HIMARS	High-Mobility Artillery Rocket System
HM	hazardous materials
HMMWV	high-mobility, multipurpose wheeled vehicle
HNS	host nation support
HPT	high-payoff target
HPTL	high-payoff target list
HQ	headquarters
HR	human resources
HRS	heavy reconnaissance squadron
HSSO	health services support operations
HTU	handheld terminal unit
HUMINT	human intelligence
HVT	high-value target
HvyHC	heavy helicopter company
HW	half wave; hardware; hazardous waste

I

IA	information assurance
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IAW	in accordance with
IBCT	infantry brigade combat team
IBS	integrated broadcast service
ICM	improved conventional munitions
ICW	in coordination with
ID	identification
IDMM	isolate, dominate, maintain, multidimensional-multiecheloned
IED	improvised explosive device
IETM	interactive electronic technical manual
IEW	intelligence and electronic warfare
IFF	identification, friend or foe
IFOR	Implementation Force
IFSAS	Interim Fire Support Automation System
IFTE	Integrated Family of Test Equipment
IFV	infantry fighting vehicle
IHFR	improved high-frequency radio
IM	information management
IMETS	Integrated Meteorological System
IMINT	imagery intelligence
INC	interface network controller
INFOSYS	information systems
INMARSAT	international maritime satellite
INS	inertial navigation system
INTSUM	intelligence summary
IO	information operations
IOCOORD	information operations coordinator
ION	input/output node
IP	internet protocol; initial position
IPB	intelligence preparation of the battlefield
IPS	intelligence production support
IR	information requirements; infrared; intelligence requirements
IREMBASS	Improved Remotely Monitored Battlefield Sensor System
ISB	Intelligence Systems Board; intermediate staging base
ISG	information systems group
ISM	intelligence synchronization matrix

ISR	intelligence, surveillance, and reconnaissance
ISSO	information services support officer
ISYSCOM	integrated system control
ISYSCON(V)4	Integrated System Control (Version) 4
IT	information technology
ITAPDB	Integrated Total Army Personnel Database
ITO	invitational travel orders
ITV	intransit visibility
IV	intervisibility; intermediate voltage; inventory variance
IVIS	Intervehicular Information System

J

JAAT	joint air attack team
JAG	judge advocate general
JCDB	joint common database
JCMOTF	joint civil-military operations task force
JCS	Joint Chiefs of Staff
JFACC	joint force air component commander
JFC	joint forces commander
JFLCC	joint force land component commander
JI	joint inspection
JIM	joint, interagency, multinational
JMC	joint military commission
JMeWS	joint medical workstation
JNN	joint network node
JOA	joint operational area
JPOTF	joint psychological operations task force
JRSOI	joint reception, staging, and onward integration
JSEAD	joint suppression of enemy air defense
JSTARS	Joint Surveillance Target Attack Radar System
JTACP	joint tactical air control party
JTF	joint task force
JTIDS	Joint Tactical Information Distribution System
JTOC	joint tactical operations command; joint target oversight council
JTTP	joint tactics, techniques, and procedures

K

KCLFF kitchen combat level field feeding

KIA killed in action

L

L low (risk)

LADW local air defense warning

LAN local area network

LAR logistical assistance representative

LC line of contact

LCC land component commander

LDB local database

LD line of departure

LD/LC line of departure/line of contact

LEIOV latest event information of value

LEN large extension node

LERSM Lower Echelon Reporting and Surveillance Module

LHS load handling system

LIN line item number

L-IPB logistics-intelligence preparation of the battlefield

LLDR lightweight laser designator rangefinder

LMCS Land Missile Combat System

LMTV light/medium tactical vehicles

LNO liaison officer

LOA limits of advance

LOC lines of communication

LOD level of detail; line of demarcation; line of departure

LOG logistics

LOGCAP Logistics Civil Augmentation Program

LOGPAC logistics package

LOGPAD logistics helipad

LOGSA Logistics Situation Awareness/Logistics Support Agency

LOGSITREP logistics situation report

LOGSTAT logistics status

LOR limits of reconnaissance

LOS line of sight

LP listening post

LPB	logistics preparation of the battlefield
LPP	logistics release point
LRAS3	Long-Range Advanced Scout Surveillance System
LRF	laser rangefinder
LRF/D	laser range finder/designator
LRP	logistics release point
LRRS	long-range radar station
LRS	long-range surveillance
LRSD	long-range surveillance detachment
LRU	line replacement unit
LSDIS	light and special divisions interim sensor
LTACFIRE	Lightweight Tactical Automation System
LTF	logistics task force
LTIOV	last/latest time information is of value
LTO	logistics task order
LZ	landing zone

