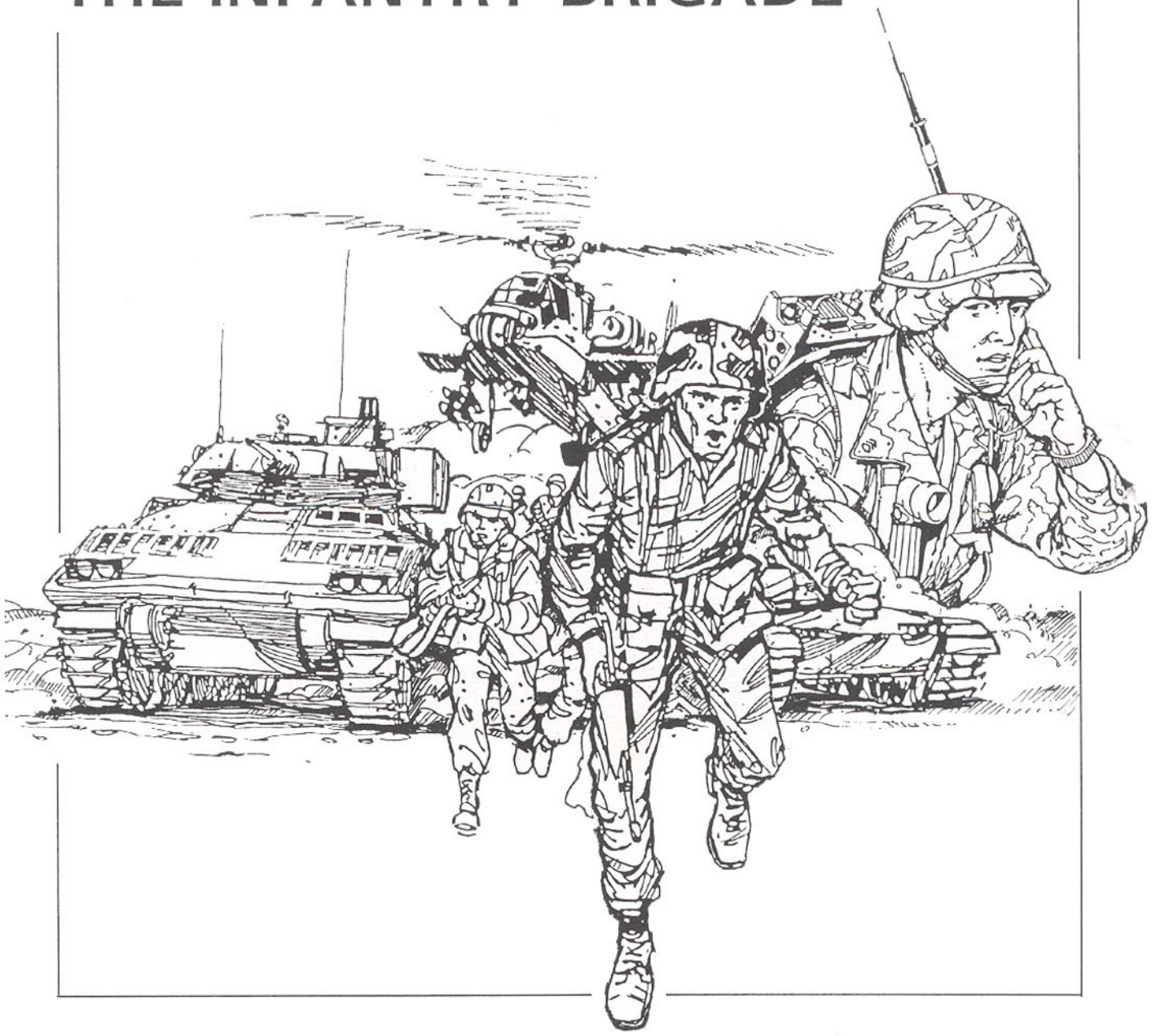
HEADQUARTERS
DEPARTMENT OF THE ARMY

FM 7-30

THE INFANTRY BRIGADE



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HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 31 October 2000

THE INFANTRY BRIGADE

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FIELD MANUAL
No. 7-30

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 3 October 1995

THE INFANTRY BRIGADE

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PREFACE

This manual describes how the dismounted infantry brigade fights Army operations. It is designed to assist the brigade commander and his staff in planning, preparing, and executing combat operations within the range of military operations. While consideration is given the full spectrum of operations within that range, the primary focus of this manual is infantry warfighting and conventional combat operations. It also serves as a guide regarding the organization, capabilities, and employment of the brigade. This manual provides the link in our warfighting doctrine between the division and the battalion. In this manual, infantry includes all types of dismounted infantry brigades—infantry, light, airborne, air assault, and ranger. For the purposes of this manual, the enhanced infantry brigades of the Army National Guard are considered separate infantry brigades. The organizational charts provided are for general planning purposes only. Readers should refer to the most recent TOE for information which may have changed after this manual was printed.

Users of this manual must apply its tactical concepts within the capabilities of their brigades. Also, they must develop SOPs that address specific techniques and procedures.

This manual is aligned with the Army's operations doctrine and is not intended to be a stand-alone document. A thorough understanding of FMs 7-8, 7-10, 7-20, 7-98, 71-100, 100-5, 101-5, and 101-5-1 is essential for effective use of this manual. The specifics of how to train the brigade are found in the ARTEP series of mission training plans, FM 25-100, and FM 25-101.

The provisions of this publication are the subject of the following international agreements:

STANAG 2067 Control and Return of Stragglers

STANAG 3146 Planning Procedures for Tactical Air Transport Operations

The proponent for this publication is the United States Army Infantry School. Send comments and recommendations on DA Form 2028 directly to Commandant, US Army Infantry School, ATTN: ATSH-ATD, Fort Benning, Georgia 31905-5410.

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

INTRODUCTION

The world geopolitical environment will continue to directly affect US military strategy. In support of our US military strategy, the Army projects forces (the military instrument of power projection) to deter aggression worldwide. Should deterrence fail, Army forces are prepared to defeat the enemy across the full range of operations. In the future, force projection operations will be the norm as forward deployed divisions are returned to the continental US.

The Army classifies its activities as war and operations other than war (those activities that occur during peace and or conflict). US Army operations are varied and range from aid and assistance to foreign government to full combat operations against a well-armed hostile force. Army brigades must continue to deter aggression worldwide and should deterrence fail, be prepared to defeat any enemy across a wide range of threats. This challenge ranges from conflict with an emergent superpower or a hostile regional power; or against a less sophisticated, but no less determined, insurgent force. This range of threats and missions indicates future US operations will be decidedly joint in nature.

US Army brigade operations are based on the Army tenets of initiative, agility, depth, synchronization, and versatility.

Initiative sets or changes the terms of battle by action. It is the effort to force the enemy to conform to our operational tempo and purpose, while retaining our freedom of action. This requires commanders to understand the intent of their commanders two levels above-centralized planning but decentralized execution.

Agility is the ability to act faster than the enemy—a prerequisite for seizing and holding the initiative. Quickness permits the rapid concentration of combat power against the enemy's vulnerabilities. It requires the commander to constantly read the battlefield, anticipate, make quick decisions, and act without hesitation. This may require committing forces quickly without complete information when situations are time-sensitive. Agility requires both mental and physical flexibility—seeing and reacting rapidly to changing situations.

Depth is the extension of operations in time, space, resources, and purpose. The commander uses these factors in thinking in depth to forecast, anticipate likely events, and expand his freedom of action. He then applies them to arrange all available resources to attack the enemy simultaneously and sequentially throughout the depth of the battlefield.

Synchronization is the focus of resources and activities in time and space to mass at the decisive point. Although the activities such as intelligence, logistics, and fires and maneuver may occur at different times and places, they are synchronized when their combined consequences are felt at the decisive time and place. The project of effective synchronization is the maximum use of every resource where it will make the greatest contribution to success.

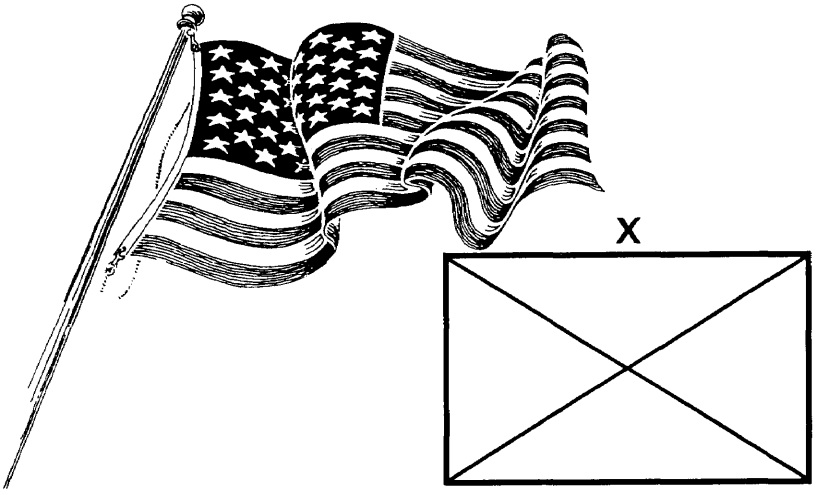
Versatility is the ability to shift focus, to tailor forces, and to move from one mission to another rapidly and efficiently. It implies a capacity to be multifunctional, to operate across regions throughout the full range of military operations.

Brigades create combat power within the commander's battle space by combining maneuver, firepower, protection, and leadership. Brigade commanders seek to apply overwhelming combat power to bring all these elements quickly and violently to bear; giving the enemy no opportunity to respond with an effective opposition.

Our military doctrine presents fundamental principles that guide the employment of US Army brigades. Doctrine is authoritative, but not directive; descriptive, not prescriptive. It provides the distilled insights and wisdom gained from the Army's collective experience with warfare. However, doctrine cannot replace clear thinking or alter a commander's obligation to determine the proper course of action under the circumstances prevailing at the time of decision.

Chapter 1

BRIGADE



The infantry brigade is a critical piece in the Army 's force structure because of its ability to operate both independently or as part of a division. The brigade fights combined arms battles and engagements employing every tactical means available. It integrates and coordinates different kinds of maneuver battalions, field artillery, aviation, engineer, ADA, combat air support, and naval gunfire to accomplish its mission. The brigade is the firest level of command that requires the commander to integrate across all the BOSs. The brigade provides the link between the division deep and close battle. Because the only permanently assigned element of the divisional brigade is the HHC, the brigade can accommodate a variety of task organizations depending on the METT-T situation. The brigade commander is responsible for setting the conditions necessary for these assets to make their contributions to the battle in an organized and synchronized fashion. The brigade commander is also responsible for placing the battalions in the right place, at the right time, and in the right combination to decisively defeat the enemy. The brigade commander commands a powerful combined arms team.

Section I
ROLE OF THE BRIGADE

The infantry brigade's mission is to close with the enemy by means of fire and maneuver to destroy or capture him, or to repel his assaults by fire, close combat, and counterattack. The brigade is extremely well-suited to operate across a wide range of military operations. The brigade normally controls from two- to five-attached maneuver battalions.

1-1. BRIGADE AS PART OF A DIVISION

Brigades usually operate as part of a division. The division is a large, fixed Army organization that trains and fights as a tactical team. Normally, the division commander controls two- to five-ground maneuver brigades. The brigade can be employed in autonomous or semiautonomous operations when properly organized for combat. All brigades must be able to deploy, conduct offensive operations, conduct defensive operations, and conduct retrograde operations. Also, airborne, air assault, and ranger brigades/regiments are capable of conducting forced entry operations. All brigades may deploy to conduct operations other than war.

1-2. BRIGADES AS PART OF A JOINT TASK FORCE

Brigades may deploy as part of a JTF with or without its traditional divisional headquarters. In these types of operations, the brigade may work directly for the JTF commander. Therefore, brigade commanders must know JTF doctrine and joint tactics, techniques, and procedures. The demand for experienced liaison will be high for a brigade in a JTF. Liaison may be required with joint, multinational, interagency, and or nongovernmental agencies. The brigade's requirement for liaison will exceed its normal personnel and equipment structure.

1-3. CHANGING NATURE OF WARFARE

The infantry has been the force that closes with and destroys the enemy in the decisive phase of the battle. Before delivering the decisive blow, the infantry sets certain conditions to allow it to accomplish the mission with the minimum number of friendly casualties. Usually, the infantry has established these conditions. For example, in search and attack, the supporting efforts find and fix the enemy, while the main effort attacks to finish the enemy. In a deliberate attack, the support force isolates the objective, the breach force creates a gap, and the main effort assaults through the gap to accomplish the mission-essential task.

a. Certainly, the infantry has come to expect assistance from the combined arms team in setting these conditions; for example, the artillery preparation used to reduce enemy resistance before the infantry assault. However, the infantry has been required to be an integral part of setting the conditions as well as delivering the decisive blow (Figure 1-1a).

b. Desert Storm demonstrated the potential for using intelligence and precision fires to set the conditions and reserving the maneuver force for employment in the decisive phase (Figure 1-1b). These maneuver forces are highly mobile combined arms forces. Before forces are committed, certain conditions must be set. These conditions include destroying the enemy's integrated air defenses, blinding the enemy, winning the information war, and eliminating the enemy's ability to attack with fires. With these and other actions, the conditions are set for decisive operations. In this phase, the highly mobile combined arms forces will be vectored in to dominate the enemy's combat formations.

c. Change in the nature of warfare is possible because of technological advances in precision fires, high resolution RISTA, enhanced situational awareness, near-real-time battle command, and the mobility and lethality of air and ground maneuver. Desert Storm demonstrated the real possibility of such a framework, and commanders must actively pursue this concept in order to accomplish the mission with minimal casualties.

d. As doctrine and technology advance, facing the enemy on a technological battlefield will become routine. While remaining highly trained in the traditional way of war, infantry brigades must prepare to transition to a new framework for the twenty-first century.

1-4. SEPARATE INFANTRY BRIGADES

Both the staffing and equipping of separate brigades are geared toward semi-independent operations. They can serve as planning headquarters for larger reserve forces or major contingency operations. Separate brigades normally conduct operations under corps command. They can also serve as a division reinforcement for short periods. The HHCs of separate brigades include support elements that would normally be found at division.

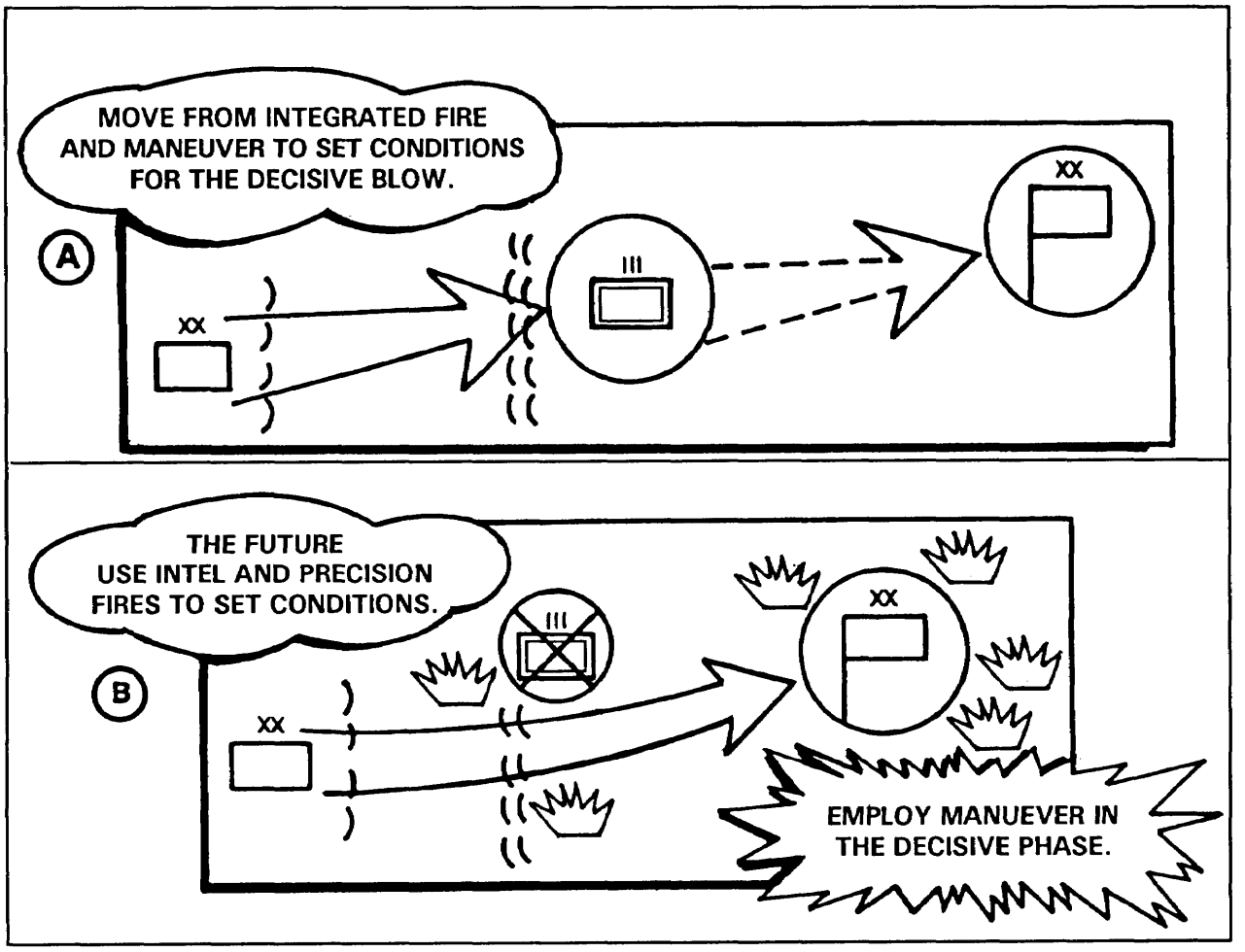


Figure 1-1. Changing nature of warfare.

a. Separate brigades can conduct operations like divisional brigades; they can fight directly under corps control or perform rear operations, flank security missions, or covering force operations. They can also serve as corps reserve or reinforce a division. Separate brigades also have their own cavalry troop, engineer company, military intelligence company, military police patoon artillery battalion and support battalion. (Figure 1-2, page 1-4, provides an example of a separate brigade organization.)

b. Additionally combat, CS, and CSS units may be attached to a separate brigade as required by the brigade's mission and operating circumstances.

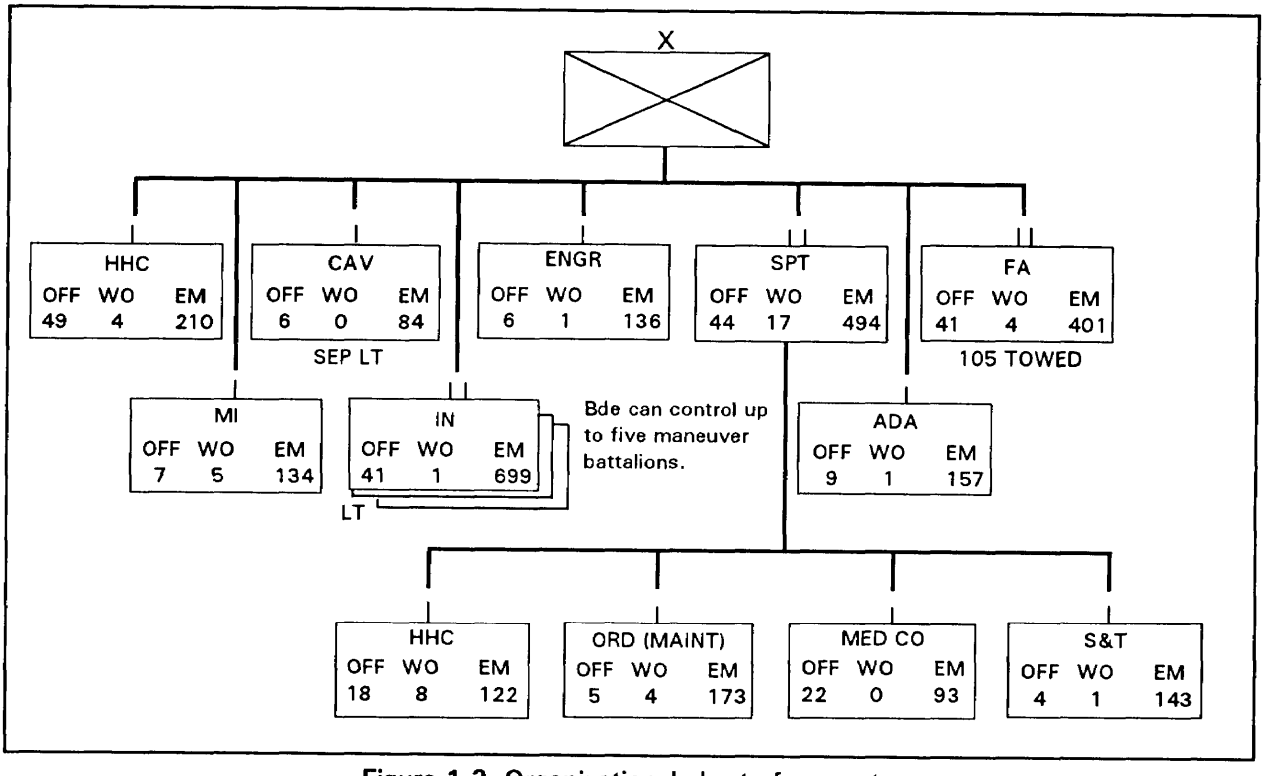


Figure 1-2. Organizational chart of separate infantry brigades.

Section II
TYPES, CAPABILITIES, AND LIMITATIONS OF THE BRIGADE

FM 7-30 focuses on the following types of infantry brigades: light, airborne, air assault, and ranger. The airborne brigade is discussed specifically in Appendix B and FM 90-26. The air assault brigade is discussed in Appendix C and FM 90-4. The ranger regiment is discussed in Appendix D and FM 7-85.

1-5. CAPABILITIES

The infantry brigade can be deployed rapidly and can be sustained by an austere support structure. Its training emphasizes fighting during limited visibility in restrictive terrain such as forests, jungles, mountains, and urban areas. The brigade conducts operations against light enemy forces in all types of terrain and climate conditions. When augmented with forces, weapons systems, and equipment, the infantry brigade can perform its mission throughout the entire range of military operations. The brigade may participte in deep and rear operations at division and corps level. Additionally, the infantry brigade can:

a. Conduct operations in all operations other than war activities.

b. Conduct small-unit operations.

c. Conduct operations with armored or mechanized forces.

d. Conduct operations with special operations forces.

e. Conduct widely dispersed operations with organic and augmented forces.

f. Take part in amphibious operations. (See FM 31-12.)

g. Conduct air assault operations. (See Appendix C and FM 90-4.)

h. Conduct airborne operations (airborne brigade/ranger regiment). (See Appendix B and FM 90-26.)

1-6. Limitations

Limitations of the infantry brigade include the following:

a. The infantry brigade does not have the firepower, mobility, or inherent protection of armored and mechanized brigades.

b. Maneuver battalions of the infantry brigade are predominantly foot mobile. Organic vehicles must move either soldiers or supplies.

c. Infantry soldiers are especially vulnerable to enemy fires and NBC attacks while soldiers are moving.

d. An austere CSS structure, which may require external CSS for extended independent operations.

1-7. ORGANIZATION OF THE BRIGADE

An infantry brigade is a combination of infantry battalions and other supporting units grouped under the command of a brigade headquarters. The organzational charts depicted in Figure 1-2 through 1-5, pages 1-4 through 1-8, illustrates the brigade commander's need to integrate all the BOSs. Paragraph 1-11, page 1-10, discusses the synchronization of these assets. The infantry brigade participates in division or corps operations according to prescribed principles and concepts. (See FM 100-15 and FM 71-100.)

The only unit permanently assigned to the divisional brigade is the headquarters and headquarters company. It provides command and control over units attached to or supporting the brigade. While there are some minor personnel and equipment differences between brigade HHCs, they are essentially the same. (Figures 1-3 through 1-5 list divisional brigades and samples of their organization for combat.)