M

M	moderate (risk)
M3	maintenance and materiel management
MA	mortuary affairs
MAC	mine action center
MACOM	major command
MACP	mortuary affairs collection point
MANPADS	man-portable air defense system
MARC	manpower Army requirements criteria
MASINT	measurement and signature intelligence
MB	maneuver battalion
MBA	main battle area
MBCOTM	mounted battle command on the move
MBSA	maneuver battalion support area command post
MC	movement control; medical company
MC4	medical communications for combat casualty care
MCG	mobile command group
MCL	mission configured load
MCM	multicapable maintainer

MCO	major combat operations; movement control office; movement control officer
MCOO	modified combined obstacle overlay
MCS	Maneuver Control System; maintenance control section
MCS-L	Maneuver Control System-Light
MCSR	Mission Condition Status Report
MCT	movement control team
MDMP	military decision-making process
ME	maneuver enhancement (brigade)
MEDEVAC	medical evacuation
MEDLOG	medical logistics
MEDSUP	medical supply
MES	medical equipment set
METL	mission-essential task list
METSAT	meteorological satellite
METT-TC	mission, enemy, terrain and weather, troops and support available, time available, and civil considerations
MFR	memorandum for record
MGB	medium-girder bridge
MGRS	military grid reference system
MGS	mobile gun system
MH	mental health
MHE	materials handling equipment
MI Co	military intelligence company
MI	military intelligence
MIA	missing in action
MIC/HIC	mid-intensity/high-intensity conflict
MICLIC	mine clearing line charge
MICO	military intelligence company
MILVAN	military van
MKT	mobile kitchen trailer
MLO	military liaison officer; medical logistics officer
MLRS	multiple-launched rocket system
MMMB	medical material management branch
MMS	mast-mounted sight
MMSO	maneuver and mobility support operations

MOE	measure of effectiveness
MOEI	measure of effectiveness indicator
MOOTW	military operations other than war
MOP	measure of performance
MOPMS	modular pack mine system
MOPP	mission-oriented protective posture
MOS	military occupational specialty
MOU	memorandum of understanding
MP	military police
MRE	meals, ready to eat
MRO	materiel release order
MSD	minimum safe distance
MSE	mobile subscriber equipment
MSO	mission staging operations
MSR	main supply route
MSRT	mobile subscriber radio telephone
MST	maintenance support team
MSU	major subordinate unit; medical supply unit
MTF	medical treatment facility
MTOE	modified table of organization and equipment
MTS	Movement Tracking System
MTV	medium tactical vehicles
MTW	major theater of war
MWR	morale, welfare, and recreation
N	
NAI	named area of interest
NATO	North Atlantic Treaty Organization
NAVAID	navigation aid
NBC	nuclear, biological, and chemical
NBCI	National Broadcasting Company Internet/Interactive
NBCRS	nuclear, biological, chemical, and radiological simulation; Nuclear, Biological, Chemical Reconnaissance System
NBCWRS	Nuclear, Biological, Chemical Warning and Reporting System
NC	node center

NCA	National Command Authority (Use Secretary of Defense or President, DOD, or Secretary of Defense, As per JCS letter dated 1 Jan 02).
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
NCS	net control station
NEO	noncombatant evacuation operation
NETCOM	network command
NETOPS	network operations
NFA	no-fire area
NG	National Guard
NGF	naval gunfire
NGFS	naval surface fire support
NGIA	National Geospatial Imagery Agency
NGLO	naval gunfire liaison officer
NGO	nongovernmental organization
NIMA	National Imagery Mapping Agency
NIPRNET	nonsecure internet protocol router network
NLOS	night line of sight
NLT	no later than
NMC	nonmission capable
NODLR	night observation device, long range
NOE	nap-of-the-earth
NORMA	nature of the target, obstacle clearance, range to target, multiple firing positions, adequate area for proper dispersion between aircraft
NP	neuropsychiatry services
NRT	near real time
NRTS	not repairable this station
NSC	net control station
NSFS	naval surface fire support
NSL	nonstockage list
NSN	national stock number
NTDR	near-term digital radio
NVG	night-vision goggles

O

O&I operations and intelligence

O/I	operations and intelligence
OAKOC	observation and fields of fire, avenues of approach, key terrain, obstacles and movement, and cover and concealment
OB	order of battle
OBJ	objective (graphics)
OBSTINTEL	obstacle intelligence
OCIE	organizational clothing and individual equipment
OCOKA	observation and fields of fire, cover and concealment, obstacles, key terrain, and avenues of approach
OCPA	Office of the Chief of Public Affairs
ODS	Operation Desert Shield
OE	operational environment
OEG	operational exposure guidance
OI	operations and intelligence
OIC	officer in charge
OIF	Operation Iraqi Freedom
ONA	operational net assessment
OP	observation post
OPCON	operational control
OPLAN	operation plan
OPLAW-JA	operations law-judge advocate
OPLOG	operational logistics
OPLOG-PLANNE	operations logistics planner
OPORD	operation order
OPSEC	operations security
OPTEMPO	operations tempo
ORGWON	organization work order number
ORL	ordnance release line
OST	order ship time
P	
P&A	Personnel and Administration
PA	physician's assistant; position area
PAC	personnel and administration center
PAG	public affairs guidance
PAI	personnel asset inventory
PAM	pamphlet

PAO	public affairs officer; public affairs office
PARC	principal assistant responsible for contracting
PARRTS	Patient Accounting and Reports Real-Time Tracking System
PASBA	Patient Administration System and Biostatistics Activity
PASR	personnel accounting strength report
PBO	property book officer
PCC	pre-combat check; primary control center
PCI	precombat inspection
PDD	presidential decision directive
PDF	protective defensive fires
PE	[used in Bero's chapter 8]
PEL	priority effects list
PEO	peace enforcement operations
PERSITREP	personnel situation report
PGM	precision-guided munition
PIR	priority intelligence requirements
PKO	peacekeeping operations
PL	phase line, platoon leader
PLGR	precision lightweight GPS receiver
PLL	prescribed load list
PLS	pallet logistics system; palletized load system
PLS-E	Palletized Load System-Enhanced
PM	provost marshal/program manager
PMCS	preventive maintenance checks and services
PME	peacetime military engagement
PMM	preventative medicine measures
PO	peace operations
POC	point of contact
POD	port of debarkation
POE	port of embarkation
POL	petroleum, oils, and lubricants
POM	preparation for overseas movement
POSNAV	position navigation
POV	personally owned vehicle
PP	passage point

PR	personnel recovery
PROPHET	programmed reviewing, ordering, and forecasting inventory technique
PS	physical security;
PSD	personnel security detachment
PSG	platoon sergeant
PSNCO	personnel staff noncommissioned officer
PSS	personnel service support
PSYACTS	psychological operations actions
PSYOP	psychological operations
PVNTMED	preventive medicine
PVO	private volunteer organization
PW	prisoner of war [do we want to use PW or POW? PW is the official usage, but POW is more familiar.]
PZ	pickup zone
PZCO	pickup zone control officer

Q

Q&A	questions and answers
QC	quality control
QM	quartermaster
QRF	quick reactionary force
QSC	quantity per shipping container

R

R	reinforce
R&S	reconnaissance and surveillance
R/GSR	reinforcing/general support reinforcing
RA	routing area
RAAM	remote antiarmor mine
RAAMS	Remote Antiarmor Mine System
RAP	rocket-assisted projectile
RATELO	radio-telephone operator
RAU	radio access unit
RC	reserve component
RCC	regional combatant commander
RDD	required delivery date
RDO	radar deployment order