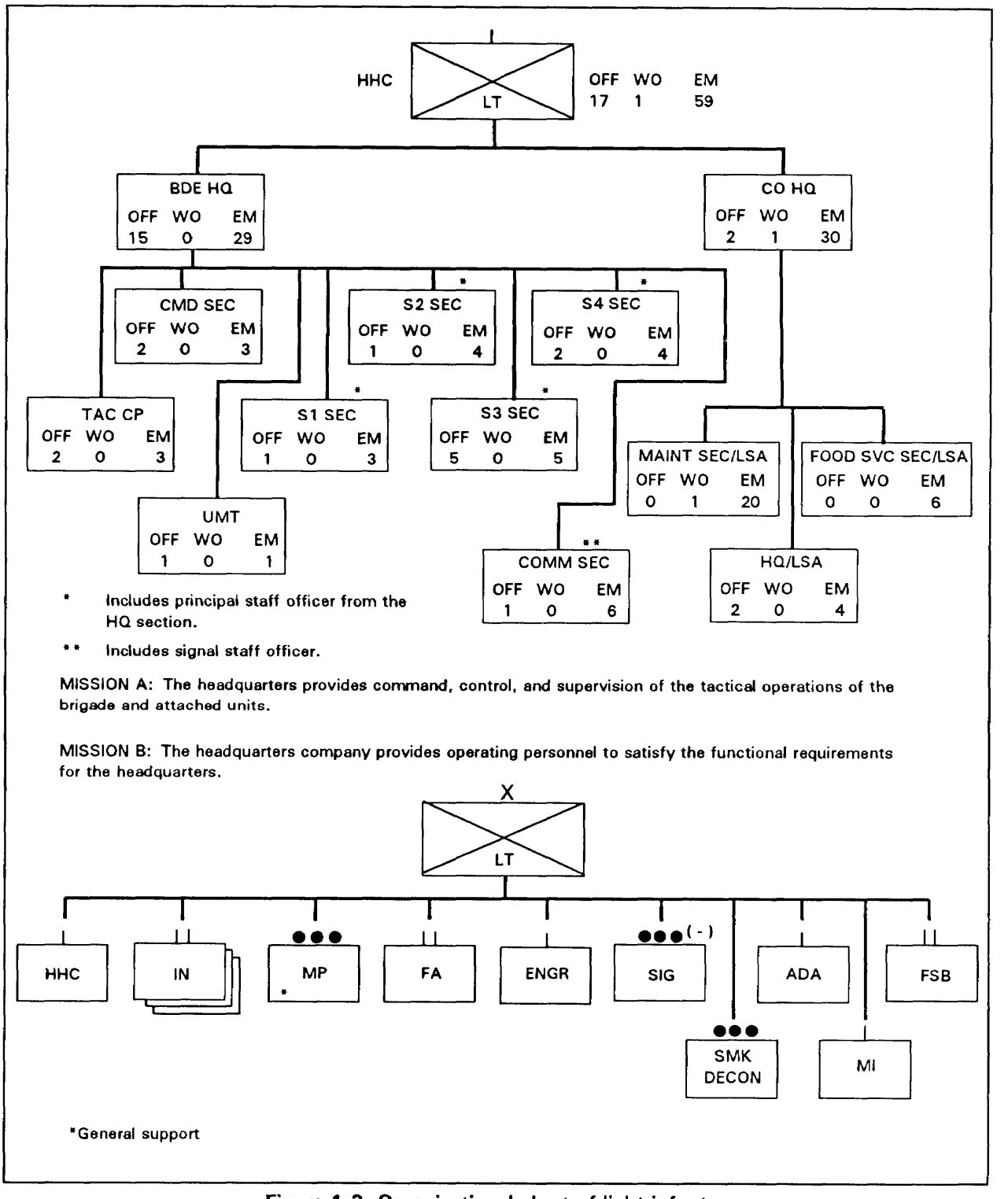


Figure 1-3. Organizational chart of light infantry brigade HHC and sample brigade organization for combat.

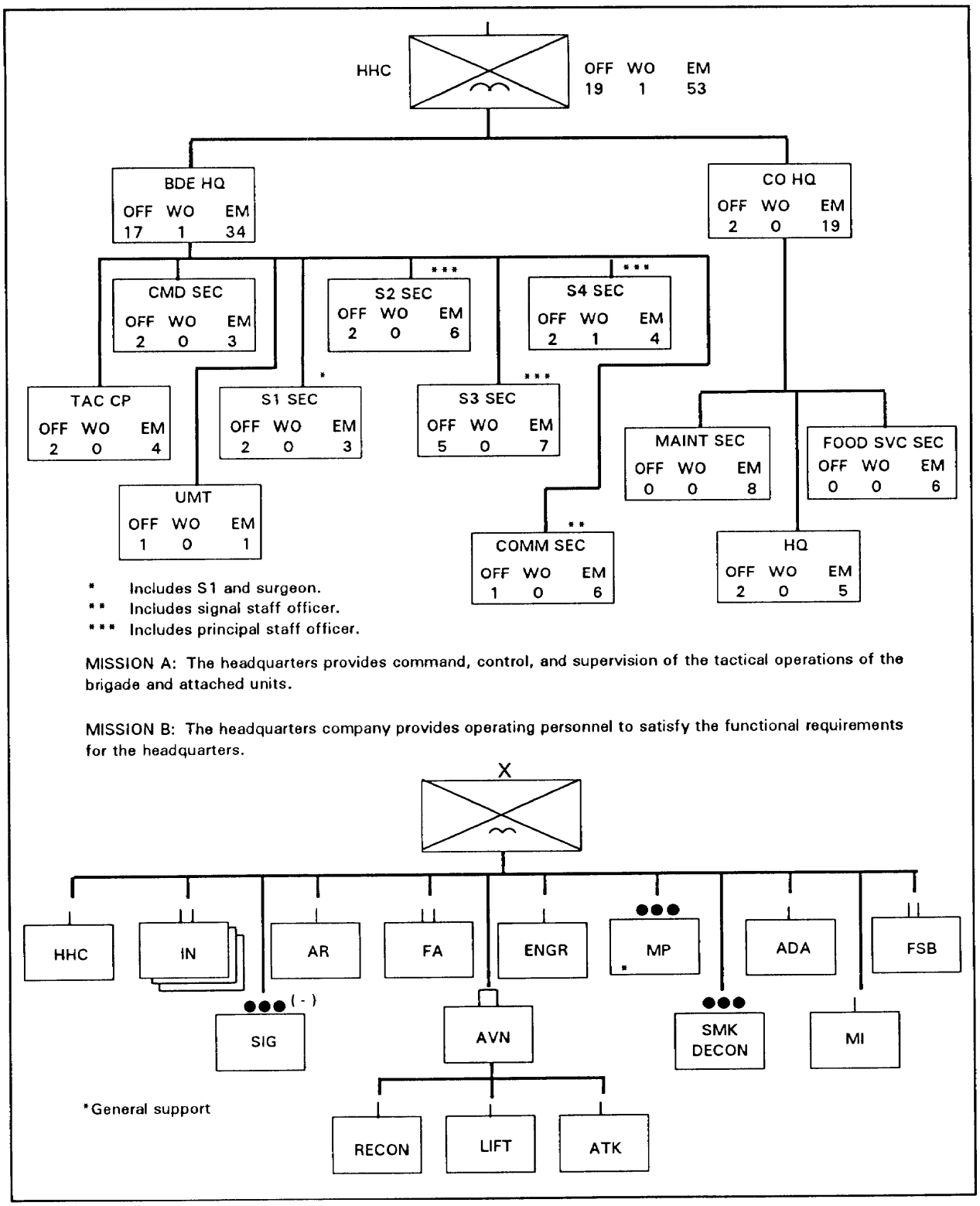


Figure 1-4. Organizational chart of airborne brigade HHC and sample brigade organization for combat.

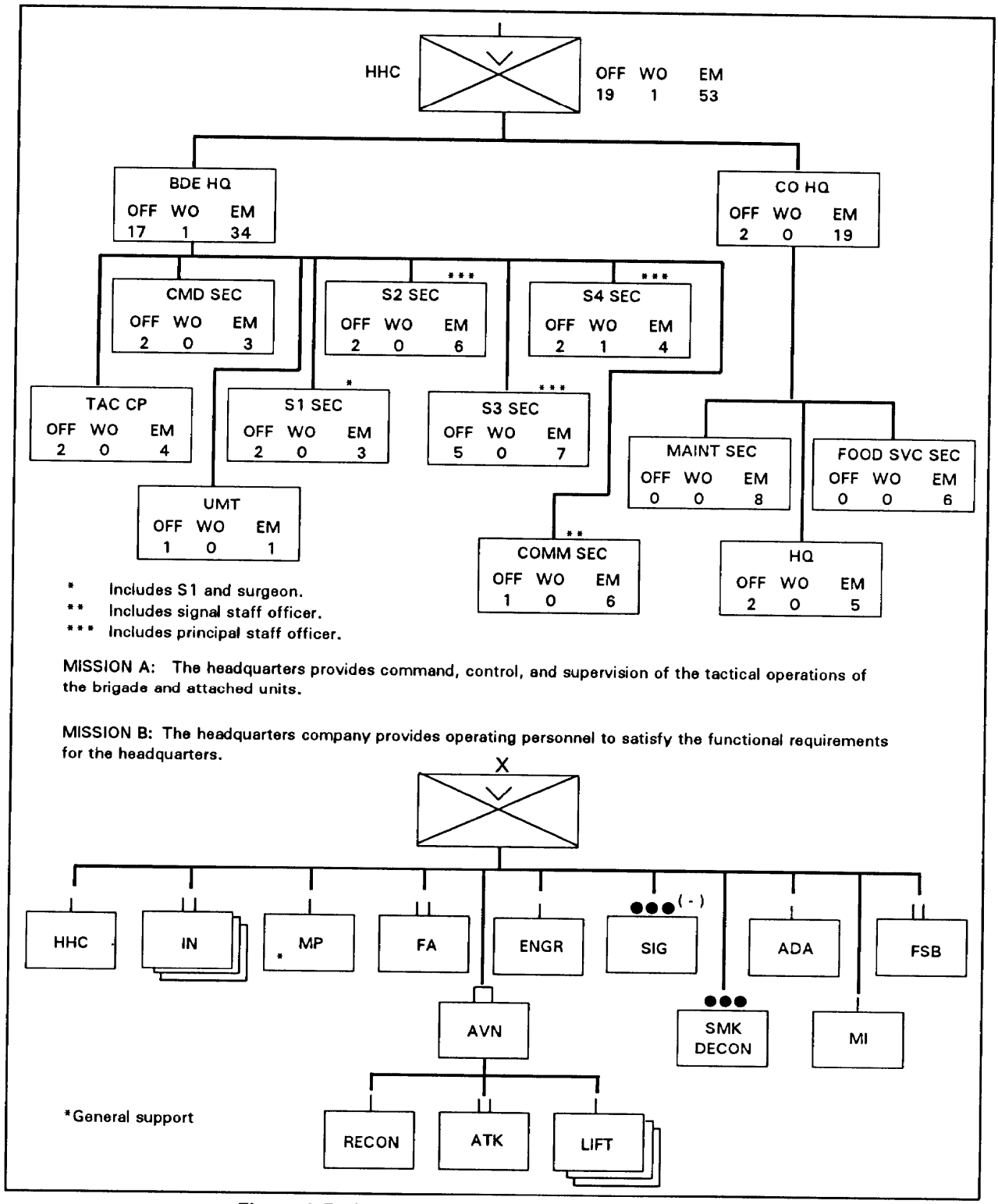


Figure 1-5. Organizational chart of air assault brigade HHC and sample brigade organization for combat.

Section III
OTHER SUPPORT

The brigade will frequently receive support from higher echelons. This support includes tactical air, Navy and Marine Corps, special operations forces, and long-range surveillance units.

1-8. COMBAT AIR SUPPORT

Combat air operations involves the employment of air power in coordination with ground and naval forces to gain and maintain air superiority; prevent movement of enemy forces into and within the objective area and to seek out and destroy those forces and their supporting installations; join with ground and naval forces in operations within the objective area in order to assist directly in attainment of their immediate objective. Tactical air missions include counterair, air interdiction, close air support, tactical surveillance and reconnaissance, and tactical air lift. Two of these that warrant additional discussion at the brigade level are close air support and tactical air lift.

a. Close Air Support. Close air support is air action against hostile targets that are in close proximity to friendly forces and require detailed integration of each air mission with the fire and movement of those forces. Preplanned CAS is a request that can be sufficiently anticipated in advance to permit detailed mission coordination and planning. The division G3 may distribute preplanned CAS sorties to the brigades. Immediate CAS is a request that could not be sufficiently identified in advance to permit detailed mission consideration and planning. The effectiveness of CAS is directly related to the degree of local air superiority attained.

b. Tactical Air Lift. The austere support structure of the light infantry brigade makes tactical airlift a vital piece of the brigade's ability to move and receive supplies and equipment. Force projection makes rapid deployment of infantry brigades by air an essential task. Once in theater, resupply, casualty evacuation, and movement of replacement personnel become key aspects of tactical air lift.

1-9. NAVY AND MARINE SUPPORT

The brigade will often have attached air and naval gunfire liaison company (ANGLICO) personnel available through which to submit requests for naval gunfire or CAS. The ANGLICO provides advice on abilities, limitations, and employment of naval gunfire and Navy/Marine CAS as well as recommends the organization and communications that are needed to request, direct, and control this support.

The ANGLICO support to a division consists of three brigade air/naval gunfire platoons organized and equipped to plan, request, coordinate, and control naval gunfire and naval air. Each platoon has two supporting arms liaison teams (SALT) that are normally provided to maneuver battalions. Note that this is not enough teams to provide one to each of the three maneuver battalions. The SALT consists of two officers and six personnel, and they become part of the unit's FSE. The SALT has two firepower control teams (FCT), which may be provided to maneuver companies. The SALT officers coordinate all naval gunfire and supervise the activities of the FCTs. In addition, they advise the FSCOORD on all matters pertaining to naval gunfire employment.

1-10. SPECIAL OPERATIONS FORCES

Special operations forces include Army special forces (SF), rangers, special operations aviation (SOA), psychological operations (PSYOP), and civil affairs (CA). Doctrinally, SF, rangers, and SOA are theater-level assets. However, brigades may conduct linkups, reliefs in place, or liaison exchanges with these units. If a tactical relationship between the brigade and the SOF does exist, normally a special operations command and control element (SOCCE) would be employed in a TACON role to provide interface.

a. Psychological operations and CA units regularly support infantry brigades. Civil affairs are those activities that embrace the relationship between the military forces and civil authorities and people in a friendly country or area, or occupied country or area, where the military are present. Because there is no organic S5 at the infantry brigade level, a CA DS team is often attached to provide S5 abilities. The members of this DS team are CA generalists and are part of the CA battalion that supports the division. The CA DS team has the following functions:

- Recommend command policy and guidance for CMO.
- Identify resources from local civil sector.
- Plan, coordinate, and supervise displaced civilian operations and other population resource control measures.

- Support and coordinate humanitarian and disaster relief.
- Assist in planning NEO.
- Coordinate military support for civil defense and civic action projects.
- Observe and analyze trends and public support of military operations.

b. Psychological operations are planned psychological activities in peace and war. These operations are directed toward enemy, friendly, and neutral audiences in order to create attitudes and behavior favorable to the achievement of political and military objectives. As such, PSYOP are a force multiplier, which is merely one piece of the operation. It must be fully integrated, timely, and directed at the right audience. The PSYOP task force is orgnized based on mission requirements. It usually consists of elements of a regional PSYOP battalion reinforced with other PSYOP assets. The brigade can normally expect to receive a brigade PSYOP support element (BPSE) consisting of at least three to four men that can control the operations of three- to five-mounted tactical PSYOP teams. They are equipped with a variety of loudspeakers and other audiovisual equipment.

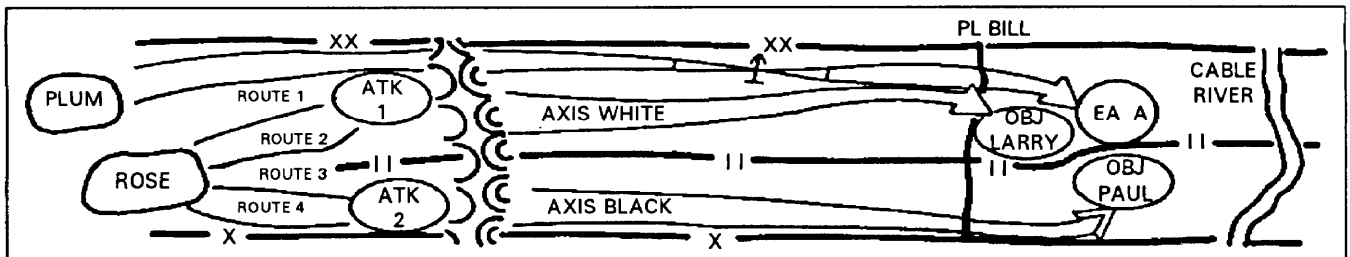
1-11. LONG-RANGE SURVEILLANCE COMPANY

It is possible, under some circumstances, that a unit may receive support from a long-range surveillance company. Surveillance teams can be assigned surveillance, reconnaissance, target acquisition, and damage assessment missions. The LRSC affects the brigade by providing information relevant to the brigade, in some cases sharing terrain, and possibly conducting linkups with brigade forces.

1-12. SYNCHRONIZATION

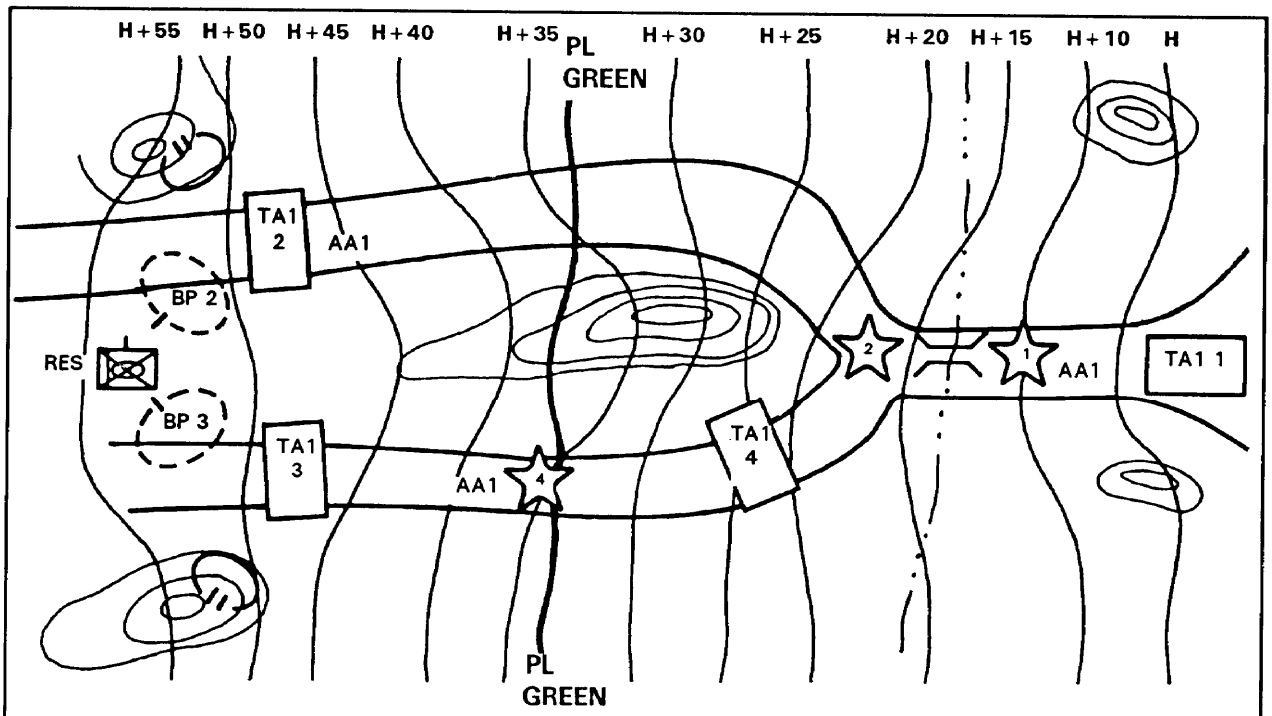
One of the brigade commander's greatest responsibilities is to ensure the synchronization of brigade assets. Synchronization is the production of maximum relative combat power at the decisive time and place. The following is a list of tools that is available to the commander, with selected examples, which will contribute to synchronization:

- Synchronization matri x (Figure 1-6).
- Decisions support template with matrix (Figure 1-7, page 1-12).
- Execution checklist (Figure 1-8, page 1-13).
- Rehearsals and briefbacks.
- Fire support execution matrix.
- Combat service support matrix.
- Engineer matrix.
- Air mission brief checklist.



		-14 HR	-12 HR	-10 HR	-8 HR	-6 HR	-4 HR	-2 HR	H -.5 HR	H HR	+6 HR	+10 HR	+12 HR	+14 HR	+22 HR
TIME															
ENEMY ACTION			Threat monitors movement. Continue def prep.						Fires counter btry.		Fights from 1st belt psn.	Defends in 2d MRC.	Res moves to atk/block main atk.		
DECISION												(1) Launch deep atk.			(2) cont atk.
MANEUVER	DEEP					Atk Hel. Atk EA							Avn Bn. Atks res vic EA A.		
	RECON	Recon routes, secure fwd areas.						Find COP's.						Screen Cable River.	
	CLOSE		Bn move on rtes 1 & 2, 3 &4.		Bns in atk psns.	Lead Bns move to LD/LC.			Cross LD/LC.		Secure Obj LARRY.			Atk Obj	Secure Obj Paul.
	RESERVE				Moves 2d on rtes 3 & 4.			Moves.				Continue atk to Obj Paul.			Continue atk or defense.
	REAR	MP Level # II response.								Atk.					
AIR DEFENSE		Wpns HOLD.	Wpns TIGHT.	Protect		Protect move to LD/LC.		Protect lead Bns.	Wpns TIGHT.			Wpns TIGHT.			Spt def.
FIRE SUPPORT			Move to fwd fire psn.			Coord w/support arty.		Fire prep.	Provide DS.	Atk threat res.		Atk RAG. Fire SEAD.			Spt atk on Obj Paul.
IEW					Confirms latest threat loc.			Find RAG & threat res.		Confirm loc of threat res.	Confirm move of threat res.				Locate threat beyond Obj Paul.
ENGINEER				Clear rtes.				Spt to lead Bns mob on axis.				Clear MSR.			Prep def or atk.
SUSTAINMENT			Refuel & maint units move.		Refuel & fix in atk psn.			Maint units to MSB.				Resupply on Obj LARRY.			Resupply Obj Paul.
C^2		Coord cross LD/LC main, AA Rose.		Tactical CP moves with lead Bn on rte 3.						Main CP plans cont atk.	Main CP prepares to move.				Main CP moves.

Figure 1-6. Example of a synchronization matrix.



DECISION POINT	ENEMY EVENT	FRIENDLY ATTACK OPTION	TAI	TIME REQUIRED TO IMPLEMENT	UNIT RESPONSIBLE
1	LEAD VEHICLE REACHES BRIDGE (COLUMN FORMATION)	AH-1 ATTACK	1	15 MINUTES	210 CAV
2	ENEMY MAIN BODY COMMITS TO AA1 B	MOVE RESERVE TO BP 2	2	10 MINUTES	B CO 1/11
2	ENEMY MAIN BODY COMMITS TO AA1B	MOVE RESERVE TO BP 3	3	15 MINUTES	B CO 1/11
4	ENEMY 1ST ECHELON MRB CROSSES PL GREEN	FASCAM TO SEPARATE ECHELONS	4	25 MINUTES	A/1/24

Figure 1-7. Example of a decision support template with operational matrix.

NO.	TIME	EVENT	CODEWORD	NET	FROM	TO	REMARKS
30	071915 JUN	TF DRAGON SCTS PZ POSTURE	ALBANY	BDE O&I	WARRIOR 07	WARRIOR 49	
	H-56:45						
40	071915 JUN	TF GIMLET SCTS PZ POSTURE	ALEXANDRIA	BDE O&I	WARRIOR 07	WARRIOR 49	
	H-56:45						
50	071940 JUN	4-25 LIFT ASSETS FOR SCOUTS ENTER	ARLINGTON	BDE O&I	NIGHT HAWK	WARRIOR 49	
	H-56:20	BDE NET/RADIO CHECK			01		
60	071941 JUN	A/C INBOUND, ADA STATUS RED HOLD	AMARILLO	BDE CMD	WARRIOR 49	BOW 06	
	H-56:19						
70	071945 JUN	AIRCRAFT ARRIVE EWA PZ	ANCHORAGE	BDE O&I	WARRIOR 07	WARRIOR 49	
	H-56:15						
90	072000 JUN	TF GIMLET & DRAGON SCTS SKIDS UP	ATHENS	BDE O&I	WARRIOR 07	WARRIOR 49	
	H-56:00						
110	072020 JUN	TF DRAGON SCTS SKIDS DOWN LZ 6	AUGUSTA	BDE O&I	NIGHT HAWK	WARRIOR 49	
	H-55:40				01		
120	072720 JUN	TF GIMLET SCTS SKIDS DOWN LZ 7	AUSTIN	BDE O&I	NIGHT HAWK	WARRIOR 49	
	H-55:40				02		
130	072100 JUN	TF DRAGON SCTS BEGIN INFIL	BAKERSFIELD	TAC SAT	TAC SCT	WARRIOR 49	
	H-55:00	(RADIO CHECK)					
140	072100 JUN	TF GIMLET SCTS BEGIN INFIL	BALTIMORE	TAC SAT	GIM SCT	WARRIOR 49	
	H-55:00	(RADIO CHECK)					
150	080530 JUN	TF DRAGON SCTS EYES ON OBJ JUNO	BARSTOW	TAC SAT	DRG SCT	WARRIOR 49	
	H-46:30						
160	080530 JUN	TF GIMLET SCTS EYES ON OBJ SWORD	BERKELEY	TAC SAT	GIM SCT	WARRIOR 49	
	H-46:30						
165	080540 JUN	FO TEAM SURVEY COMPLETE OBJ JUNO	BETHLEHEM	TAC SAT	DRG SCT	WARRIOR 49	
	H-4620						
170	081900 JUN	TRUCKS ARRIVE GIMLET SECTOR OF	BILLINGS	BDE O&I	GIMLET 49	WARRIOR 49	
	H-33:00	LODGEMENT					
175	081930 JUN	GIMLET CONVOY ASSEMBLED (D-14 (-)	BIRMINGHAM	BDE O&I	GIMLET 49	WARRIOR 49	
	H-32:30	2/B/65,1/58MP,B/2-11,1/71CHEM)					
190	082000 JUN	TF GIMLET DPT LODGEMENT W/ 1/58 MP	BLOOMFIELD	BDE O&I	GIMLET 49	WARRIOR 49	W/ B/2-11FA
	H-32:00						
200	082005 JUN	TF GIMLET SP RT GREEN	BOISE		GIMLET 49	WARRIOR 06	W/ B/2-11FA
	H-31:55						
*210	082017 JUN	TF GIMLET CP 1	BOONE	BDE O&I	GIMLET 49	WARRIOR 49	W/ B/2-11FA
	H-31:43						
215	082102 JUN	1/B/2-11 OCCUPY VIC EJ880690	BOSTON	BDE O&I	GIMLET 49	WARRIOR 49	
	H-30:58						
217	082115 JUN	1/B/2-11 IN PSN, RTF, LAY ON PRIORITY	BOULDER	BDE O&I	ON TIME 49	WARRIOR 49	
	H-30:45	TARGET					

Figure 1-8. Example of an execution checklist.