RECCE	reconnaissance
RECON	reconnaissance
RED	risk estimate distance
REDCON	readiness condition
RF	radio frequency
RFA	restrictive fire area
RFI	request for intelligence; request for information
RFID	radio frequency identification tag
RFL	restricted fire line
RHO	reconnaissance handover
RHOL	reconnaissance handover line
RI	relevant information
RM	requirements management
ROE	rules of engagement
ROI	rules of interaction
ROM	refuel on the move
RP	release point
RPB	regional PSYOP battalion
RPG	rocket-propelled grenade
RPOL	rearward passage of line
RPV	remotely piloted vehicle
RS	radio set; religious support
RSCAAL	remote sensing chemical agent alarm
RSO	reconnaissance staff officer; regional security officer
RSOI	reception, staging, onward movement, and integration
RSP	regional supply point
RTQ	response to query
RSR	required supply rate
RSSA	reconnaissance squadron support area
RSSP	ration supplement/sundries pack
RSTA	reconnaissance, surveillance, and target acquisition
RTD	return to duty
RTS	remote tracking station;
RUF	rules on the use of force
RVT	remote video terminal

S

RWS	remote workstation
RX	reparable exchange
S1	adjutant/personnel officer
S2	intelligence officer
S3	operations and training officer
S4	logistics officer
S5	civil affairs officer
S6	communications staff officer
SA	security assistance
SAAS-MOD	Standard Army Ammunition System-Modernized
SADARM	search and destroy armor
SALT	size, activity, location, and time
SALUTE	size, activity, location, unit, time, and equipment
SAMS	Standard Army Maintenance System
SARSS	Standard Army Retail Supply System
SARSS-O	Standard Army Retail Supply System-Objective
SATCOM	satellite communications
SBCT	Stryker brigade combat team
SBF	support by fire; suppress by fire
SC4	systems for command, control, communications, and computers
SCATMINE	scatterable mine
SCATMINEWARN	scatterable minefield warning
SCL	standard conventional load
SCT	scout (graphics)
SD	self-destruct
SEAD	suppression of enemy air defense
SECSGT	section sergeant
SEE	small emplacement excavator
SEN	small extension node
SFC	sergeant first class
SFOR	sustainment force
SGM	sergeant major
SGT	sergeant
SHORAD	short-range air defense

SIDPERS	Standard Installation Personnel System
SIGCOM	(theater) signal command
SIGINT	signals intelligence
SINCGARS	Single-Channel Ground and Airborne Radio System
SIP	system improvement plan
SIR	specific information requirements
SITREP	situation report
SITTEMP	situation template
SIV	systems integration vehicle
SJA	staff judge advocate
SMART-T	secure, mobile, antijam reliable, tactical terminal
SME	subject matter expert
SMFT	semitrailer mounted fabric tank
SMU	special-mission unit
SOEO	scheme of engineer operations
SOF	special operations forces
SOI	signal operating instructions
SOO	space operations officer; special operations officer; supply operations officer; support operations officer
SOP	standing operating procedures
SOR	specific orders and requests
SOS	source of supply; special operations squad; strategic operating system
SOSRA	suppress, obscure, secure, reduce, and assault
SP	start point
SPBS-R	Standard Property Book System-Revision
SPIES	special patrol insertion/extraction system
SPINS	special instructions
SPLL	self-propelled loader-launcher
SPO	support operations officer
SPOD	seaport of debarkation
SPOE	seaport of embarkation
SPORT	soldier portable-system repair tool
SPOTREP	spot report
SPT OPS	support operations
SRC	Standard Requirement Code

SRO	system readiness objective; standing route order; singly resonant oscillator
SRP	Soldier readiness preparations
SSC	small-scale contingency
STAMIS	Standard Army Management Information System
STANAG	Standardization NATO Agreement
STANG	Standardization Agreement (NATO)
STE ICE	simplified test equipment/internal combustion
STE	secure telephone equipment; simplified test equipment
STON	short ton
STRIKEWARN	strike warning
STU	secure telephone unit
SU	situational understanding
SUA	support unit of action
SUAV	small-unit unmanned aerial vehicle
SVML	standard vehicle-mounted launcher
SWEAT-MS	sewage, wear, energy, academics, trash, medical, and security
SR	system-revised