1-13. DIGITIZATION

Advances in technology continue to affect how we conduct warfare. The pace of operations is now greater than ever. Communications connectivity, line-of-sight limitations; map and compass navigation; hierarchical flow and bottlenecked information; and static CPs are giving way to new technologies and procedures as we digitize the division's battlefield. However, these advances may create a potential for information overload, and the staff must guard against this occurrence.

a. Digitization is one way the miltary services have chosen to modernize their forces. Digitization is defined as "near-realtime transfer of battlefield information between diverse fighting elments to permit a shared awareness of the tactical situation." Digitization leverages information-age technologies to enhance the art of command and facilitate the science of control.

b. Continued insertion of digital (data) technology into sensors, intelligence fusion systems, communications systems, and smart munitions will increase our ability to rapidly and globally manage, process, distribute, and display C2 information.

c. Microprocessing and space-based technologies have combined to permit near-real-time intelligence and information distribution. Improved control systems (mobile subscriber equipment [MSE], maneuver control system II [MCS II], cellular phones, satellite links), imagery directly down-linked to ground terminals, broadcast technologies, facsimile, video, color graphics, global position systems, digital overlay mapping, and data base are becoming available to lower echelon units. These capabilities give commanders and soldiers access to accurate data about the battlefield. This type of an architecture will allow them to rapidly act on this data.

d. When properly applied, technology can provide commanders near-real-time information on the operational and logistical status of friendly units, as well as a current picture of the enemy. Map displays and graphics are automatically updated, giving subordinate units complete knowledge of the friendly/enemy situation; thus a common view of the battlefield. This near-real-time common picture/situational awareness permits commanders at all echelons to: make timely decisions on accurate information better control forces, synchronize effects, and achieve decisive victories with minimal casualties.

e. Future integrated, digital computer networks will provide commanders, staffs, sensors, and shooters a great technological advantage. Through digital information exchange, systems can automatically *share* information between platforms/weapon systems, including relative positioning, identification direction, azimuth, targeting, and support. Network data systems will aid in the performance of tasks. For example, soldiers currently do the data entry and the retrieval by keyboard (or pencil). The current interface method (typing) does not lend itself to speed or cross-country movement over rough terrain. Forthcoming technology will ease data entry, retrieval, and viewing under field conditions. Light pens and *pointers* as well as menu/mouse driven software are good examples of near term technology that are important for mobile battle command. In the far term, voice input/output commands, speech synthesis, and voice recognition techniques will improve the interface even more.

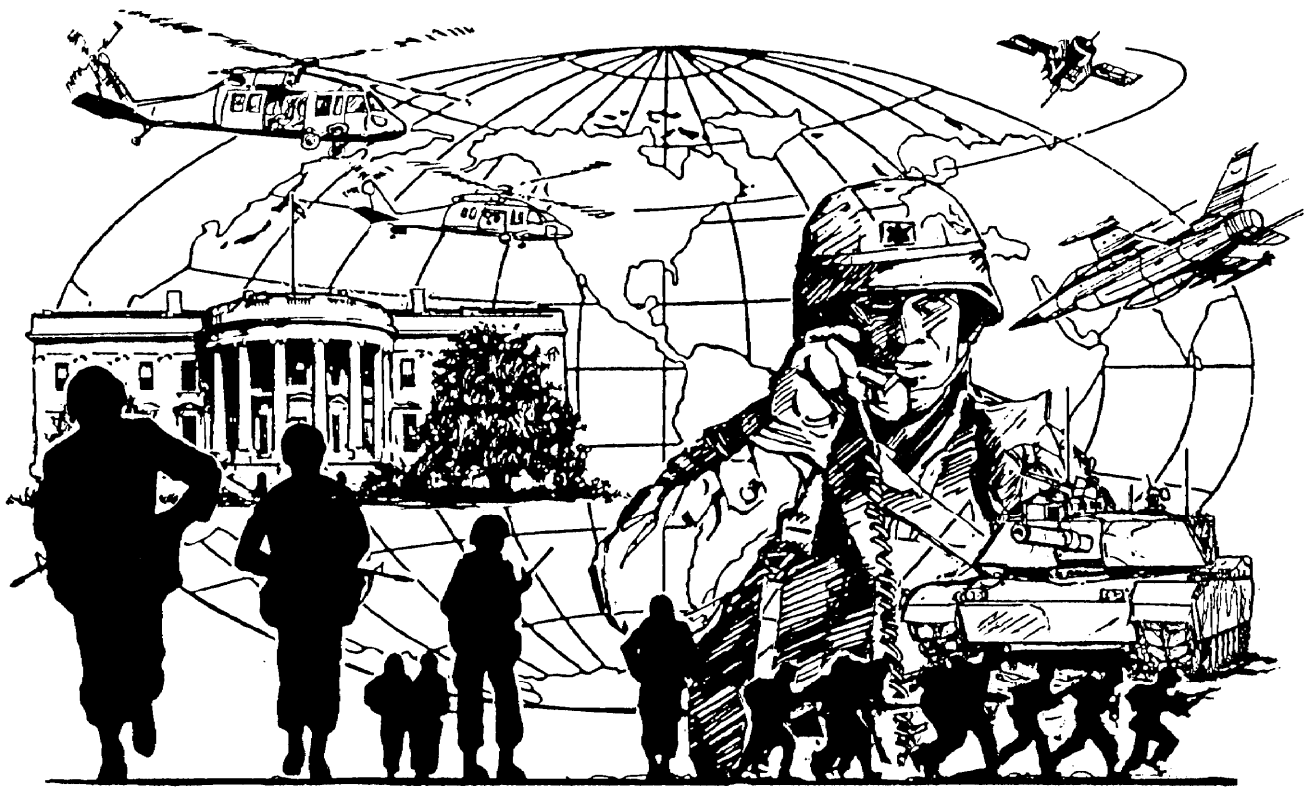
f. In the future, *pushed* information through command and control vehicles (C2V), commander's vehicle (CV), airborne command and control (ABC2) CPs, or operations centers will include orders, map overlays/graphics, logistics status, changes in locations, updates to FRAGOs, and so on. *Pulled* intelligence information from broadcast terminals and operational information from CP vehicles, command centers, and subordinate units will alleviate demands on tactical commanders or staffs answering the interminable questions "where are you/what is your status?"

g. When fully implemented, integrated and digitized control systems of the future will permit any commander or staff officer to access critical information from any point on the battlefield.

h. Digitization of the battlefield is a viable solution for managing command, control, communications, computers, and intelligence information (C41) from the foxhole to JTF headquarters and higher levels.

Chapter 2

FUNDAMENTALS OF BRIGADE OPERATIONS



With the conclusion of the cold war, the threat to US forces has become more ambiguous than ever. Infantry brigades will be expected to conduct operations in three diverse environments: war, conflict, and peacetime. The capabilities of our potential enemies run the gamut of size, doctrinal background, organization, equipment, training, and ideological motivation. Infantry brigades may face an enemy organized in large armored and mechanized formations using combined arms tactics in conventional operations. The brigade may deploy to areas where the enemy's level of technology is inconsistent, his tactics improvised and unconventional, and his support based on a popular one.

To meet this threat, brigades must be able to operate within a joint, multinational, and or multiagency environment and must synchronize all available systems using a battlefield framework. Brigades must fight in depth. This involves striking the enemy's echelons and facilities at the same time rather than just sequentially. Technology makes such action possible, and it is the brigade commander's responsibility to orchestrate his assets so that they act in concert to achieve decisive results.

Section I
FORCE PROJECTION

The Army currently maintains a smaller forward presence than it did in the past. These forward presence forces can defend for a short period, but they depend on the timely arrival of reinforcements to continue the fight. Force projection operations are usually planned at the division level but may actually involve brigade or smaller forces. During peacetime, the infantry brigade trains and plans for war and specially assigned missions. All brigades must be able to quickly alert, mobilize, deploy, and conduct operations anywhere in the world.

2-1. STAGES OF FORCE PROJECTION

The success of a brigade in wartime operations begins with its preparations for war. These preparations include a mission-oriented training program and premobilization/predeployment plans that support the brigade's specific wartime contingencies. Given these contingencies, the brigade commander and his staff derive the critical wartime tasks and missions that the brigade will most likely be called upon to execute. They express these tasks and missions as the brigade's METL. Commanders have the responsibility for developing and executing a mission-oriented training program that incorporates all of the METL tasks. They must ensure that all training plans adhere to the fundamentals of training as set forth in FM 25-100 and FM 25-101, as well as ARTEP 7-30-MTP. Training must be mentally challenging, physically demanding, and as realistic as common sense, safety, and resources permit. Such training allows units to deploy rapidly IAW an N-hour sequence. The N-hour sequence and deployment procedures are covered in the unit tactical SOPs. The N-hour sequence is just part of the force projection picture. The complete stages of force projection are mobilization, predeployment activity, deployment, entry operations, operations, war termination and post-conflict operations, and redeployment and reconstitution. They are further discussed in the following paragraphs of this section.

2-2. MOBILIZATION

Whether deploying as part of a division or in an independent operation, the brigade will generally conduct the following sequence of activities for mobilization: planning, alert, home station, mobilization station, and POE.

a. Planning. The brigade assists the division by maintaining and improving its combat readiness, preparing mobilization plans and files as directed by higher headquarters (including logistics and family support plans), providing required data to various mobilization stations (through division headquarters) as appropriate, ensuring unit movement data accuracy, conducting required mobilization and deployment training.

b. Alert. This phase begins when the unit receives notice of a pending order. Commanders complete administrative and personnel processing actions begun during the mobilization planning phase. The alert phase concludes with preparation for deployment.

c. Home Station. Home station activities bring the reserve units onto active status. During this phase, the brigade takes the necessary steps to clear installation accounts and hand receipts, if required. The brigade also dispatches an advance party to the mobilization station.

d. Mobilization Station. In this phase, the brigade plans for and provides the specific support called for in

the applicable mobilization plan or as tasked by its parent division. Throughout this phase, the brigade continues to train to METL tasks in preparation for deployment.

e. **Port of Embarkation.** Brigade actions at the air or the sea POE include preparing and loading equipment, and manifesting and loading personnel. This phase ends when the brigade departs from the POE.

2-3. PREDEPLOYMENT ACTIVITY

When ordered to deploy, the brigade task-organizes, echelons, and tailors its units based on the assigned mission and available lift and other resources. Higher echelon plans determine the command, communications, intelligence, and logistics relationships for the brigade. Some modifications to existing OPLANs will normally be necessary. These plans should also specify any joint and combined operations relationships, if known. Within the division plan, the brigade commander prioritizes lift requirements consistent with METT-T. He also establishes the sequence in which the brigade's units deploy relative to the movement of other forces and other services. Maximum use of in-theater intelligence sources is essential. Sources include SOF area assessments, the country team and higher headquarters.

a. *Echeloning* is organizing and prioritizing units for movement. Echelons are often divided into elements such as advance parties, initial combat forces, follow-on forces, and closure forces. Each echelon has a designated echelon commander. *Tailoring* is the adding to or subtracting from planned task organizations based upon a METT-T analysis, available transportation, pre-positioned assets, and host nation support. *Task organizing* is the temporary grouping of forces to accomplish a certain mission. Task organizing and echeloning occur during initial planning. Force tailoring, however, is situational dependent and occurs after a thorough METT-T assessment is completed by the commander and his staff. Brigades tailor forces after identifying initial strategic lift, pre-positioned assets, and host nation and or contract services or assets.

b. Following the receipt of a mission, the brigade prepares its personnel and equipment for deployment through preparation for overseas movement activities. These activities ensure that deploying units meet all requirements associated with deployment into another theater of operation as directed by Army regulations and local authorities.

2-4. DEPLOYMENT

Deployment includes preparing or moving the brigade, its equipment, and supplies to the area of operations in response to a crisis or natural disaster. Deployments take place in four phases: movement to the POE, strategic lift, reception at the POD, and onward movement. Deployment tasks overlap mobilization tasks and take place at the same time.

a. **Movement to the Port of Embarkation.** Units deploying with the brigade complete their preparation for overseas movement based on the mobilization plan and the CINC's time phased deployment list. Units update their automated unit equipment lists to deployment equipment lists and submit them to the installation transportation office for transmission to TRANSCOM. Based on information given to the joint operations planning and execution system, TRANSCOM provides movement guidance for the brigade's movement to the POE through its component command.

b. **Strategic Lift.** This phase begins with the departure of brigade elements on strategic lift from the POE. It ends with the brigade's closure in theater. The brigade commander and his staff must be preparcd to update intelligence and, as neccessary, modify plans while in transit.

C. **Reception at the Port of Debarkation.** This phase applies only to unopposed entry operations. It begins with the arrival of brigade units at the POD in the theater and ends when the brigade departs the POD. Except in opposed entry operations, the brigade can expect CS and CSS elements to help process them through the POD. The primary requirement is coordinating the brigade's onward movement to its first destination.

d. **Onward Movement.** This phase begins with personnel and equipment linkup, sustainment, the receipt of pre-positioned systems or logistics stocks at designated marshaling areas, and the reconfiguration of brigade forces. It ends when the brigade arrives at the gaining command's staging areas where preparations for decisive operations occur.

2-5. ENTRY OPERATIONS

Entry requirements following deployment vary. A brigade's entry into an area of operations can be either opposed or unopposed. In both cases, the brigade may use an intermediate staging base (ISB) to complete preparations and shorten lines of communications. Also, early deployment of FAAD weapons and sensors should be considered to protest the force from enemy RISTA aerial platforms.

a. **Unopposed Entry.** Unopposed entry operations generally support host nation or forward presence forces. Hostilities may be underway or imminent, but the POD is secure and under friendly control.

Commanders sequence their combat forces and supporting structure into the contingency area to gain and sustain the initiative and protect the force. Actions include the following:

- Link up with in-theater forces.
- Prepare to assist the host nation or forward presence forces.
- Protect the brigade and other collocated units, if required.
- Task-organize or re-task-organize.
- Build up the combat abilities through training, familiarization, and acclimatization of the troops to the environment. Facilitate the arrival of follow-on forces.

b. Opposed Entry. Opposed entry requires the integration and synchronization of multiservice capabilities in a concerted military effort against a hostile force. It is an extremely complex and hazardous operation that risks the assault force's defeat. Natural forces such as unfavorable weather and sea states represent hazards that are not normally such dominant factors. The assault force's key advantages lie in its mobility, flexibility, ability to concentrate balanced forces, and the ability to strike with great power at a selected point in the hostile defense system. Opposed entry operations exploit the element of surprise. They also capitalize on enemy weaknesses by applying the required type and degree of force at the most advantageous times and places. The threat imposed by the existence of a US forcible entry capability induces the enemy to disperse his own forces, and in turn may result in his making wasteful efforts to defend everything. The typical sequence in this type operation is to gain, secure, and expand a lodgmcet as part of a larger force before continuing operations. As an assault force, the brigade deploys by various means (ground movement, parachute, helicopter, landing craft) into the objective area to seize initial assault objectives, neutralize enemy units, prepare obstacles, and secure additional LZs. The intent is to introduce additional forces as quickly as possible to secure the initial lodgment area.

2-6. OPERATIONS

Fighting battles remain the brigade's primary purpose. The fundamentals of brigade operations are discussed later in this chapter. Additional separate chapters continue this discussion for offensive, defensive, and other operations, as well as operations other than war.

2-7. WAR TERMINATION AND POST-CONFLICT OPERATIONS

When hostilities cease, or when a truce goes into effect, brigade forces transition to a period of post-conflict operations. This occurs even if residual combat operations are still underway outside the brigade's area. Planning must begin before hostilities stop. Anticipation and proper planning during this critical period are necessary to restore conditions in the AO to a state favorable to US national policy.

a. The brigade focuses on restoring order and reducing confusion that exists after combat operations end. It may assist other support forces in repairing infrastructure while continuing to prepare for redeployment. Its presence continues to contribute to the achievement of strategic goals. Tasks for the brigade may include humanitarian efforts, disaster relief, population control, and other operations other than war activities. The brigade is not well suited to extended post-conflict operations without augmentation.

b. Force protection remains paramount throughout this period. Hostilities may resume unexpectedly. Soldier discipline and the continuation of tactical protective measures will best ensure the ability of the brigade to resume combat operations quickly should the need arise.

c. Post-conflict activities span a wide range of tasks. These may include: controlling indigenous, enemy, and friendly personnel in and around the unit locations; assisting with EPW control assisting in civil affairs in populace and resource control; and retraining of forces to unit standards. Civil affairs tasks could include providing security for the host nation's people, assisting local civil police, and protecting property. Such activities contribute to restoring order and protecting the local population. Also, the brigade may be required to assist in establishing or reestablishing the essential infrastructure of the host country. During postconflict, the brigade will begin retraining and or training its own forces on critical tasks. With proper augmentation and planning, the brigade can provide specialized skills and training, which can be an immediate assistance to the host government. Usually, these skills are found within attached CS and CSS units such as the staff judge advocate, PSYOP, medical, engineers, law enforcement, signal, transportation, maintenance, and civil affairs. The brigade may also be tasked to participate in nation-assistance activities and humanitarian assistance.

d. During this stage, the brigade may begin to transfer specific responsibilities within its area of operations to external units or agencies. For example, the International Red Cross may assume responsibility

for medical treatment of all non-US military personnel in the AO. Specialized military forces may be deployed by a higher headquarters or JTF commander to reestablish and control law and order. Many US and international agencies could be involved in this action. Transferring responsibilities may merely involve withdrawing from a previously occupied position. In other cases, the transfer will be more complicated. Whatever the situation, the brigade commander ensures an orderly, disciplined transfer within the AO and prepares units for redeployment or action elsewhere.

2-8. REDEPLOYMENT AND RECONSTITUTION

This stage includes two major functions: deployment back to home station or to another theater, and consolidation and reorganization as part of division reconstitution.

a. Redeployment. Redeployment is the preparation for and movement of the brigade from a theater to its designated follow-on CONUS or OCONUS base or to any other location. Commanders must contend with the same challenges as in deployment. Force protection remains critical. Redeployment activities must be planned and executed to optimize the readiness of redeploying forces and material to meet new contingencies or crises. Redeployment phases include reconstitution for strategic movement, movement to the redeployment assembly areas, movement to the POE, strategic lift, reception at the POD, and onward movement.

b. Reconstitution. Reconstitution activities include rebuilding unit integrity and accounting for soldiers and equipment. These activities continue after the force arrives in CONUS or in the home theater. The focus is on reconstituting units and their assigned equipment to premobilization levels of readiness, regenerating logistic stockpiles, and accounting for mobilized equipment and supplies.

2-9. DEPTH AND SIMULTANEOUS ATTACK

Technological advance in terms of weapons, information and communications systems makes it possible to conduct operations at the same time throughout the enemy's depth to gain synergistic effects. Depth and simultaneous attack is the simultaneous application of combat power against the enemy throughout the depth of the battlefield.

a. Objective. The objective of a simultaneous attack in depth is to *accelerate* the defeat of the enemy. Although this concept is not new or unique to the US Army, modern technology improves our ability to link these two concepts. US forces have the combat potential to engage enemy centers of gravity and critical combat systems throughout the depth of the battlefield in a unified effort. This presents the enemy commander with the dilemma of having to react to multiple threats. In short, it is possible for US forces to create conditions where the enemy has insufficient resources for reaction and few places to hide. The action of depth and simultaneous attack could be perceived as piecemealing combat power, as if all targets are of equal importance. By applying the principle of mass, all elements of combat power may be synchronized so that they will have the desired effect on the enemy in the shortest time. The principle of economy of force dictates that those targets which yield the most effective employment of combat power will be targeted. By applying the principles of war, simultaneous operations in depth must still maintain the *nested* concept relationship. In other words, the term *simultaneous* does not relieve the commander of his obligation to tie the purpose of supporting efforts to the main effort.

b. Planning. Simultaneous attacks in depth are normally planned by division or higher staff, but brigades must be prepared to refine those plans and execute the operation. Commanders must apply the principles of war and tenets of Army operations, concentrating the effects of combat power at critical places and times. In preparing for depth and simultaneous attack, commanders must answer the following questions.

- Is it possible to find and identify enemy elements in near-real-time?
- Is it possible to strike the enemy with precision and highly lethal effects, in near-real-time, at the times and places of our choosing?
- What is the desired end state?
- How does that end state support the purpose/intent or higher?
- What action/sequence will result in the desired end state?
- How should available resources be allocated/task organized?

(1) Commanders must clearly understand the composition, disposition, and intent of the enemy witthin his battle space. Combat formations, centers of gravity, reserves, air defenses, logistic support systems, and C3 locations must be known in the near-real-time throughout the planning phase until the time of attack.

(2) To synchronize the attack, commanders and staff must establish links between sensor/reconnaissance assets and his combat elements to ensure near-real-time engagement of critical mobile targets. Engagement areas and trigger events are specified and coordinated;

long-range, secure communications and near-real-time information systems are used to control the operation.

(3) The operation must be planned to achieve specific objectives. With simultaneous attacks in depth, it is critical to tie the objectives to specific points in time or events. Subordinates must have a clear understanding of the commander's intent—especially his plan for how the attack will be synchronized.

(4) Commanders and staff must plan deception into their operation. This is critical in operations in depth, because friendly forces may be thinly spread throughout the depth of the battlefield, and will be vulnerable to massing of enemy forces. Deception should be used to prevent the enemy from understanding our intent as friendly forces move throughout the depth of the battle space.

(5) Redundancy must be planned into the operation within the capabilities of the unit. Indirect fires, CAS, and air assault forces may be used to support or augment friendly forces as long as these assets are brought in and used on the enemy within the timeline of the simultaneous attack.

(6) Rehearsals must be planned to ensure the attack is synchronized throughout the depth of the battlefield. Since a simultaneous attack in depth hinges on a near-real-time information flow, staffs are the focal point of all rehearsals. They should be well rehearsed in their role before involving troops and other combat support elements in the rehearsal.

c. Execution. In coordinating a simultaneous attack in depth, the commander executes a number of actions throughout the depth of the battlefield. These actions may include the use of organic and supporting fires, combined arms maneuver, and psychological and special operations forces. The following actions are typical of simultaneous attacks in depth:

(1) ***Destruction of air defense systems.*** The commander focuses his reconnaissance, intelligence, surveillance, and target acquisition (RISTA) assets against enemy air acquisition and air defense weapons, to free the skies for friendly infiltration.

(2) ***Blinding the enemy.*** Commanders seek to deny the enemy use of his RISTA assets, to prevent the enemy from determining the intent of friendly operations. Early deployment of FAAD weapons and sensors should be considered to protect the force from enemy RISTA aerial platoons.

(3) ***Winning the information war.*** Since a simultaneous attack depends on information flow, it is critical to gain electromagnetic-spetrum supremacy. Information channels must remain open, and efforts must be made to deny the enemy use of his information systems.

(4) ***Elimination of enemy indirect fires.*** Indirect fires pose the greatest threat to friendly troops and combat systems in simultaneous attacks in depth. Preemptive strikes and an aggressive counterbattery plan must be employed to accomplish the commander's intent for enemy indirect fire systems.

(5) ***Maneuver of highly mobile forces against critical targets.*** Commanders employ combined arms against a variety of objectives at varying depths throughout the battlefield. The rapid commitment of forces extend the decisive action of close combat throughout the battle space.

Section II
TACTICAL BATTLEFIELD FRAMEWORK

A battlefield framework helps commanders visualize how they will employ forces. At the tactical level of war, the battlefield framework consists of four interrelated concepts: area of operations, area of interest, battle space, and battlefield organization.

2-10. TERMS

The following terms are defined by FM 101-5-1:

- Area of Operations: A geographic area assigned by a higher commander usually defined by lateral and rear boundaries.
- Area of Interest: The area of concern to the commander, including the area of operations, areas adjacent thereto, and extending into enemy territory to the objectives of current or planned operations.
- Battle Space: A conceptual volume determined by the maximum capabilities of a unit to acquire and physically dominate the enemy. It includes areas beyond the area of operations. It varies over time according to how the commander positions his assets.

- Battlefield Organization: Determine the purpose and relationship of the activities of the battlefield, then determine how to arrange them.

a. Of these terms, area of operations is the easiest to understand, because it is graphically expressed through overlays from higher headquarters. Area of interest and battle space are less tangible concepts. Although battle space is described as an "intellectual" exercise, it has more limits than the area of interest. The commander must be able to physically dominate the enemy in his battle space. This "domination" is achieved by influencing activities outside the AO through observation expression of intent to supporting efforts, and planning for the use of combat multipliers in GS roles. Yet in doing so, he should consider not just the effects of his own forces, but all friendly forces, including joint and multimtional. Thus, the emphasis on operations in a battle space is on unity of effort versus strict unity of command.

b. For example, the brigade, which is the division main effort, has the task of destroying the enemy on objective A (Figure 2-1). The brigade AO is defined by the boundaries on the division operations overlay. The brigade's battle space extends beyond the AO to include objectives B and C. Two supporting effort attacks from forces outside the brigade will interdict

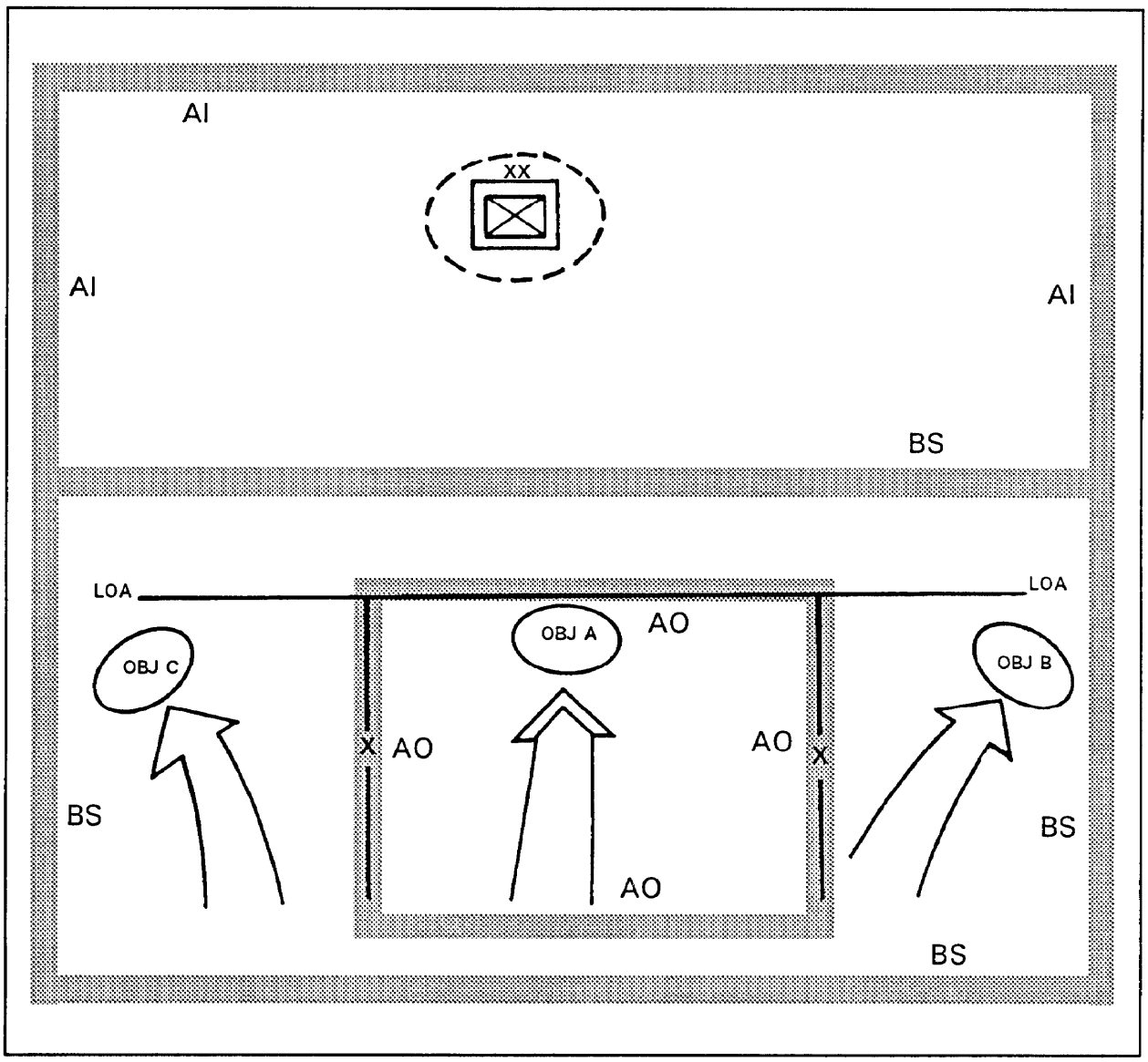


Figure 2-1. Example of a brigade destroying objective A.

enemy forces on objectives B and C to prevent them from interfering with the main effort by reinforcing objective A. The main effort brigade commander dominates objectives B and C, even though they are outside his AO, because of his understanding of the division commander's intent, his analysis of how his main effort relates to the supporting efforts on his flanks, and his ability to communicate with those supporting efforts. Objective A is important to the enemy, and he will commit his tactical reserve to regain it.

c. Once the brigade destroys the enemy on objective A, the division commander plans for the brigade to transition to the defense. The brigade retains objective A to draw the enemy tactical reserve into an EA where it will then be destroyed by corps assets. Thus, the brigade commander's area of interest includes the enemy tactical reserve expected to eventually attack objective A. However, the enemy is currently too far away for friendly forces to influence. The enemy will only move into range to try to regain objective A. By identifying this future enemy as part of his AI, the brigade commander generates information and intelligence requirements to facilitate his planned operation.

2-11. TACTICAL BATTLEFIELD ORGANIZATION

Within the AO, the brigade commander organizes the tactical battlefield into deep, close, and rear components. Deep, close, and rear operations are not separate and distinct. Each aspect works in concert with the others to provide a synergistic effect. At the tactical-level of warfare, commanders consider all aspects of three-dimensional battle and use standard control measures to organize battlefields within their AO. Tactical battles are commonly linear with deep, close, and rear components. These components are not separate and distinct but are synchronized efforts throughout the entire tactical battle. Not only are these components synchronized, but to defeat an enemy rapidly with minimum friendly casualties, commanders may apply combat power at the same time throughout the depth of the battle area. Inherent in all these operations is a battle to protect the force.

2-12. DEEP OPERATIONS

FM 101-5-1 defines deep operations as "all actions which support the friendly scheme of maneuver and which deny to the enemy commander the ability to employ his forces not yet engaged at the time, place, or in the strength of his choice."

a. Usually, the brigade does not execute its own deep operations, but it acts as an element of the corps or division deep battle. On occasion and only when properly resourced, the brigade can conduct its own deep operations. This conduct of deep operations is especially true in operations other than war and on noncontiguous battlefields (Figure 2-2). This is possible because deep operations are not necessarily a function of depth but they are a function of what forces are being attacked and the intent of the operation. Deep operations prevent the enemy from using his resources where and when he wants to on the battlefield. The brigade conducts deep operations if the action's purpose are as follows:

- Limit the enemy's freedom of action.
- Alter the tempo of operations in favor of the brigade.
- Deny the enemy the capability to concentrate his forces.
- Isolate the close operation.
- Destroy the enemy's will fight.

b. Brigades usually conduct deep operations by the concept of deep maneuver. Infantry forces may reach the enemy's rear by means of stay-behind, infiltration, airborne insertion, or air assault. The commander provides CSS for deep maneuver forces using extreme caution in order not to compromise the mission. Logistics support can be provided through task organization or through lines of communication.

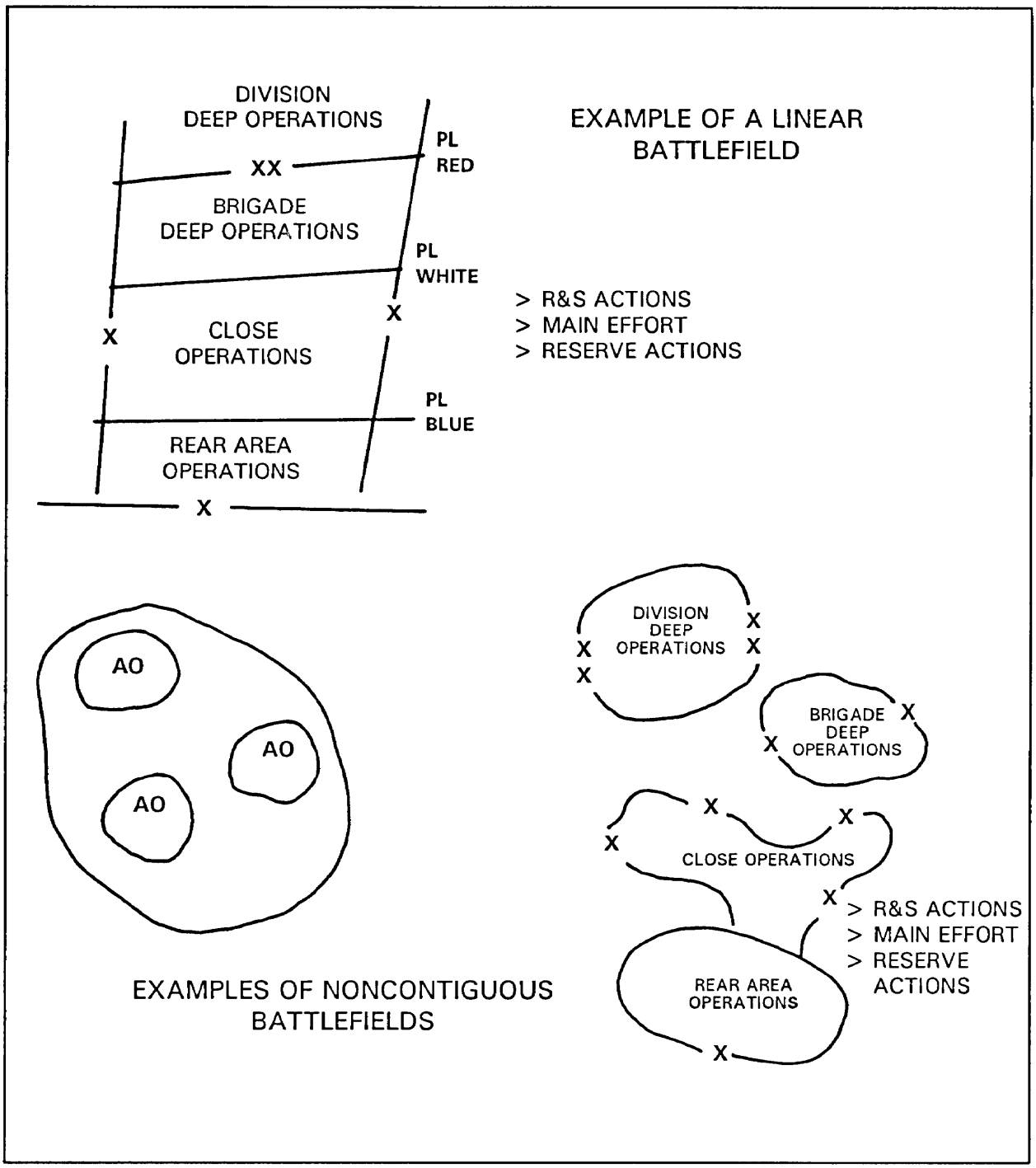


Figure 2-2. Tactical battlefield organization.

2-13. CLOSE OPERATIONS

Forces in immediate contact with tile enemy are fighting close operations. These usually include reconnaissance and security actions, main and supporting efforts, and reserve actions.

a. Reconnaissance. Reconnaissance is the precursor to all operations. Reconnaissance actions yield information on the disposition of an enemy force and its intent as well as environmental conditions. Effective reconnaissance allows the commander to gain and maintain contact with the enemy as well as to direct other friendly units into the fight. Reconnaissance units will normally orient their movement on the movement of the enemy. Reconnaissance units may have to fight for information but usually avoid decisive combat.

b. Security. Security, on the other hand, protects and conserves the combat power of friendly units. Security is an inherent part of all military operations. At the tactical level, security actions protect the command against surprise attack and hostile air and ground observation. All units conduct security actions while specific units may be tasked to conduct security missions (for example, screen, guard, cover, and area security). Security forces orient their movements on the force or facility to be secured.

c. Main and Supporting Effort. The main effort is assigned to only one unit at a time. Normally, the commander visualizes the accomplishment of his unit's purpose by his main effort. If the situation changes, the commander shifts and applies combat power as necessary to reinforce his main effort or shifts the main effort completely. Designating a main effort provides the focus that each subordinate and supporting commander uses to link his actions to the action of those around him. It is part of a commander's concept that permits initiative but maintains direction and cohesion. Supporting the main effort requires synchronization of combat, CS, and CSS resources.

d. Reserve Actions. Reserves give a commander options and flexibility. Reserves provide an edge against uncertainty. Reserves exploit successes, gain opportunity, and expedite victory. They are used to weight the main effort to maintain momentum provide security, and defeat enemy counterattacks. Reserve actions are not solely in response to unforeseen enemy actions.

2-14. REAR OPERATIONS

The objective of rear operations is to ensure a freedom of maneuver and continuous (or continuity of) operations. Rear operation are numerous, complex, and continuous. Rear operations include the functions of sustainment, terrain managcmcnt, movement control, and reconnaissance and security. They are usually orchestrated by the FSB commander through the rear CP.

Section III
BATTLEFIELD OPERATING SYSTEMS

A variety of functions help the commander build and sustain combat power. At the tactical level, these functions are the battlefield operating systems. Commanders integrate and coordinate these functions to synchronize battle effects in time, space, and purpose.

2-15. PERSONNEL INTELLIGENCE RESPONSIBILITIES

The commander drives the brigade's intelligence effort. The commander's role in intelligence begins before the current crisis or operation, but well before and is continuous throughout the operation. The commandcr focuses the intelligence effort and ensures the effort is responsive to the information requirements and to the subordinates. He does this by clearly stating the PIRs and targeting priorities. In the PIR and IR, the commandcr includes the requirements for intelligence support to force protection and BDA. Through the S2, the commander ensures the intelligence system, both his own and that of higher echelons, is responsive to the needs and focused on the requirements of the brigade.

a. The S2 and the DS MI company commander are a team whose mission is to provide IEW support to the commander. The team **is** responsible to the commander for planning and directing the intelligence activities of the brigade. The S2 is the senior intelligence officcer and the primary staff officer for intelligence. The S2 directs and supervises the commander's IEW operations including counterintelligence. He also ensures the commander is supported with timely

intelligence, targets, and BDA. The S2 coordinates with the S3 and FSO to ensure EW is fully integrated with fire support.

b. The commander and S2 must direct the intelligence effort daily to ensure support of the current operations and planning. This is especially important in an era of force projection operations where the brigade may deploy on short notice and have little time to prepare for the operation. In a force projection operation, the brigade could receive IEW support under the intelligence principle of split-based operations. In this principle, the brigade deploys with the brigade's DS MI company and other key intelligence personnel to form a small, flexible, tailored IEW organization with access to intelligence databases and systems outside the AO. The division G2 and ACE form an intelligence support base that provide tailored intelligence to the brigade throughout the operation. Split-based operations take advantage of long haul communications, automated intelligence processing, and direct broadcast dissemination systems. Split-based operations ensure the brigade receives continuous, timely, and relevant IEW support during all stages of force projection operations.

c. With a clear understanding of the commander's intent and course of action, the S2 integrates IEW support into all battlefield activities. The S2 supports these activities in the following manner using all available asscts:

(1) *Deep operations.*

- Dedicating acquisition systems to support targeting, deep attack and BDA.
- Planning EW support.
- Identifying uncommitted enemy reserves and reinforcing forces.
- Conducting CI operations to deny the enemy knowledge of friendly OPLANs and preparations.
- Identifying enemy CSS and C2.
- Supporting SEAD.

(2) *Close operations..*

- Collecting tactical intelligence on the composition, disposition, strength, weaknesses, and intent of the enemy in contact.
- Conducting counterintelligence operations in support of force protection.
- Recommending engagement area.
- Providing predictive intelligence.
- Supporting SEAD.

(3) *Rear Area Operations.*

- Identifying, analyzing, and providing early warning of threats.
- Identifying, terrain that supports friendly rear area operations.
- Recommending OPSEC measures and EP to protect C2 and support areas.

d. To meet the commander's requirements, the S2 executes IEW operations within the framework of the intelligence cycle. The cycle consists of the following steps:

- Plan and direct.
- Collect.
- Process.
- Produce.
- Disseminate.

The over-arching principle is intelligence synchronization to ensure IEW operations are linked to the commander's requirements and respond in time to influence decisions and operations.

(1) During the *plan and direct step,* the DS MI unit commander, in coordination with the S2, tactically tailors the MI assets available, identifying personnel, logistics (IEW specific), and communications (connectivity) requirements. The S2 concentrates on identifying, prioritizing, and validating IRs; developing collection and R&S plans; issuing specific orders and requests for collection; and monitoring the availability of collection information.

(2) During the *collection step,* the S2 uses the DS MI company, reinforcing MI assets, and other brigade units to execute the collection or R&S plan. Collection requirements outside the scope of the brigade are forwarded to the division G2 as RFIs.

(3) The *process and production steps* at the brigade level are indistinguishable. The S2 receives battlefield information from the maneuver units and support units, and also analyzed intelligence from the DS MI unit. This information is integrated, evaluated, analyzed, and synthesized into all source intelligence. The S2 disseminates current intelligence using standard reports, graphics, or verbal notification.

(4) The *dissemination step* is the last step where the S2 provides the intelligence reports to all brigade units, the division G2 (who makes interdistribution to current operations and the ACE), and adjacent unit S2s/G2s. The brigade S2 uses the automated terminal for dissemination to higher and adjacent and the brigade O&I net to lower. The communications architecture

must be sufficiently robust to ensure a continuous push and pull of intelligence to all commanders.

e. Inherent to the intelligence cycle steps are the following intelligence tasks:

(1) ***Indications and warnings.*** Indications and warnings identify opportunities or vulnerabilitics that may require immediate action. They prevent surprise through anticipation and reduce risk from enemy actions that are counter to the planning assumptions. At the brigade level this is normally conducted by execution of the R&S and collection plan. Indications and warnings alert the unit commander to move the unit from its current mission to a branch or sequel operation or to a totally different contingency.

(2) ***Intelligence prcparution of the battlefie!d.*** An IPB is a systematic, continuous process of analyzing the threat and environment in a specific geographic area. The S2 uses the IPB process to continually assess threats to, and opportunities for, the friendly force. The process consists of the following steps:

- Defining the battlefield environment.
- Describing the battlefield effects.
- Evaluating the threat.
- Determining threat COAs.

(a) Using the IPB process, the S2 predicts threat COAs and identifies the events that will enable him to confirm or deny each threat COA.

(b) The commander uses the IPB to understand the battlefield and the options it presents to friendly and threat forces. The commander and his staff use the results to war-game threat COAs against friendly actions, evaluate future threat actions, and perform situation and target development. This generates refined intelligence requirements, which the S2 includes in the R&S plan as well as the decision support template and BOS synchronization matrix produced by the S3. These products support the commander and his staff in decision making by developing specific unit OPLANS or OPORDs. By applying the IPB process, the commander gains the information necessary to selectively apply and maximize his combat power at critical points in time and space on the battlefield. (For more information on IPB, refer to FM 34-130.)

(3) ***Situation development.*** Situation development provides an estimate of the enemy's combat effectiveness and current operations based on continuous IPB. It confirms or denies enemy COAs and explains what the enemy is doing in relation to the friendly force. In situation development the S2 uses the DST and ISM to determine the types of information needed, the degree of specificity, and the latest time the information is of value. The S2 implements intelligence synchronization through the collection plan by issuing specific orders and requests to the DS MI company. Other units of the brigade are tasked by the intelligence annex of the OPORD. The R&S tasks are listed in paragraph 3 of the order. Tasking and positioning of MI assets takes time; therefore, the S2 must anticipate future requirements. By monitoring the situation, the S2 can redirect intelligence operations for timely delivery of the intelligence required for decisions.

(4) ***Target development and support.*** Target development and support uses intelligence and precision fires to set the conditions that allows the commander to employ maneuver in a decisive phase. During IPB, the S2 identifies high-value targets that are critical to the enemy commander's success. Through war-gaming, high-value targets are nominated as high-payoff targets. The S2 advises the commander on the viability of collection against each high-payoff target. The S2 is responsible for the direct dissemination of targeting information from the collection assets to the FSE. He is involved in the entire decide-detect-deliver-assess process of lethal and nonlethal fires.

(5) ***Force protection.*** Intelligence support to force protection must identify and counter enemy intelligence collection. Counterintelligence operations identify, locate, and target an enemy's ability to target and affect friendly forces, facilities, and operations. At the brigade level, these operations are conducted by thorough counterreconnaissance throughout the brigades area of operations. The S2 must assess friendly vulnerabilities and the threat's ability to exploit those vulnerabilities. Based upon the S2's risk assessment, the S3 evaluates the risks and develops EEFIs for the commander's approval. Threats identified will prompt the commander and his staff to develop countermeasures against the threat's best opportunities.

(6) ***Battle damage assessment.*** The S2 performs BDA if the commander specifies conditions that he wants to achieve before beginning a subsequent COA. The BDA determines if the commander's operational and targeting actions have met the conditions for initiating subsequent COAs. If the desired operational conditions have not been met, BDA provides the commander with the information necessary to decide if, when, and how the targets should be reengaged. The requirement for BDA is identified early during targeting so that the S2 can ensure targets are nominated for poststrike collection.

2-16. MANEUVER

Maneuver is both an element of combat power and a principle of war. Forces undertake tactical rnaneuver to

gain operational results. As the commander develops his concept of an operation and considers the maneuver of all his forces, he retains a balance when applying maneuver, firepower, and protection. Generating combat power on the battlefield requires combining the movement of combat forces and employment of their direct fires in combination with fire support. The brigade commander creates the conditions, largely through maneuver, that will allow his subordinate elements to accomplish the unit's purpose.

a. Although infantry brigades can operate in any environment, they are best used to exploit the advantages of restricted terrian, limited visibility, adverse weather, and urban warfare. In both the offense and the defense, infantry brigades depend on terrain for their survival. In the offense, they are employed in restrictive terrain. They infiltrate at night or conduct stay-behind operations to secure limited objectives and to attack high-payoff targets. They are well suited for air assault operations. They also close with and destroy the enemy. In the defense, infantrv brigades position battalions laterally and in depth for the best use of terrain. Even in the defense, infantry brigades conduct air assault and infiltration operations. They are augmented bascd on the factors of METT-T. They require additional artillery, engineer, antiarmor forces, and mobility augmentation when defending against heavy enemy forces in open terrain.

b. Reconnaissance and security operations are subsets of the maneuver BOS. Reconnaissance is the precursor to all military operations. It provides information on terrain and the enemy to all commanders and staffs. Reconnaissance verifies or refutes analyzed information in IPB products. Reconnaissance missions include area, zone, route, and force-oriented reconnaissance, which are accomplished by ground (mounted or dismounted), air, or technical means.

(1) Ground reconnaissance performed close to the enemy is often high risk. However, this type of reconnaissance provides the brigade commander with an all-weather, eyes-on target capability. All units in the brigade can and do perform some sort of ground reconnaissance in the conduct of their operations.

(2) The use of air reconnaissance assets provided by division may be lower in risk, but air assets can be hampered by environmental factors. These systems can, however, cover large areas quickly.

(3) Technical means can cue other reconnaissance assets. Employing technical means is low in risk. Technical assets can cover large areas or they can be focused on precise targets.

The complementary use of all these assets provides the commanders with an accurate picture of the battlefield.

The divisional brigade does not have an organic reconnaissance or security organization (separate brigades have their own cavalry troop). Therefore, the brigade relies on division and subordinate elements for reconnaissance and security. Brigades may conduct security operations (advance, flank, or rear guard) for a larger force. They may also participate as part of a division in a corps covering force. (See Chapter 5 for a discussion on defensive operations.)