T

T/ESM	target/effects synchronization matrix
TA	target acquisition
TAA	tactical assembly area
TAC	terminal attack controller
TACAIR	tactical air
TACON	tactical control
TACP	tactical air control party
TACSAT	tactical satellite
TAI	target area of interest
TAIS	Target Airspace Integration System
TALO	theater airlift liaison officer
TAML	theater army medical laboratory
TAMMIS	The Army Medical Management Information System
TAMMS	The Army Maintenance Management System
TARSOC	theater army special operations command
TAV	total asset visibility
TB	technical bulletin

TC-AIMS II	Transportation Coordinator's Automated Information for Movement System II
TC-AIMS	Transportation Coordinator's Automated Information for Movement System
TCAM	TAMMIS customer assistance module
TCAM	threat condition alerting message
TCF	tactical combat force; tactical command force
TCMD	transportation control and movements document
TCN	transportation control number
TCO	troop commanding officer
TCP	traffic control point
TCRIT	target criteria
TDA	table of distribution and allowances
TDD	time definite delivery
TDIS	time and distance
TDMA	time distance multiple access
TECHCON	technical control
TEP	theater engagement plan
TEWT	tactical exercise without troops
TF	task force
TI	tactical internet
TIB	theater intelligence brigade
TIM	toxic industrial materials
TIO	tactical intelligence officer
TIRS	Terrain Index Reference System
TIS	thermal imaging sensor
TLE	target location error
TLP	troop-leading procedures
TM	team (graphics)
TMDE	test, measurement, and diagnostic equipment
TMIP	Theater Medical Information Program
TMM	target management matrix
TMR	transportation movement release; technical modification request
TNC	theater network command
TO	task order
TOA	transfer of authority

TOC	tactical operations center
TOE	table of organization and equipment
TOW	tube-launched, optically tracked, wire-guided
TPFDDL	time-phased force and deployment data list
TPL	time phase line
TPN	tactical packet network
TPS	Tactical Personnel System
TPT	tactical PSYOP team
TRADOC	US Army Training and Doctrine Command
TRI-TAC	tri-service tactical communications
TRMT	treatment
TRP	target reference point
TSC	theater sustainment command
TSM	TRADOC systems manager; TRADOC systems management
TSOP	tactical standing operating procedures
TSS	target selection system; target selection standard
TTP	tactics, techniques, and procedures
TUAV	tactical unmanned aerial vehicle
TVS	television sensor
TWV	tactical wheeled vehicle

U

UA	unit of action
UAV	unmanned aerial vehicle
UBL	unit base load
UCMJ	Uniform Code of Military Justice
UE_x	unit of employment x
UE_y	unit of employment y
UGR-E	unitized ground rations-express
UGR-H&S	unitized ground rations-heat and serve
UGR	unitized ground rations
UGR-A	unitized group ration-A
UGR-B	unitized group ration-B
UH	utility helicopter
UHB	ultrahigh brightness
UHF	ultrahigh frequency

UHN	unit hub node
UJTL	universal joint task list
ULLS	Unit-Level Logistics System
ULLS-(A/G/S4)	Unit-Level Logistics System- (Air/Ground/Logistics)
ULLS-G	Unit-Level Logistics System-Ground
UMCP	unit maintenance collection point; unit maintenance control point
UMO	unit movements officer
UMT	unit ministry team/unit maintenance technician
UN	United Nations
UO	urban operations
US	United States
USAF	United States Air Force
USAR	United States Army Reserve
USMC	United States Marine Corps
UTO	unit task organization
UXO	unexploded ordnance

V

VBIED	vehicle borne improvised explosive device
VHF	very high frequency
VHSIC	very high-speed integrated circuits
VMF	variable message format
VOIP	voice over internet protocol
VSAT	very small aperture terminal
VT	variable time

W

WAN	wide area network
WARNO	warning order
WCS	weapons control status
WIA	wounded in action
WILCO	will comply
WIN	Warfighter Information Network
WMD	weapons of mass destruction
WO	warning order
WP	white phosphorus
WSM	weapon system manager

	WSRO	weapon system replacement operations
X, Y, Z		
	XO	executive officer
	ZOR	zone of responsibility
retrans		retransmission
met		meteorological
mm		millimeter
km		kilometer
kmph		kilometer per hour

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