2-17. FIRE SUPPORT

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

a. Fires supporting the brigade result in the commander's ability to quickly mass combat power at the proper time and place. Fires aid the brigade commander in seizing the initiative deep, close, and rear by destroying, neutralizing, or suppressing enemy units and systems. The commander allocates fires to support his maneuver battalions by establishing proposed priority. allocation, and restrictions of each system available. (In some cases, he may allocate maneuver elements to support his fire systems.) The commander establishes the purpose. This important step does not have to be in fire support language, but the FSCOORD must understand what the commandcr wants from his fires.

b. The Army does not fight alone. The Army achieves victory quicker and with fewer casualties with the integration of its own fire capabilities with sister services and multinational partners. Joint and combined fires can support Army operations at all levels. (Army corps and divisions may provide fires for the joint or combined force.) During entry operations, joint (or combined) fires provide the core fire support and interdiction capabilities for the brigade. Once the brigade establishes a lodgment and as soon as force packaging allows, divisional assets will augment joint fires. In early entry operations, joint fires capabilities are critical in providing protection for the force.

c. The key to receiving timely and effective joint fires is getting into the joint targeting cycle. Fire planners use a decide-detect-deliver-assess targeting model and understand the targeting cycle used in joint operations. The fire planner must comply with the sister service time requirements for submitting requests. All requests must be prioritized.

d. Functions within this BOS such as establishing support coordination measures, SEAD, use of Army aviation and control measures that overlap with other BOS and require detailed coordination and control.

2-18. MOBILITY AND SURVIVABILITY

The battlefield operating system includes both engineer and NBC functions. Specifically, it addresses mobility, countermobility, survivability smoke, and NBC defense operations. These actions provide mobility to division units, degrade the enemy's ability to move on the battlefield and provide protective emplacements for personnel and equipment.

a. Mobility countermobility, and survivability operations are planned consistent with the commaander's intent and complement the concept of operation. They support the brigade's deep, close, and rear fights—both in the offense and in the defense. Engineers must be active players in the IPB process, mass to support the main effort, require external support, and coordinate the control of obstacles.

b. Mobility operations consist of breaching both friendly and enemy minefield and obstacles, gap crossing, maintaining supply routes, preparing combat trails between battle positions, and supporting forward aviation units. Countermobility operations attack the enemy's ability to execute his plan. These operations use terrain, friendly and enemy-emplaced obstacles to disrupt enemy combat formations, and interfere with enemy command and control. These operation confuse enemy commnders. Optimally, contermobility is accomplished with a full integration of obstacles and fires. Slowing enemy movement creates opportunities that other combat systems can exploit.

c. Maneuver commanders ensure that obstacles support their intent, mission, and scheme of maneuver but do not degrade their friendly mobility. Well-planned countermobility operations are combat multipliers that enhance the effects of friendly direct and indirect fires.

d. Survivability operations consist primarily of preparing fighting and protective positions. Survivability operations also include NBC defenses.

2-19. AIR DEFENSE

The brigade air defense operations consist of all activities that nullify or degrade the effects of enemy air and missile attacks and surveillance on friendly units, supplies, and facilities. These operations include passive measures and coordination with Army, Air Force, Navy and Marine aviation, and the fire support BOS for A2C2 integration. All units in the brigade conduct active and passive air defense. Air defense assets are limited and must be integrated into the brigade scheme of maneuver and in concert with the division air defense plan. The air defense system identifies and engages enemy aerial platforms before the force is attacked. The air defense BOS is also concerned with the following:

- Aerial portion of the S2's IPB.
- Targeting enemy air bases and air fields.
- Allocating air defense weapons and sensors.
- Early warning.
- Advising the force on CAAD.

Any actions taken pertaining to these items are based on the commander's ADA priorities.

2-20. COMBAT SERVICE SUPPORT

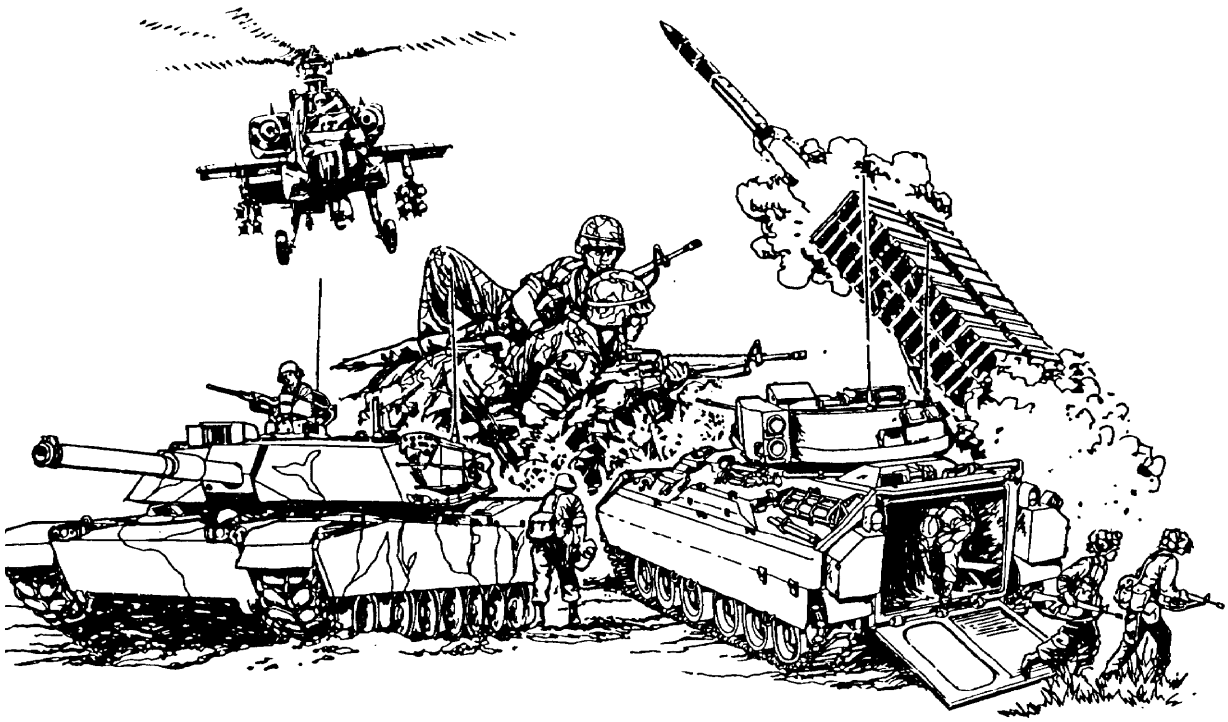
The brigade CSS system must support the overall intent and concept of the commander. Sustaining the brigade fight requires all CSS elements to adhere to the sustainment imperatives of anticipation, integration, continuity, responsiveness, and improvisation CSS elements of the brigade are integrated into the command and control system so that they can shift support effort to the critical place and time to weight the battle. Sustainment operations enable the brigade commander to mass combat power. Before tactical operations, the brigade commander establishes criteria for the withdrawal of units for reconstitution. The division reconstitution effort focuses on the reorganization of organic assets to quickly return to combat. A unit's combat capability equates to its ability to continue to fight effectively—a function of availability leadership, manned and operable systems, and morale. (See Chapter 9 for a more detailed discussion of CSS.)

2-21. BATTLE COMMAND

The concept of battle command was introduced in the 1993 edition of FM 100-5 and expands the Army's notion of C2. Battle command distinguishes the essence of command from its implementing functions. While battle command includes previous thoughts on command and control, but it incorporates the art and the science of decision making and leadership to accomplish missions. Battle command emphasizes the subjective aspects of war fighting and, therefore, focuses on the human dimension. (For a detailed discussion of the concept of battle command to brigade operations, see Chapter 3 of this manual.)

Chapter 3

BATTLE COMMAND



Battle command is the art and science of battlefield decision making and leading soldiers and units to successfully accomplish the mission. The battle command basic elements are ***decision making, leading,*** *and* ***controlling.*** *The battle command system at brigade level enables commanders to lead, prioritize, and allocate assets required to employ and sustain combat power. The brigade commander must see further, process information faster and strike more precisely and quicker. If information is the medium of the battle command process, the battle command system must provide the commander with timely and accurate information on which to base the commander's decision.*

3-1. BATTLE COMMAND PROCESS

Information products and the interpretation result in decision and directives. Battle command involves acquiring and displaying this information. All units continually acquire information about the mission enemy terrain and weather, troops available and time (METT-T) through a variety of means. This information is sent and received; the means of communicating the information is managed; and the information is filtered and maintained in a form convenient to the decision-making process. The brigade commander's decisions are recorded as plans and orders that serve as input to the battle command process at the next lower echelon. Feedback from subordinate units provides input back to the brigade's battle command process; thus an ongoing cycle (Figure 3-1).

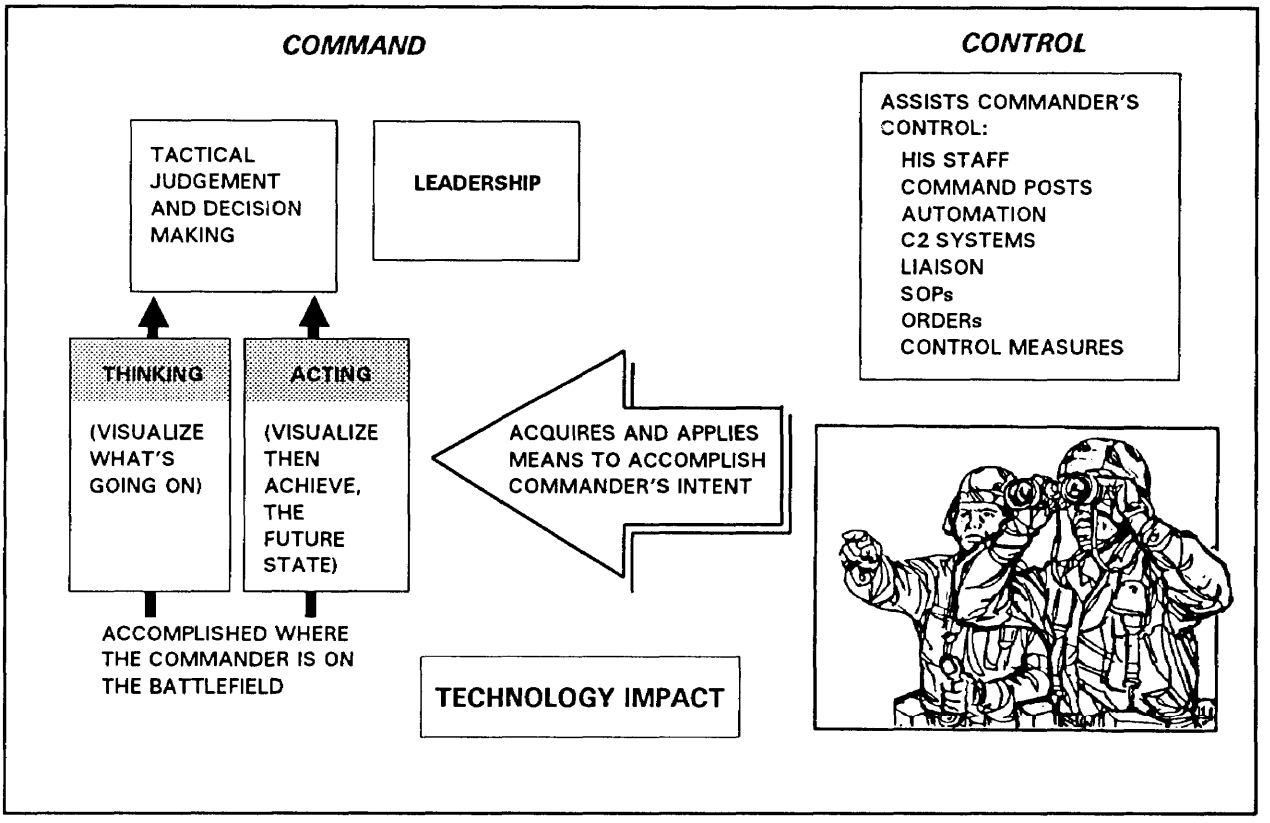


Figure 3-1. Battle command.

3-2. ART OF BATTLE COMMAND

Battle command involves a continuous process of estimates, decisions, assigning tasks and missions, executing tasks and missions, and acquiring feedback. This process includes deriving missions, formulating concepts and successfully communicating the commander's intent. Courses of action are developed and analyzed. A single course of action is selected or modified based on the most accurate available information. Because control is executed through feedback from units, control of any mission is accomplished through subsequent iterations of the battle command cycle (Figure 3-2).



Figure 3-2. Battle command definition.

3-3. ROLE OF THE COMMANDER AND STAFF

The brigade commander's leadership provides both purpose and direction to soldiers and units. Commanders motivate soldiers as well as the staff to accomplish difficult tasks under dangerous trying circumstances of combat and obscurities of operations other than war. The commander's leadership is central to the success of the division and the effects his actions has far-reaching implications. Commanders inspire and mentor subordinates through face-to-face communications. Commanders position the brigades where the battlefield can be seen by the commanders and the soldiers. Commanders establish interpersonal relationships with the staff and subordinate commanders. Commanders are the professionals that all members of the organization look to for timely decisions and informal feedback (Figure 3-3, page 3-4). The brigade commander transforms potential combat capabilities within the brigade into combat power using the brigade's battle command system. The battle command system—

- Allows the brigide commander to lead his forces.
- Is flexible, redundant, and survivable in order to synchronize the brigade's combat operations and requirements for CS an CSS.
- Allows the commander to clearly sense the total battle, then transmit orders to adjust quickly and take advantage of battlefield opportunity.
- Is responsive throughout the brigade's area of operations, controlling units in deep, close, and rear areas at the same time.
- Provides the commander with the ability to move and mass the effects of combat power from anywhere on the battlefield.

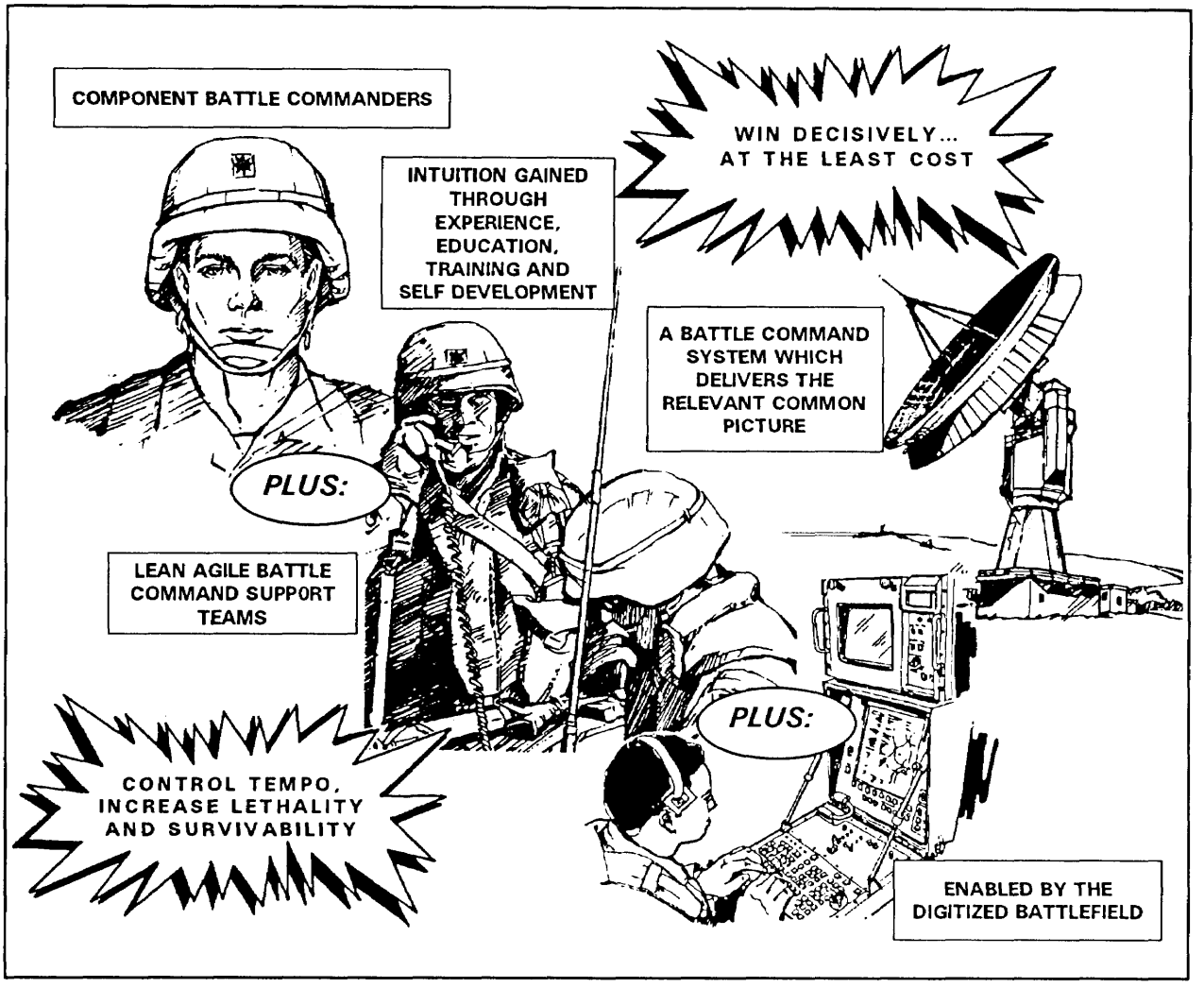


Figure 3-3. Army vision for force XXI battle command.

a. Brigade commanders teach, coach, and encourage. Commanders care, are technically and tactically competent, and train suboordinate units and soldiers the same way. Commanders set and demand adherence to tough, clear, achievable, and meaningful standards. Commanders take responsibility for the good the bad, and the ugly within the organization. Senior commanders develop excellence in the soldiers and the units of the brigade.

b. The brigade commanders set into motion forces on the battlefield to win in battle. The commanders decision on where and when to place forces and concentrate combat power is based on the assigned mission from the division or joint task force commander. The brigade commander develops the concept of operation in consonance with the higher commander's concept and intent.

c. The brigade commander starts with a vision—a mental image of successful accomplishment. The commander's vision is the personal concept of what the brigade must do and be able to do at some future point. The vision provides the brigade with a common, understood end state in which all activities are planned and executed. The commander's vision is essential to developing combat power. For military operations, the commander's vision is expressed as a part of the plans and orders. Commanders articulate the vision with the commander's intent and concept of the operation (Figure 3-4). (See FM 101-5 for a complete discussion of intent and concept of operation.)

d. Within the brigade, coordinating staff officers are the principal staff to the commander. Each is responsible for abroad category of assistantce and support. The staff ensures that all activities of subordinate staff

sections and supporting and augmenting units are integrated and coordinated within the unit's particular staff area. Coordination is affected among the staff at brigade, vertically with maneuver battalion staffs, and with the senior headquarters to which assigned. The more austere the brigade's staff, the more reliance on higher headquarters for many types of support. (See FM 101-5 for a complete discussion of staff functions.)

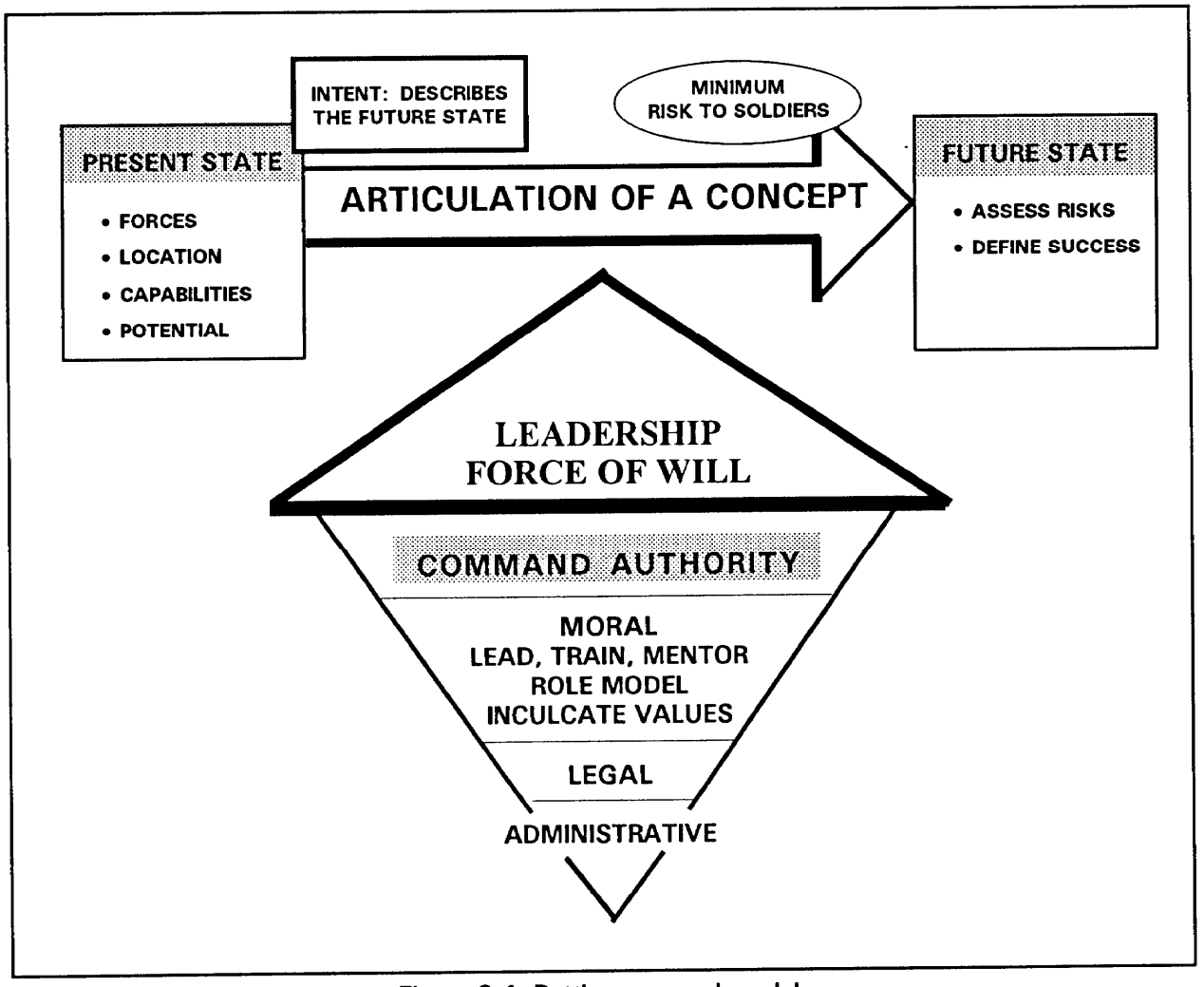


Figure 3-4. Battle command model.

e. The brigade commander trains the staff to assist the commander in translating the intent and decisions into coordinated and supported operations. A well-trained smooth functioning staff requires that the commander develop, train guide, and demand high standards of performance from all members of the staff in peacetime to ensure proper preparations for war and operations other than war. Through demanding realistic, difficult training exercises, the staff begins to think like the commander. A staff that is in concert with the commander and on their on initiative—

- Accurately determines the current situation.
- Anticipates what needs to be done.
- Develops courses of action.
- Assesses courses of action.
- Issues the necessary orders and instructions.

- Monitors how well the orders and instructions are being executed.
- Alters the plan as required IAW feedback, commander's guidance and intent.
- Plans future operations.

f. The staff must discriminate, from the flood of information available, that information essential to the commander's decision making. The staff is expected to operate with a great deal of freedom and responsibility to ensure that the entire brigade effort is fully coordinated to support the commander's decision and concept of operation. The staff develops orders and conducts necessary coordination between subordinate units and higher headquarters to execute the commander's decision and intent. (See Appendix I for a discussion of the staff's role in the decision-making process.)

The commander, however, still decides, monitors, and drives the operation.

3-4. COMMAND AND CONTROL

Command is the art of assigning missions, prioritizing resources, guiding and directing subordinates, and focusing the entire brigade's energy to accomplish clear objectives. *Control* is the science of defining limits, computing requirements, allocating resources, prescribing requirements for reports, monitoring performance, identifying and correcting deviations from guidance, and directing subordinate actions to accomplish the commander's intent. Command has two vital components: *decision making* and *leadership* (Figure 3-5). Decision making is discussed in Appendix I.

3-5. LEADING

Leading is the process of making others accomplish your will. The tactical leader relies primarily on the estimate process as his decision-making tool. He must also possess an intuitive sense that allows him to see battlefield opportunity, to predict a possible crisis, and to do something about it. The leader develops this sense by experience. The leader must be morally strong. Leading involves consistently choosing the harder right over the easier wrong. History is replete with examples of lives that were saved, because commanders ordered their soldiers to dig in or pull security in adverse situations. The leader gains credibility by sharing dangers and hardships with his soldiers but he must always remember that he best serves his men by being in a position to make effective decisions, communicate guidance, and provide command and control. Sometimes this will be far forward. The tactical leader must also have tactical and technical competence to know how best to employ his forces.

3-6. COMMANDER'S CRITICAL INFORMATION REQUIREMENTS

Critical information directly affects the successful execution of operational or tactical operations. The commander's critical information requirements (CCIR) are previously unknown but needed information of such critical importance to a commander's decision-making process that they directly affect the successful execution of operations. They are further characterized as follows:

- Situationally dependent predictable information.
- Specified by the commander for each separate operation or implicitly recognized by the staff members as such based on their understanding of the commander's mission and intent.
- Generally, time-sensitive terms of formalizing decisions at specified decision points.
- Applicable only to the commander who specifies them.
- Normally, published in an OPORD (paragraph 3d) or OPLAN and updated as the situation changes.
- Normally, transmitted over predetermined channels specified in the SOP or directly accessed by the commander during fact-to-face communication with subordinate commanders, staffs, and units.
- A link between current and future operations.

a. The CCIR enable the commander to reduce the abundant information found in combat and the confounding effect of information overload by thinking through what is important and what is urgent but not important to mission accomplishment. They allow the commander to define his information needs and, in turn focus the efforts of subordinates in acquiring, processing, and filtering information. The CCIR communicate previously unknown information that the commander needs and considers critical to determine a COA and then to continually validate the COA that has been selected. The CCIR ensure that information is transmitted to the commander, is meaningful, and readily recognized as critical to his visualization of the situation. The commander decides what information he deems to be critical, based on the mission and his experience. The commander, not his staff officer, develops the CCIR. The staff may recommend the CCIR to the commander as follows:

- Priority intelligence requirements (PIR) (how I see the enemy) to determine what the commander wants or needs to know about the enemy, his purpose and or terrain.
- Friendly forces information requirements (FFIR) (how I see myself) to allow the commander to determine the combat capabilities of his or adjacent units.
- Essential elements of friendly information (EEFI) (how I can prevent the enemy from seeing me) to allow the commander to determine how he must protect the force from the enemy's information gathering systems.

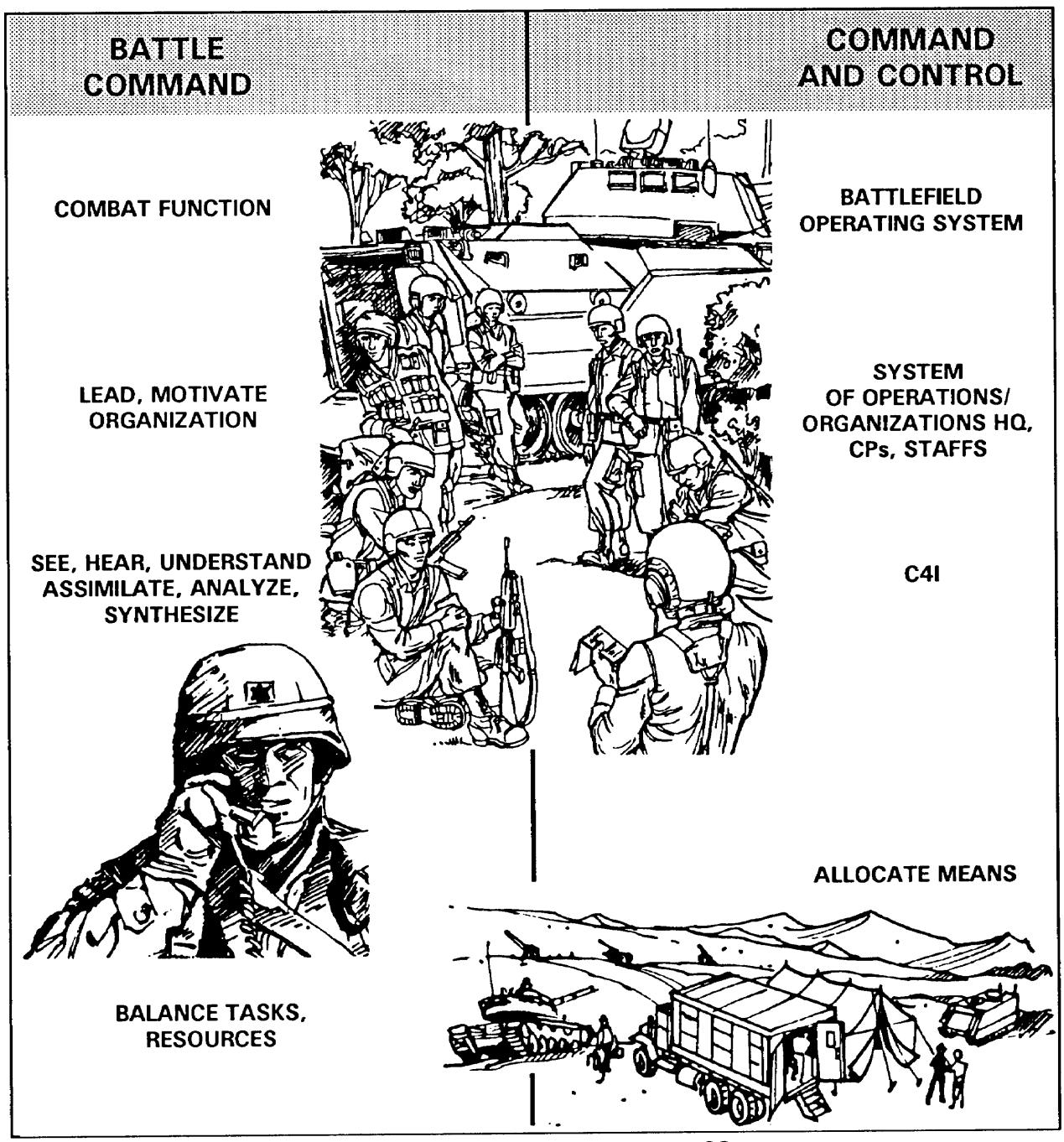


Figure 3-5. Battle command versus C2.

b. The CCIR depend on the concept of the operation the key decisions the commander is likely to have to make, and the type of information required to support each key decision. Once the CCIR are identified, responsibility for providing that information to the commander, wherever he is on the battlefield can be established. Information management ensures the battle command system delivers information for the few key decisions that the commander will make at the right place, at the right time, about right. The commander must designate an information manager. It may be the executive officer. The information manager outlines and monitors the performance and responsibilities of the staff in processing information to support the operation and flow that feeds the commander's requirements. The CCIR are directly linked to present and future tactical situations and to previously identified decisions. The information manager collects, tasks, analyzes, and presents the CCIR in a timely and accurate manner. Information managers, within the commander's intent and commanders must adjust the CCIR as the situation changes. Based on the factors of METT-T, the CCIR are dynamic. Even though some CCIR may be standard the commander must review them for each operation. Two tangible forms for deriving the CCIR are war gaming and production of the DST as part of the IPB process. War gaming forces the commander and staff to anticipate likely decision points for each COA. The DST is an estimate of where and when the commander must make a decision to synchronize critical events or to execute an option in an operation. (See Figure 3-6.)

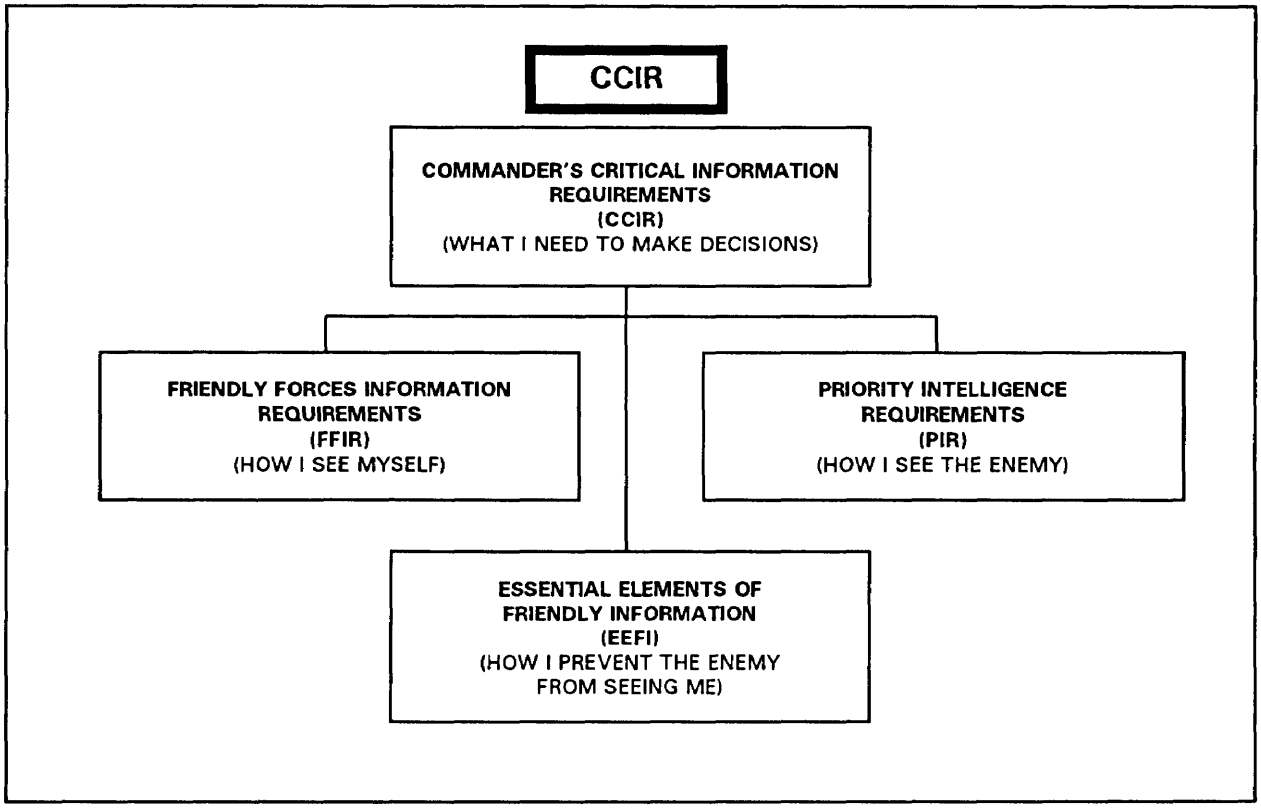
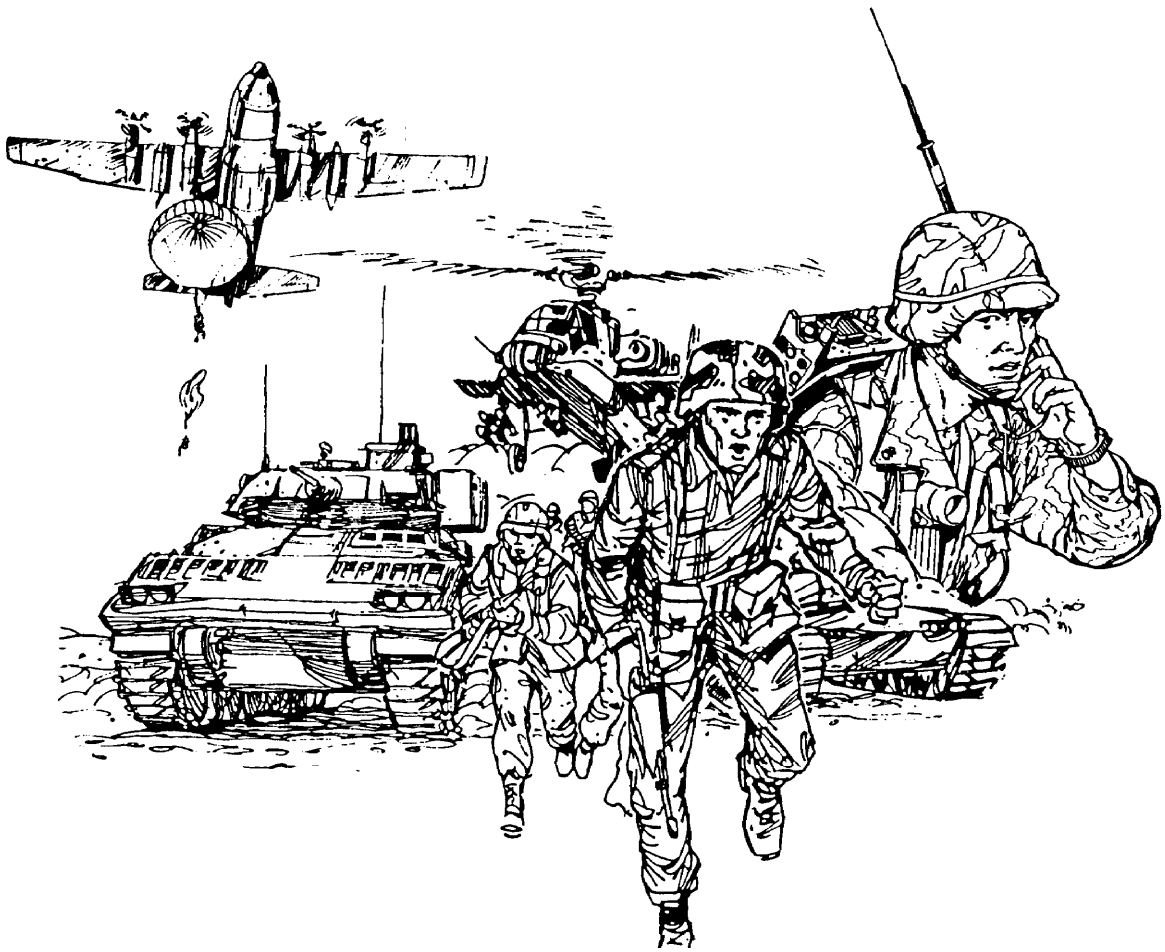


Figure 3-6. Commander's critical information requirements.

Chapter 4

OFFENSIVE OPERATIONS



The purpose of the offense is to defeat, destroy, or neutralize the enemy. Infantry brigades normally conduct offensive operations in restrictive terrain under day or night conditions in support of division or coprs operations. Brigades may also conduct offensive operations independently. Offensive operations are rapidly executed, violent operations against over-matched opponents that seek weaknesses and exploit success. The brigade atacks as part of a synchronized division, corps, or joint task force plan by

fixing the enemy while maneuvering to defeat him. The concept of establishing a base of fire with one force and maneuvering with another is fundamental to offensive maneuver based warfare. These two distinctforces have separate missions. The base of fire force uses indirect and direct fire to reduce the enemy's capability to interfere with the movement of the maneuver force and, within its capabilities, to destroy the enemy. The mission of the maneuver force is to close with and defeat the enemy. The maneuver force is normally assigned the main effort to accomplish the brigade's purpose. Many historical examples reveal the unique characteristics of infantry operations, which are marked by stealth, resourcefulness, a high degree of discipline, innovation, and the will to operate in terrain and environments where they are least expected.

Section I
FUNDAMENTALS OF BRIGADE OFFENSE

The offensive is the commander's primary means of gaining the initiative and limiting the ability of the enemy to recover from the initial shock of the attack. Through constant offensive pressure on the enemy, he is best able to force the enemy to conform to his intent and retain his own freedom of action. A thorough understanding of enemy doctrine is critical to success in all offensive operations.

4-1. CHARACTERISTICS OF OFFENSIVE OPERATIONS

Successful offensive operations are characterized by concentration, surprise, tempo, flexibility, and audacity. (FM 100-5 discusses these characteristics in detail.)

a. **Concentration.** When concentrating the effects of forces for the attack, the brigade commander must avoid set patterns or obvious movements that would indicate the timing or direction of the attack. He designates, sustains, and shifts the main effort as necessary. Mobility, speed, security, and OPSEC are essential to concentrate forces successfully. Concentration also requires the close cooperation and integration of CS and CSS elements. Success depends on the ability to concentrate unexpectedly and achieve combat superiority at a decisive place and time.

b. **Surprise.** Achieve surprise by striking the enemy at a time or place, or in a manner, for which he is unprepared. Avoid the enemy's strengths and attack his weaknesses. Strike him when and where he least expects it through night attacks, infiltrations, or rapid insertion of airborne or air assault forces.

c. **Tempo.** Tempo is the rate of speed of a military action. By controlling the tempo (friendly and enemy) of the operation the commander maintains the initiative. Commanders seek a tempo that puts pressure on the enemy to effectively keep him off balance and unable to respond. A quick tempo demands an ability to make quick decisions, to execute operations to deny the enemy a pause, and to exploit opportunities according to the commander's intent. Tempo can be either fast or slow. Commanders adjust the tempo to achieve synchronization. Speed is preferred in order to keep the enemy off balance, but establishing the conditions for decisive actions may require the tempo to be slowed as the pieces are set in place. Once ready, the tempo is increased, and the action takes place rapidly. Tempo provides the necessary momentum for attacks to achieve their objectives. Tempo is a combination of speed and mass that creates pressure on the enemy. Commanders build the appropriate tempo into the operations through careful planning. Commanders identify the best avenues for attack, plan the battle in

depth, provide quick transition to other phases of the offense, and concentrate and combine forces effectively.

d. **Flexibility.** The plan of attack must foresee developments, reflect the uncertainties of offensive combat and provide for the exploitation of opportunities that arise during the course of operations. Subordinates must understand the brigade commander's intent so well that they can properly exploit battlefield opportunities even when communications fail. The commander must be capable of changing quickly from offense to defense (and vice-versa), conducting continuous operations, and fighting on an integrated battlefield. He must be able to cope with diversions from the original plan such (as changes in direction or location of the main effort. The understanding of doctrine and commander's intent coupled with the use of SOPs, drills, and mission orders are the keys to flexibility.

e. **Audacity.** Audacity is the willingness to take bold action to achieve decisive results. The audacious commander's actions, though quick and decisive, are based on a reasoned approach to the tactical problem and on his knowledge of soldiers, terrain, and enemy. The brigade maneuvers to maintain a positional advantage over the enemy, seeks to attack the enemy on the flank or rear, and exploits success once achieved. Audacious commanders throughout historyhave used the "indirect approach." To defeat a numerically superior opponent, they strike at an unexpected time and place.

4-2. ORGANIZATION OF OFFENSIVE BATTLES

As a means to organize thoughts and information, the commander views tactical offensive battles as operations in depth. These operations consist of three interrelated parts as follows:

- Deep operations.
- Close operations.
  - Reconnaissance and security actions.
  - Main effort.
  - Reserve action.
- Rear operations.

a. All operations are interdependent on each other, and all are equally important. To defeat the enemy, the commander applies combat power within the construction of deep, close, and rear operations and protects his forces.

b. The brigade normally plans and conducts deep operations within its battlefield framework and may participate in the execution of deep operations as part of the division or corps deep fight.

4-3. OFFENSIVE OPERATIONS PLANNING

Planning for possible operations is a continuous process on the part of the brigade commander and staff. A continuing analysis of METT-T is conducted as part of the estimate process. The four general phases of offensive operations are preparation, attack, exploitation and pursuit.

a. Reconnaissance and security are key precursors to all offensive operations. Reconnaissance is undertaken to obtain information about the activities and resources of the enemy. It also provides fresh information on the terrain to reduce the unknown and facilitate the rapid execution of the main or supporting effort. Reconnaissance provides information on enemy dispositions and helps guide attacking forces against enemy weaknesses. The brigade uses the eyes and ears of every soldier to supplement existing information on the enemy and terrain. Reconnaissance by air, ground, and intelligence units is continuous and aggressive before and during offensive operations. Information must be evaluated, interpreted, and disseminated rapidly or its value is lost.

b. Security operations are designed to deny information to the enemy and provide friendly reaction time, maneuver space, and protection to the main body. Security operations include screening, guarding, covering, and area security. (See Chapter 2 for a discussion of reconnaissance and security and Chapter 5 for reconnaissance and security operations.)

c. Available maneuver forces, engineers, FA, ADA, attack helicopter, CAS, and EW assets must be synchronized at the decisive point and time to ensure tactical success. This requires that the brigade mission be analyzed and translated into specific objectives that through control of an area or destruction of an enemy force, lead to defeat of the enemy. Designing main and supporting efforts and tasks to forces in the attack contributes to mission understanding and clarifies responsibilities of attacking battalions. The brigade plan must designate a—

- Main effort.
- Supporting effort(s).
- Follow-and-support force, if any.
- Reserve.

d. The brigade commander weights the main effort by—

- Assigning tasks and purposes to supporting effort units to create the conditions for main effort success.
- Allocating additional ground maneuver forces.

- Prioritizing combat multipliers such as fires, close air support, engineers, air defense, intelligence assets, and CSS.
- Narrowing the zone.
- Selecting favorable terrain.
- Striking assailable enemy flanks.
- Supporting with direct fires.
- Using follow-and-support elements.
- Prioritizing employment of attack helicopters.
- Limiting the number of tasks assigned to the main effort.
- Establishing priorities of fire.
- Assigning priority targets.

e. The supporting effort contributes to the success of the main effort by—

- Fixing enemy forces to facilitate the main effort.
- Controlling terrain that facilitates maneuver of the main effort.
- Destroying enemy forces that would otherwise hinder the main effort.
- Deceiving the enemy as to the location of the main effort.
- Preventing or delaying enemy concentration to defeat the main effort.

f. Follow-and-support forces are committed forces that follow a force conducting an offensive operation normally an exploitation or a pursuit. They usually reinforce and support the main effort-they are not the reserve. Follow-and-support forces must be able to keep up with the attacking echelon and maintain close liaison and coordination. Follow-and-support units are assigned missions that would slow the attacking forces advance such as securing lines of communications, destroying pockets of resistance, securing key terrain and blocking movement of enemy reinforcements.

g. Follow-and-assume forces are committed forces that follow a force conducting an offensive operation. The follow-and-assume force is prepared to continue the offensive when the lead force is fixed, attrited, or otherwise unable to continue.

h. Reserves are uncommitted forces that are kept available to be used at the decisive location and time to exploit success or to ensure mission accomplishment. The purpose of the reserve is to provide flexibility and retain the initiative through offensive action. The best use of the reserve is to capitalize on an exposed enemy weakness or unexpected advantage by a decisive attack. The size of the reserve is determined by the commander during his estimate of the situation. In general, the more vague the situation, the larger the reserve. The reserve is positioned to—

- Exploit success.
- Permit rapid movement to points of probable employment.
- Weight the main effort by destroying or blocking enemy counters to it.
- Provide security to unoccupied terrain within the brigade sector.
- Provide the greatest protection from hostile observation.
- Provide fire and support consistent with mission requirements.

The commitment of the reserve signals a loss of flexibility for the brigade and should be reported immediately to higher headquarters. Reserve planning guidance should be detailed enough to provide the reserve force commander a clear understanding of the brigade commander's intent, commitment criteria, and priorities. This guidance should be clear enough to enable the reserve force commander to develop effective plans and rehearse for the most likely contingencies. The commander must plan to reestablish a reserve at the earliest opportunity after the original reserve is committed. The commander, himself, decides whether or not to commit the reserve.

4-4. CONDUCT OF OFFENSIVE OPERATIONS

During execution, the momentum of the attack must be maintained. The force closes quickly on the objective with the greatest combat power. Halts on intermediate objectives should normally be avoided because they slow the attack and increase vulnerability.

a. As the attack progresses, the commander may shift the weight of the attack to take advantage of tactical success, avoiding suspected enemy strength and taking advantage of more favorable routes or situations as they are discovered by reconnaissance elements.

b. As the assault begins, units close quickly on the objective before the enemy can react. Direct-fire weapons from overwatch units must be integrated with indirect-fire weapons. Weapon systems lift and shift their fires as fires are masked. Obstacles must be quickly overcome by breaching and bypassing.

c. As soon as the objective is seized, supporting weapons adjust to protect consolidation and reorganization. To eliminate the enemy from the objective, the unit may have to systematically clear it using the

appropriate control measures. The unit forms a hasty defense, establishes security, plans fires, and conducts reconnaissance. Preparations are made for follow-on missions. Key personnel, wounded or killed in action are replaced. The WIAs, KIAs, EPWs, and equipment are evacuated. Supplies, ammunition and equipment are redistributed, and the C2 facilities relocate.

4-5. FORMS OF MANEUVER

The basic forms of maneuver in the offense are envelopment, turning movement, infiltration, penetration and frontal attack.

a. **Envelopment.** An envelopment seeks to apply friendly strength against an enemy weakness. To accomplish this, the commander fixes the enemy from the front. He then maneuvers a force around the enemy's front and strikes his flank or rear. He forces the enemy to fight him as he advances along lightly defended or undefended avenues of approach. Envelopment requires the enemy to have an open flank weakness in his positions, or a gap in his lines, which affords the enveloping force an exploitable weakness.

(1) The brigade may use the envelopment as a form of maneuver for its own attack or it may take part in one as part of a larger force. In an envelopment, the brigade makes a supporting attack with one or more battalions. The remaining units maneuver against the enemy's flank to destroy him or seize objectives in his rear. As part of a larger unit's envelopment, the brigade may have the envelopment role or a supporting role (Figure 4-1).

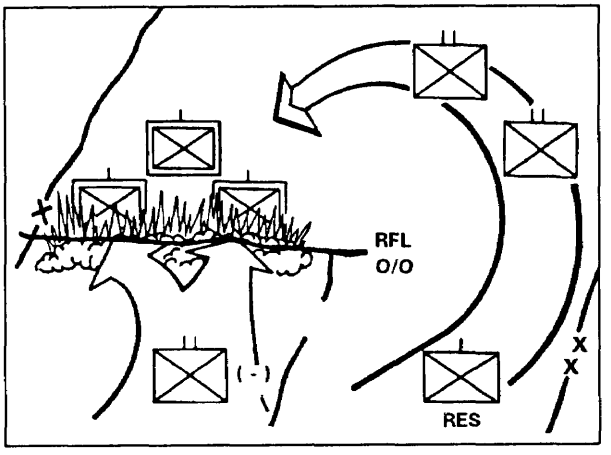


Figure 4-1. Brigade envelopment.

(2) Envelopments require task-organizing the brigade based on METT-T and the commander's intent. The holding or fixing forces must have sufficient combat power to keep the enemy fully engaged during the movement of the enveloping force. The supporting and enveloping forces may launch the attack at the same time or at staggered times. The attacker always plans preparatory fires but does not always fire them. Normally, the brigade also retains a reserve; its size is based on the estimate of the situation. The reserve follows the enveloping force to exploit success or to respond to an unforeseen contingency.

(3) Variants of the envelopment are the double envelopment and the encirclement. In the double envelopment the commander seeks to pass around both enemy flanks at the same time. This action requires close coordination and precise timing. An encirclement occurs when the enemy loses control of all ground routes of evacuation and reinforcement. This variant offers the best opportunity for fixing the enemy in position, it usually permits his capture or destruction.

b. **Turning Movement.** Brigades normally participate in turning movements as part of a larger force operation. In executing a turning movement, the brigade pa,ses around the enemy force (avoiding his main forces) to secure an objective deep in the enemy's rear (Figure 4-2). This maneuver forces the enemy to abandon positions or divert major forces to counter the attack. Airborne and air assault forces are well suited for conducting turning movements because of their air mobility. Deep fires become more important in this type of maneuver to protect the maneuver force and to attack the enemy, especially when unaccompanied by artillery.

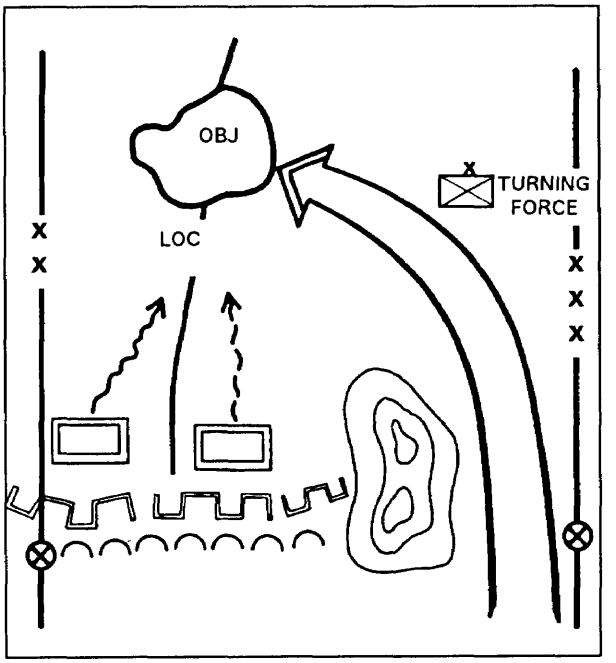


Figure 4-2. Brigade turning movement.

c. **Infiltration.** In the offense, infiltration is the concealed movement of all or part of the attacking force through enemy lines to favorable positions in the enemy rear. Because infiltration alone can rarely defeat an enemy defense, it normally takes place with some other form of maneuver.

(1) The commander will rarely infiltrate all of his brigade. However, he may require some elements to move through gaps in the enemy's defense to—

- Attack lightly defended positions.
- Occupy an overwatch position from which to support the main effort by fire.
- Seize or secure key terrain.
- Conduct ambushes, destroy vital facilities, or harass and disrupt the enemy's defenses.
- Identify targets or to obtain intelligence.

(2) Infiltration is most feasible during limited visibility, over restrictive or difficult terrain through areas unoccupied by the enemy, or through areas not covered by enemy observation and fire. These conditions often allow undetected movement of small elements when movement of the entire force would present more risk. It requires resourcefulness, a high degree of discipline, expert land navigational skills, and innovation (Figure 4-3).

(3) Infiltrations are conducted in five phases: patrol, prepare, infiltrate, consolidate, and execute.

(4) Infiltration requires extensive reconnaissance that identifies the enemy disposition across the area to be infiltrated identifies infiltration lanes, locates assault positions, identifies enemy weaknesses, and observes enemy activity.

(5) Based on the initial reconnaissance, friendly forces organize into appropriate sized elements and move through and around enemy positions. They may use single or multiple lanes. The choice depends upon the size of the force to be infiltrated, the detail of information on enemy dispositions and terrain the time, and the number of lanes available. (For more information on the employment of infiltration, see FM 7-20.)

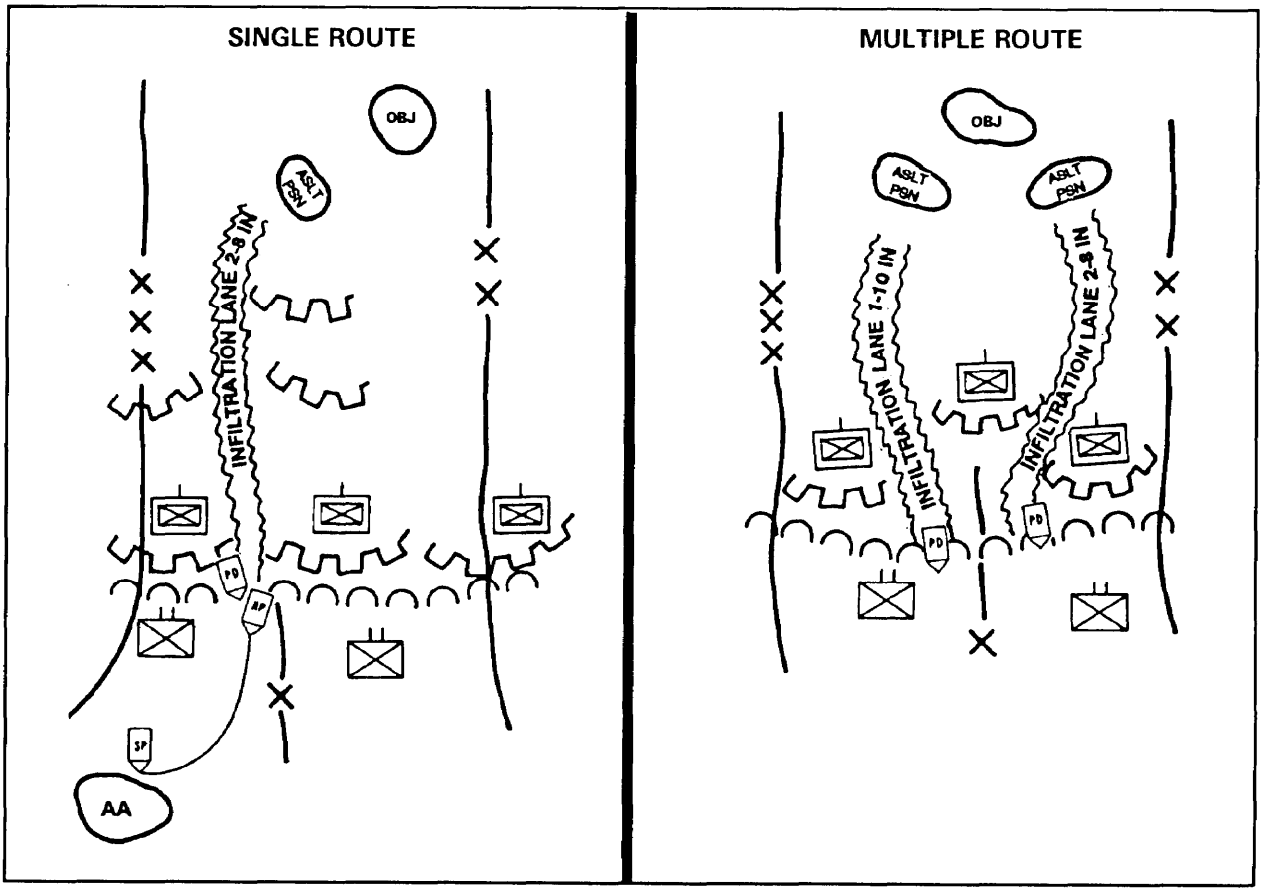


Figure 4-3. Infiltration.

d. **Penetration.** The purpose of a penetration is to break through prepared enemy positions by concentrating overwhelming combat power on a narrow front. Units penetrate when enemy flanks are not assailable and when time does not permit some other form of maneuver (Figure 4-4). A successful penetration requires the concentration of all combat multipliers, to include use of limited visibility, stealth and covered and concealed terrain. Infantry brigades ideally penetrate the enemy by infiltrating through the enemy positions during limited visibility. The brigade attacks the enemy at the point of penetration from an unexpected direction achieving surprise and concentration of combat power. Penetrations have three stages: initial rupture of enemy positions, roll-up of the flanks on either side of the gap, and exploitation to secure deep objectives.

(1) A penetration requires a massing of forces and fires against a narrow portion of the enemy defense before he can move forces to halt the attack. Fires (including smoke) on the defensive position help suppress and isolate forces at the point of attack to deprive the enemy of mutual support and defensive fires. Once the enemy is overwhelmed at the point of attack, infantry holds the shoulders of the penetration and assists other forces as they pass through the gap to secure the objective.

(2) The initial stages of the penetration often favor small-unit operations. Infantry forces remain under decentralized control until they concentrate just before the attack. Suppression of the enemy is critical at this stage since infantry on the move is vulnerable to enemy fires.

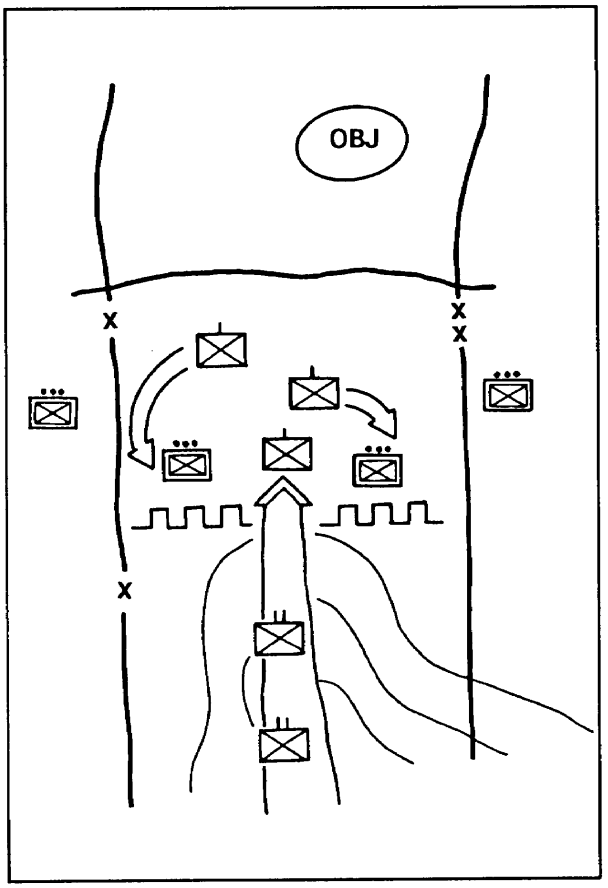


Figure 4-4. Brigade penetration.

e. **Frontal Attack.** The purpose of a frontal attack is to overrun and destroy or capture a weakened enemy, or to fix an enemy force in position to support another attack. A frontal attack is the least desirable form of maneuver, and the brigade normally conducts it as part of a larger force. The frontal attack strikes along the enemy front within the zone of the brigade (Figure 4-5). During the attack, the brigade commander seeks to take advantage of the enemy position. Subordinate units try to seize their objective from a direction other than the front if the terrain and enemy situation permit.

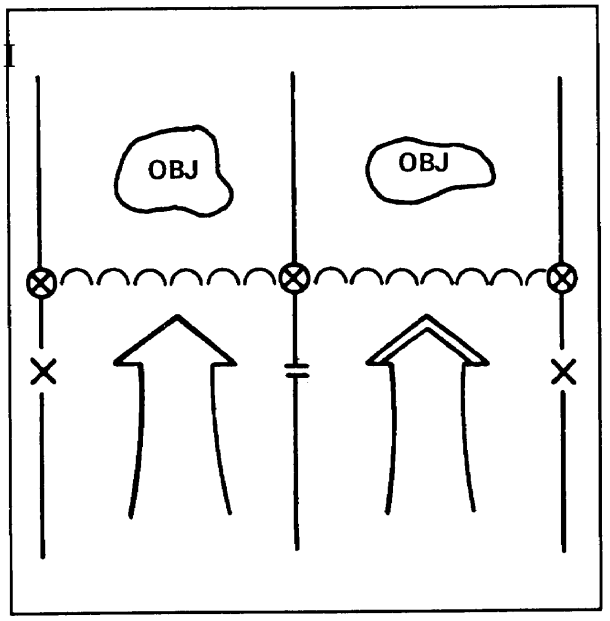


Figure 4-5. Brigade frontal attack.

4-6. BRIGADE FORMATIONS

The brigade commander selects the initial attack formation that offers the best chance of success. However, the brigade subordinate commanders must be flexible to change their formations and organizations rapidly to conform to changing situations. Maintaining mutual support between maneuver elements should be a key consideration, and the

piecemeal commitment of forces shoul be avoided. Commanders must understand time-spice relationships when planning movement. The figures within this paragraph provide a planning distance. The actual distance used is based on METT-T. The brigade may employ any of several basic formations in offensive operations.

a. **Brigade in Column.** The commander may opt to use a column of battalions for the initial attack—

- To attack on a narrow front, at night, or during limited visibility, if terrain or enemy defenses require it.
- To provide the depth necessary for a sustained attack when the strength, composition, and location of the enemy reserves so dictate.
- To retain the initiative and permit flexibility.
- To keep the following battalions in position to move through or around the lead elements to maintain the momentum of the attack.
- To provide a degree of security by keeping the following battalions in position to counter threats from the flanks.

Forces in column can concentrate only a part of their fires to the front; thus they are subject to piecemeal commitment and slower deployment to the front. The brigade requires multiple routes in their zone if they are to attack effectively from columns. Passage of the birgade through an area in column requires more time than other formations (Figure 4-6).

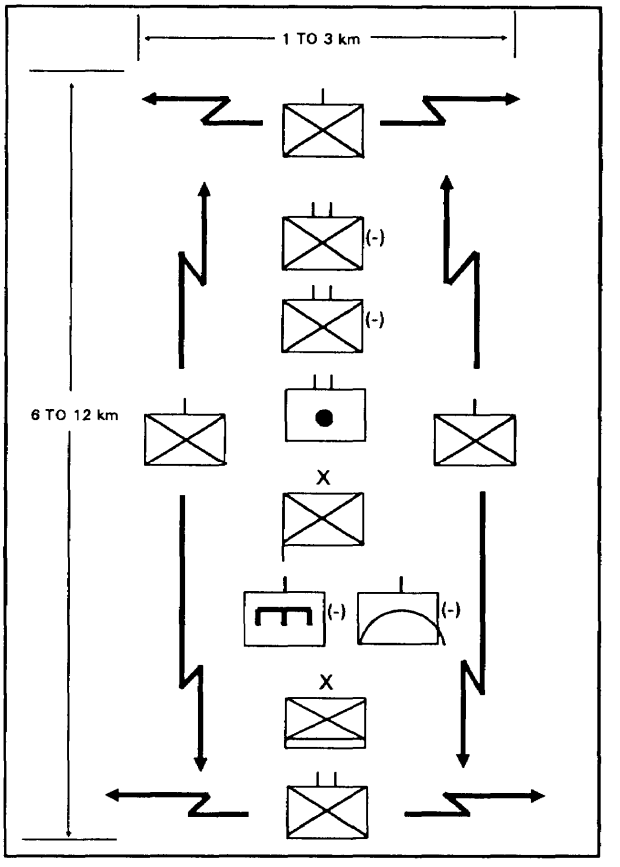


Figure 4-6. Brigade in column.

b. **Brigade on Line.** A brigade may be on line with or without a reserve.

(1) ***With a reserve.*** This formation consists of two or more battalions of the brigade on line with the remaining forces designated as the brigade reserve (Figure 4-7). The reserve provides flexibility and security because it is a major force that can exploit the success of, or assume the mission of, a leading battalion This formation allows the brigade to attack on a broad front. This formation may be used—

- Against defensive positions when great depth in the attack is unnecessary.
- In the initial attack against an enemy position known to be so thin and weak that it can be ruptured by an attack on a relatively wide front.
- In the envelopment when the assailable flank is of the extent that the brigade can envelop on a broad front.

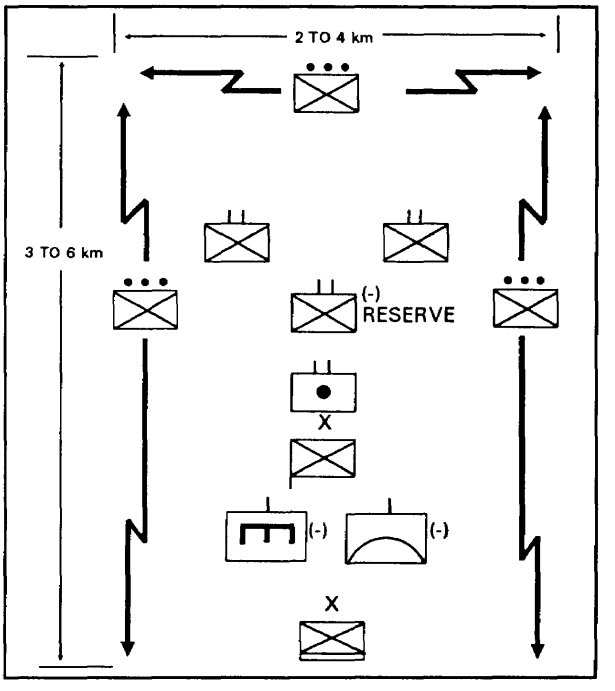


Figure 4-7. Brigade on line with a reserve.

(2) ***Without a reserve.*** When the requirement for speed outweighs that of security, this formation may be used with two or more battalions abreast without a reserve (Figure 4-8). Another use is to exploit a friendly nuclear or chemical attack on an extended front. Reconnaissance across the brigade front is essential to provide knowledge of enemy dispositions and areas of nuclear or chemical contamination. This enables forces to reposition as necessary to maintain the momentum of the attack. The terrain must be suitable for this formatting and the enemy situation must not initially dictate a reserve. This formation needs adequate maneuver space and avenues of approach and sufficient gaps or weak spots in the enemy line. The brigade must also be capable of delaying decisive action by the enemy reserves through the employment of fire support, screening forces, or appropriate maneuver. Once contact is made, the commander may designate the least committed unit to provide an on-order reserve.

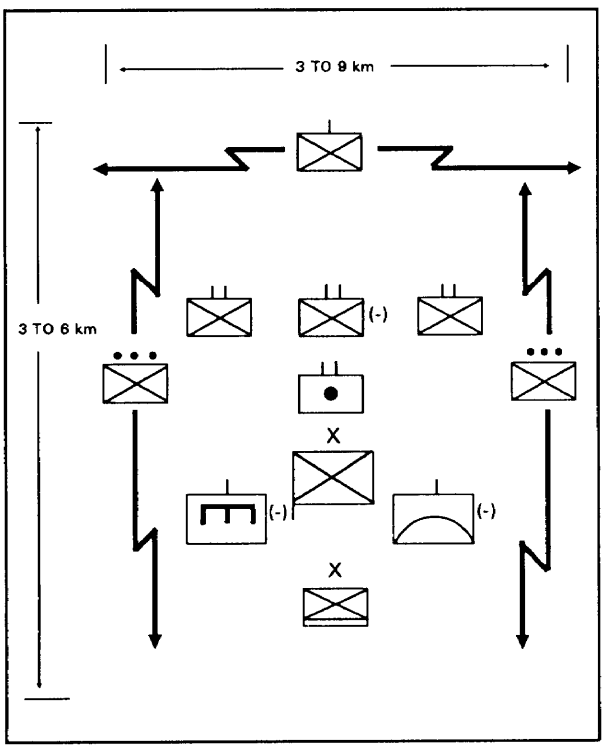


Figure 4-8. Brigade on line without a reserve.

c. **Brigade in Echelon.** This formation is used when advancing in a wide zone, when a flank threat exists, or when the envelopment of an enemy force is planned. The echelon formation provides good flank security and depth, but flexibility and ability to develop combat power to the front is more limited than in some other formations (Figure 4-9).

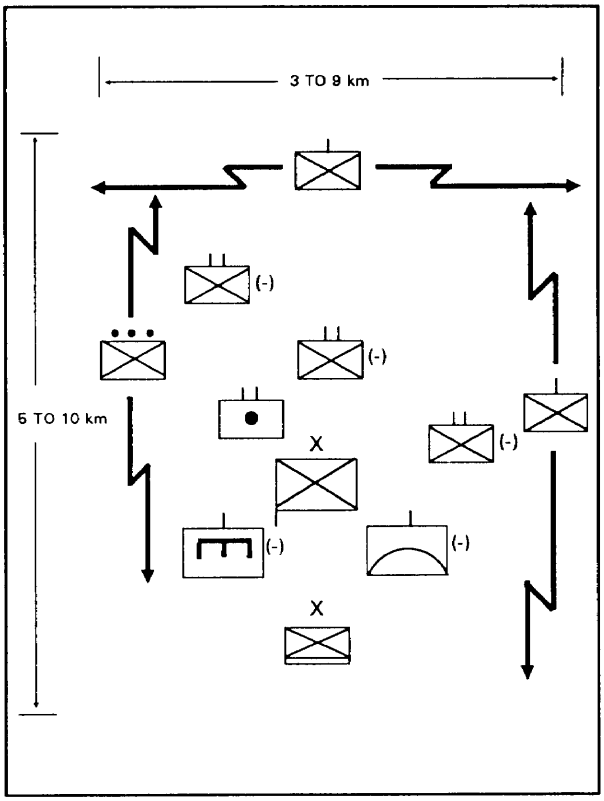


Figure 4-9. Brigade/battalion in echelon.

d. **Brigade Vee.** When two or more battalion TFs of the brigade are on line, any remaining battalion TFs may be designated as the brigade reserve. The reserve can exploit success, assume the mission of the leading TF, or counter enemy threats to the brigade mission. The brigade vee (Figure 4-10, page 4-10) may be employed when great depth in the attack is not required, such as in the limited objective attack. It may also be used in the initial attack against a weak enemy, vulnerable to defeat by an attack on a reactively wide front. In the envelopment, this formation can be used when the brigade can envelop an assailable flank on a broad front. The lead TFs receive the priority of fire support.

e. **Brigade Wedge** Like the brigade vee, the brigade wedge (Figure 4-11, page 4-10) offers the commander flexibility and security in all directions. It is often used when the enemy situation is vague, and contact is imminent. The wedge facilitates control and permits sustained effort by reserving two task forces for maneuver against the enemy.

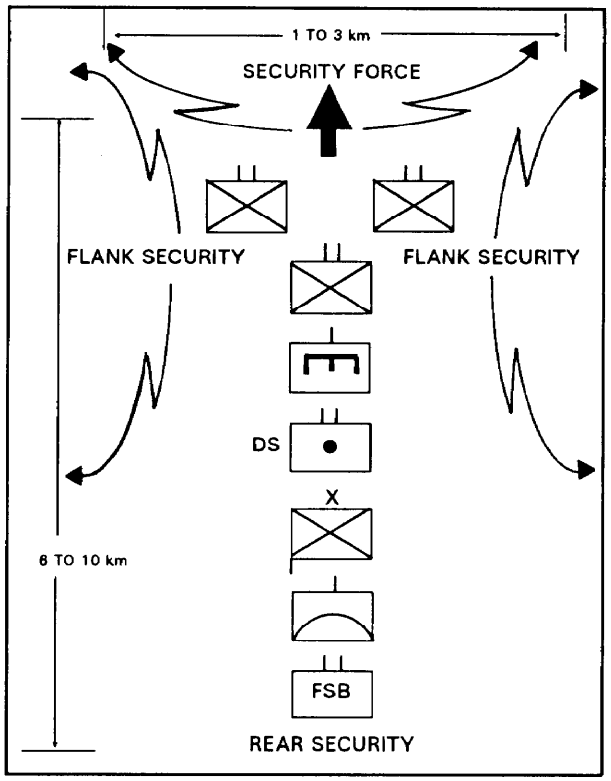


Figure 4-10. Brigade vee.

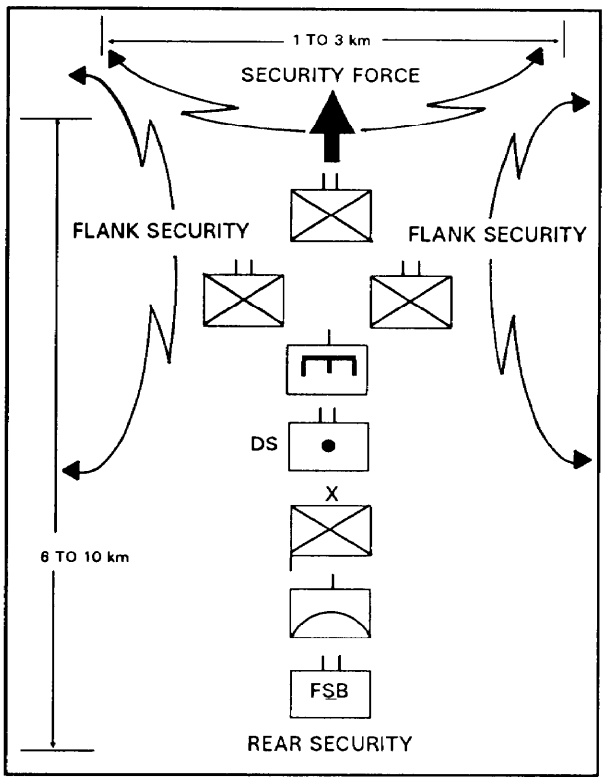


Figure 4-11. Brigade wedge.

NOTE: Size, composition and distance of operation from the main body for advance, flank, and rear security will vary according to the comander's estimate of the situation.

Section II
TYPES OF OFFENSIVE OPERATIONS

The brigade prepares for offensive operations that support the scheme of maneuver. The types of operations may be conducted in sequence in a successful battle, beginning with a movement to contact to locate the enemy and ending with the destruction of the enemy through pursuit. The four general forms of the tactical offense are—

- Movement to contact.
- Attack.
- Exploitation.
- Pursuit.

Brigades may conduct both hasty and deliberate attacks.

4-7. MOVEMENT TO CONTACT

A movement to contact is an attack to gain or reestablish contact with the enemy. It is used when the tactical situation is not clear or when the enemy has broken contact.

a. The brigade is normally assigned an axis of advance or zone of action and an objective. Although a movement to conflict may result in taking a terrain objective, the primary focus should be on the enemy force.

b. A movement to contact must maintain the commander's freedom of action upon contact if the commander is to maintain the initiative. The following principles apply to a movement to contact:

- Lead with a small, mobile, self-contained force to locate and fix the enemy.
- Task-organize the brigade to be able to deploy and attack rapidly in any direction.
- Maintain mutual supporting distances to facilitate response.
- Use aggressive movement.
- Use decentralized execution.

c. The key fire support task during a movement to contact is to provide immediate responsive fires to the maneuver units initially making contact. Consider the following options:

- Establish priority of artillery fires and assign priority targets to forces most likely to make the first contact.
- Assign COLTs to increase the number of trained observers looking into likely engagement areas.
- Establish quick-fire channels to provide lead elements a direct link to the field artillery battalion.

d. Aircraft that provide CAS, air interdiction and airlift of troops and supplies can also provide information on the terrain to be traversed. They can detect enemy units, obstacles, or movement in the area in which the brigade can conduct a movement to conflict. Intelligence units at division or corps and USAF aircraft with long-range surveillance equipment may locate the enemy before contact.

e. Consider establishing priority of artillery fires and assigning priority targets to forces most likely to make the first conflct assigning COLTs to increase the number of trained observers looking into likely engagement areas, and establishing quick-fire channels to provide lead elements with a direct link to the field artillery battalion.

f. Air defense systems protect the brigade movement by moving ADA with security forces to selected sites forward, to the flanks, and to the rear of the main body. Dispersed formations reduce vulnerability to nuclear or chemical attack, but they also complicate C2 and mutual support. However, reconnaissiance and liaison between units can reduce these problems. The brigade's CSS units must also be capable of uninterrupted movement.

g. The brigade main CP normally displaces as far forward as possible before starting movement then displaces as required to provide continuous support. The tactical CP operates forward with the main body to ease decision making and transition to other missions.

h. In organizing for a movement to contact, the brigade commander must anticipate contact with the enemy during movement. He considers requirements for maneuver and fire support upon contact. The infantry brigade uses one of three techniques to conduct a movement to contact—the approach march, the search and attack, and the reconnaissance in force.

(1) The approach march technique is one technique used for conducting a movement to contact. It is used when direct contact with the enemy is imminent. The brigade is fully or partially deployed. It is used to develop the situation early to provide an advantage before decisive engagement. The brigade is assigned an axis of advance or a zone, and march objectives are assigned to orient movement. The focus of the movement to contact remains enemy, not terrain. The brigade may not be required to seize, hold or occupy the objectives. The march objective can be any terrain feature that is easy to find and that is a possible enemy location. If the unit does not contact the enemy before it reaches the last objective, it establishes a hasty defense and seeks guidance from higher headquarters. The brigade usually establishes advance, flank, and rear guards to protect the main body.

(a) ***Advance guard.*** The main body normally furnishes the lead element and controls the advance guard. The advance guard is organized to fight through small concentrations of enemy forces. It makes sure the main body can deploy uninterrupted into attack formations. Required CS, such as engineers and artillery, are integrated into the advance guard. The R&S elements and systems assist in detecting the enemy before actual contact.

(b) ***Flank and rear guards.*** Flank and rear guards protect the main body from ground observation and surprise attack. These guards must have enough combat power to defeat enemy forces or to delay an enemy attack long enough to allow the main body to deploy. They operate under control of the brigade. The flank guard travels on routes parallel to the main body and within range of supporting artillery. It moves by continuous marching or by successive or alternate bounds to occupy key positions on the flanks of the main body. The rear guard follows the main body and provides rear security to the brigade. If adjacent or following units secure the flanks or rear of the brigade, the size of the brigade flank and rear guards can be smaller.

(c) ***Main body.*** The main body contains the bulk of the brigade's combat power. The main body must be capable of conducting either a hasty attack or a defense. The march formation of the main body must permit the greatest flexibility during movement and upon contact with the enemy.

(2) The search and attack technique is used when the enemy is operating in small, dispersed elements or when the task is to deny the enemy movement in an area. The battalion is the basic operational unit in search and attack operations. The brigade assists by ensuring the availability of adequate supporting fires, mobile transportation assets, timely and accurate intelligence, and reserve forces. Search and attack operations are accomplished by organizing the brigade into find fix, and finish forces; each has a specific task and purpose. The finish force is the main effort. Some considerations for conducting search and attack operations include:

(a) The IPB process is critical to the conduct of search and attack. The brigade does not usually have the luxury of conducting a police call type search of the zone. The S2 must focus the brigade's search efforts on likely enemy locations. The enemy situation template must be continuously refined as new information becomes available.

(b) The brigade commander task organizes the finish force first ensuring that it has enough combat power based on the anticipated size of the enemy. The finish force may move at some distance behind the find force, or it may be at a PZ and air assault to the objective once it is located. The air assault technique is dependent on the availability of LZs near the objective, weather, and availability of aircraft. The finish force must be responsive enough to have reached the objective before the enemy can displace. The S2 must provide the commander with his estimate of how long it will take the enemy to displace.

(c) The fix force isolates the enemy once the find force finds it. It blocks both escape and reinforcement routes. Indirect fires are incorporated into the fix plan. The fix force is placed to block routes identified by the S2. Depending on the mobility of the enemy and the likelihood of the find force being compromised, the fix force may have to be emplaced before the find force enters the AO.

(d) The size of the find force will be dependent on the degree of certainty associated with the enemy ternplate. The more vague the situation is, the larger the find force will be. The find force will consist of infantry, air, and electronic assets. It usually uses zone reconnaissance techniques to reconnoiter NAIs identified by the S2. The brigade fix-and-finish plan must consider the possibility of the find forces being compromised.

(e) Units may be rotated through the find, fix, and finish roles, but the main effort remains the finish force. Rotating roles may require a change in task organization and additional time for rehearsal.

(f) Available fire support must provide flexible, rapid support throughout the area of operation. This includes the ability to clear fires rapidly. In order to clear fires rapidly, units must track and report the locations of the unit's subordinate units. The capability must exist to mass fires quickly in support of the main effort. Because of the uncertainty of the enemy situation the commander avoids command or support relationships that prevent shifting assets when necessary. Supporting fires should be flexible and destructive. They should also enhance the ability of a highly mobile attack force to destroy an enemy force located and fixed by other forces.

(g) The brigade commander provides the necessary control, but he allows for decentralized actions and small-unit initiative to the greatest extent possible. This includes establishing the proper graphic control measures to control movement and the synchronization of all brigade assets to enhance combat power.

(3) Reconnaissance in force is a movement to contact technique used to obtain information and to locate and test enemy disposition, strengths, and reactions. Although its primary purpose is reconnaissance, the reconnaissance in force may discover weaknesses in the enemy dispositions which, if promptly exploited, would permit tactical success. The brigade commander may conduct his own reconnaissance in force or conduct a reconnaissance in force at the direction of a higher headquarters.

(a) When deciding to reconnoiter in force, the commander considers the following:

- His knowledge of the enemy situation.
- Urgency and importance of additional information.
- Efficiency and speed of other intelligence collection agencies.
- Extent to which his plan of action may be divulged by the reconaissance in force.
- Possibility that the reconnaissance may lead to a general engagement.

(b) The reconnaissance in force is planned and executed as an attack with a limited objective (Figure 4-12). The objective should be of such importance than when threatened, it forces the enemy

to react. Securing a terrain objective is not the purpose—gaining the most information of the enemy is. The plan should address the possible withdrawal or extrication of the reconnoitering force if necessary. When possible, the objective should contribute to an envelopment or penetration of enemy defenses, thereby facilitating future operations.

(c) The reconnoitering force is normally at least battalion size. However, the size of the force depends on the mission and situation. The force must always be strong enough to make the enemy react. The brigade commander normally retains sufficient maneuver forces to exploit enemy weaknesses or extract his committed forces. The composition of the reconnoitering force may include:

- Infantry battalion (+).
- Artillery battery.
- Engineer platoon.
- ADA platoon.
- Additional assets (GSR teams, interrogation teams, and so forth).
- Army aviation (aero scouts).
- Additional signal assets.

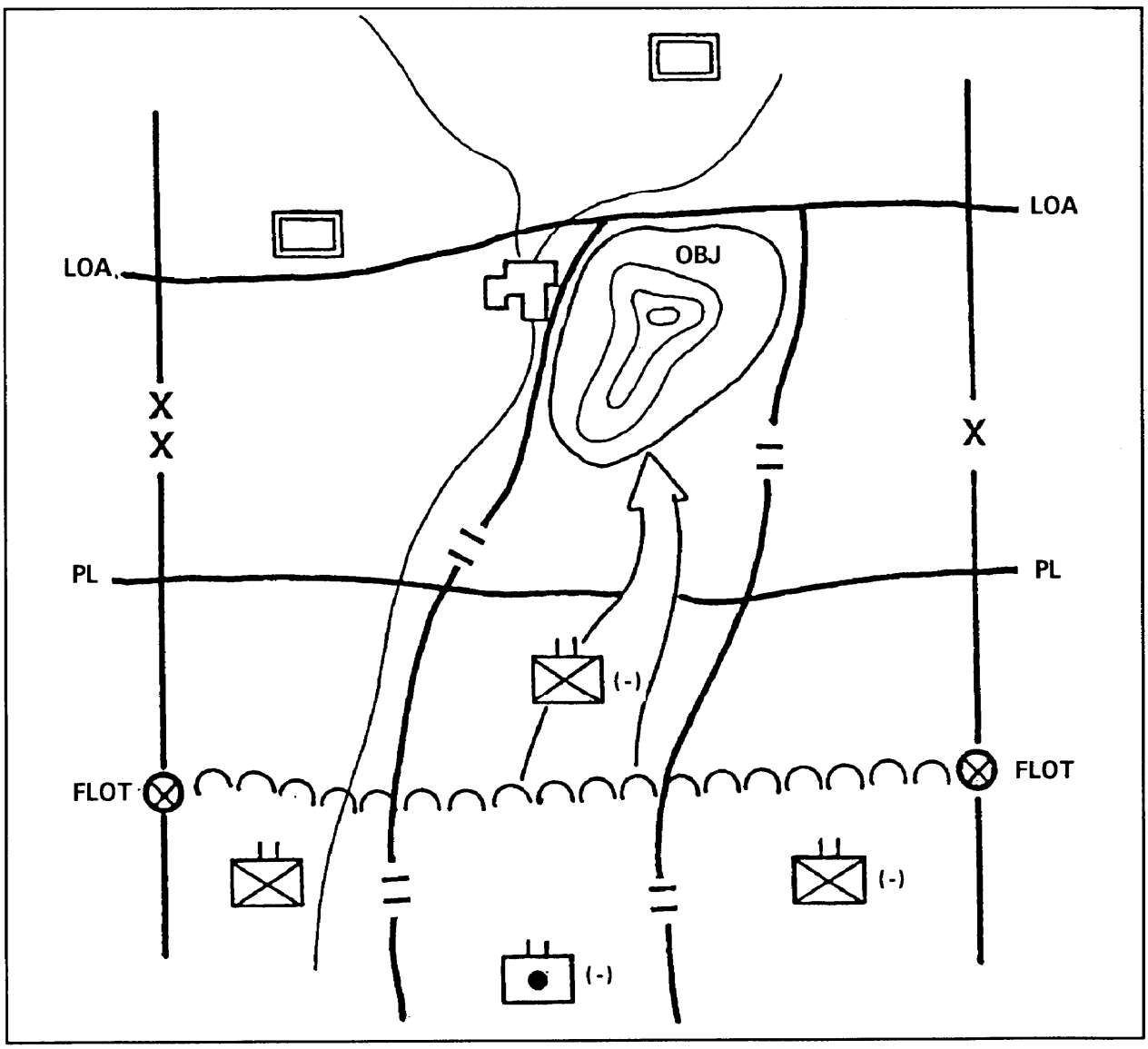


Figure 4-12. Brigade conducting a reconnaissance in force.

i. In a division's movement to contact the brigade may move as part of the division main body, or it may provide units for the division's advance, flank, or rear guards. It may control some division security forces or act as the covering force for the division. When assigned as a division covering force, the brigade is usually reinforced with aviation, artillery, engineers, and CAS (when available). Suppression of enemy air defense must be a top priority if CAS missions are planned. The brigade commander must provide clear guidance on bypassing to maintain momentum of movement while securing the main body. (See FM 71-100 for more information on division movement to contact.) The brigade commander forms his forces for movement on either a single axis or multiple axes.

(1) ***Single axis.*** The single axis is used for ease of control or when terrain permits movement on only one axis. The disadvantages are that it takes longer to deploy, increases column length and permits the enemy to achieve the greatest delay with the least force (Figure 4-13).

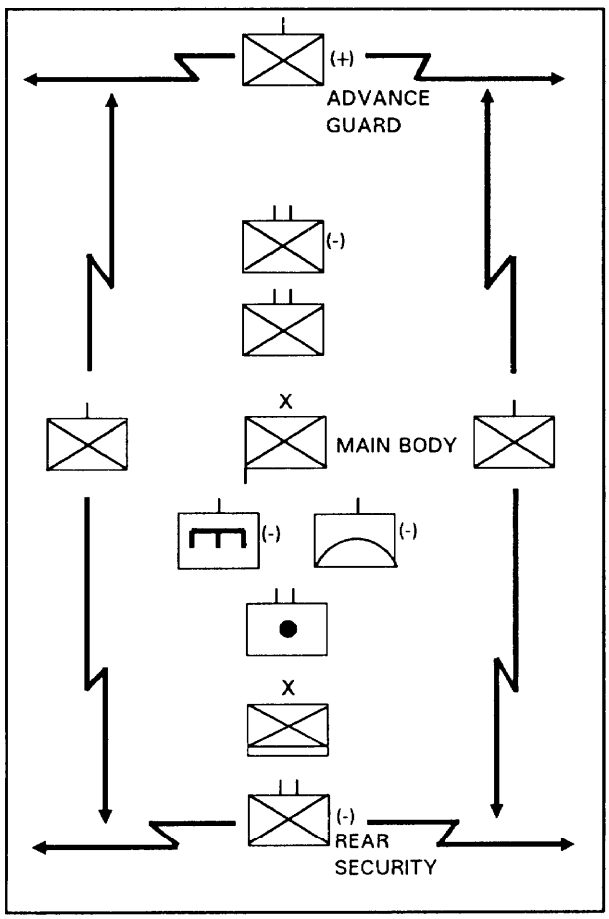


Figure 4-13. Brigade movement to contact on single axis.

(2) ***Multiple axes.*** Multiple axes are normally a movement to contact because they allow greater flank security and mutual support. Forces can deploy more quickly from multiple axes and can present multiple threats to the enemy. However, multiple axes do complicate C2 (Figure 3-14).

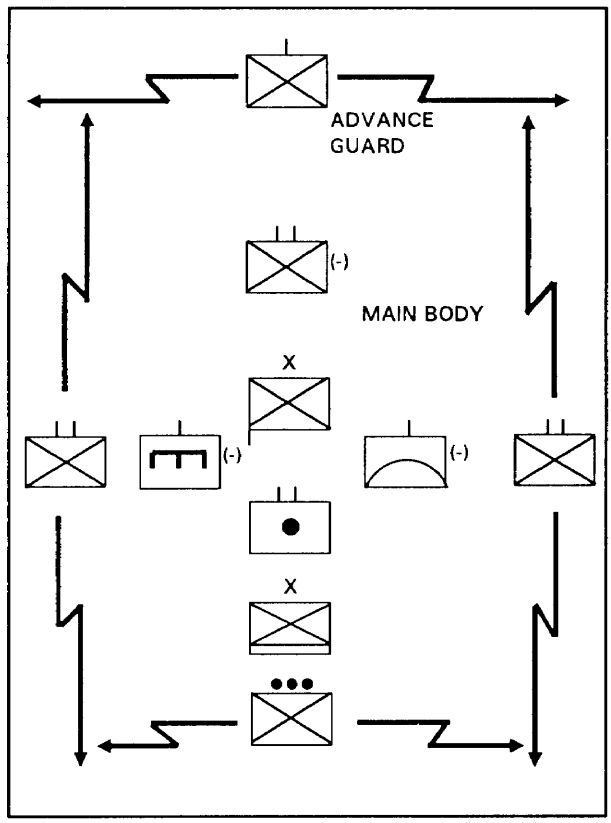


Figure 4-14. Brigade movement to contact on multiple axes.

j. A meeting engagement is normally the result of a movement to contact. It is the initial contact that occurs when a moving force makes contact with a moving or stationary enemy force. The main characteristics of a meeting engagement are a limited knowledge of the enemy and limited time for the commander to develop the situation. A meeting engagement is a decision point where the commander decides to retain the initiative and attack or where he takes up a hasty defense. The action ceases to be a meeting engagement when the situation has been developed and other actions are undertaken such as a hasty attack or defense. However, if the advance guard or leading battalion can defeat the enemy force, the movement to contact continues. The brigade commander must clearly state his intent and let subordinates know how much initiative they may use in reacting to a meeting engagement.

k. The goal, once contact is made, is to overcome the enemy quickly and decisively before he can effectively react. To do this, the commander must have his force prepared for contact, must have good information as to the situation (either through good reports or personal observation), and must immediately issue instructions for action. If the enemy force is also moving, speed in both decision making and execution is important.

4-8. ATTACK

Attacks can be hasty or deliberate. The principal difference is that in a deliberate attack there is more time available for planning and preparation.

a. **Hasty Attack.** A hasty attack is normally conducted following a movement to contact or a meeting engagement. The brigade attacks with the resources it has immediately available and with a minimum of reorganization to maintain momentum or to take advantage of the enemy situation. Attacking units may bypass local obstacles and pockets of resistance that do not threaten overall success, according to the higher commander's intent. The reduction of bypassed enemy units then becomes the responsibility of the higher commander. The commander must consider the inherent danger that bypassed enemy units can inflict on trail CS and CSS assets.

(1) Fire support planning for the movement to contact and the hasty attack is a continuous process. The FSCOORD must control the displacement of artillery so that fire support to committed units is not interrupted. The division attacks deep targets, suppresses enemy air defense, and provides counterfire. Specific considerations are as follow:

- Plan fires on likely counter attack routes.
- Use preparation fires to fix the enemy in coordination with the unit's assault force.
- Synchronization direct and indirect fires at the point of penetration for the final assault. Consider requesting additional fire support assets from the division artillery.
- Choose only those targets that are critical and attack the targets ruthlessly. Elaborate plans will fail.
- Consider FASCAM to block conter attack routes and smoke to screen friendly movement.
- Recommend other radar zones to prioritize the engagement of enemy artillery that can affect the brigade's operations.

(2) The commander must quickly identify the critical points in the battle where deep fires are most useful. In the movement to conflict and hasty attack, tactical air support and deep fires can be used to interdict the movement of enemy counterattack forces, to isolate the enemy at times and places critical to the brigade, and to destroy the enemy's artillery units, CPs, and logistic units.

(3) When opposing forces are moving, the initial advantage in hasty attacks belongs to the force that first fixes and contains the enemy, deploys into combat formations, and maneuvers additional forces to the flank and rear from where the enemy can be destroyed by fire or assault. The reaction is RDRD: return fire, deploy, report and develop the situation.

(4) Preparation time is short, and orders must be brief during the hasty attack. The brigade commander should be well forward to influence the battle. Although tactical CPs need to be close to their commanders for assistance in battle direction and information flow, their movement must not interfere with attack formations.

(5) Commanders ensure visual contact is maintained with leading units. When one battalion follows another, the trailing battalion is responsible for maintaining contact. The main CP should monitor the leading force's command net. If the hasty attack is not succeeding, the commander may elect to establish a defense on the best defensible terrain until greater combat power can be achieved.

(6) The most critical control measures are objectives, phase lines, checkpoints, axes of advance, and boundaries. Intermediate objectives may be used to coordinate the essential movements of attacking forces. On-order objectives are used to orient following forces and reserves quickly, this increases the flexibility of tactical maneuver.

(7) When the maneuver force attacks, the attacking battalions should receive FAAD priority.

(8) Engineers should provide breaching support to maneuver forces, protect flanks by creating obstacles on avenues of approach, and assist in organizing captured ground against counterattacks. Engineers should plan for situational obstacles on the flanks and upon consolidation on the objective.

b. **Deliberate Attack.** A deliberate attack is characterized by thorough, detailed planning; specific task organization; rapid concentration of forces; exploitation of enemy weaknesses; and violent execution. It may involve overcoming strong enemy forces in established positions. A deliberate attack is undertaken after thorough reconnaissance, acquisition

and development of targets, and analysis of all other factors affecting the situation. This type of offensive operation requires a sudden, violent concentration of combat power in an area where there is a high probability of surprise and success.

(1) This type of attack is usually necessary against a well-organized enemy who cannot be turned or bypassed. Normally, the scheme of maneuver for the deliberate attack employs three elements—assault, support, and breach. The assault is the main effort.

(2) In organizing for a deliberate attack, the brigade commander must make the most of his available combat power. If given additional forces, he must integrate them with brigade forces to create the most potent force. The following considerations based on METT-T apply to the conduct of a deliberate attack:

(a) An enemy oriented deliberate attack requires knowledge of the enemy location. Otherwise, it is a movement to contact. A sizeable reconnaissance effort will usually be required.

(b) Use terrain to avoid enemy fires and to exploit gaps in his defenses. This dictates the development of a comprehensive reconnaissance plan.

(c) Use smoke to conceal movement.

(d) Use artillery and mortars (including smoke) to suppress adjacent enemy positions. Concentrate fires at the breach point.

(e) Plan redundant breaching assets.

(f) Attack adjacent positions by fire or maneuver. The support element must isolate the objective.

(g) Mark the breach lane. Use a breach OIC to control passage through the breach.

(h) Preparation fires may be used, but they forfeit surprise. If fires are used, the assault must quickly follow the preparation. Consider echeloning fires from larger (artillery) to smaller (mortar) systems.

(i) Position the brigade reserve within the formation to permit rapid movement to the point of probable employment and to provide security.

(j) After securing the brigade objective, reorganize rapidly and prepare to continue the attack on order. Make the greatest use of supporting fires and use minimum forces to retain control of objectives. Disperse the remaining units to defend against an enemy counterattack or to prepare to continue the attack. Designate elements to maintain contact with the enemy to keep him off balance and to obtain information.

(k) If the brigade is required to continue the attack issue a FRAGO to subordinate units with instructions on the following:

- Designation of main effort and how it is to be supported.
- Resupply of units.
- Passage of lines within the brigade.
- Shift in direction of movement.

4-9. EXPLOITATION

This is the bold continuation of an attack to increase success and take advantage of weakened or collapsed enemy defenses. Its purpose is to prevent reconstitution of enemy defenses, prevent enemy withdrawal, secure deep objectives, and destroy enemy C2 facilities, logistics, and forces.

a. The exploitation is initiated when an enemy force is having difficulty maintaining its position. Although local exploitations may appear insignificant, their cumulative effects can be decisive. Depending on the situation and its task organization, the brigade can exploit its own success, it can be used as an exploiting force for a higher echelon, or it can follow and support another exploiting force. Exploiting forces can have the mission of securing objectives deep in the enemy's rear, cutting lines of communications, surrounding and destroying enemy forces, denying escape routes to an encircled force, or destroying enemy reserves.

b. The commander must be ready at all times to use every opportunity afforded by the enemy for exploitation. These are indicated by an increase in prisoners captured; an increase in abandoned materiel; and the overrunning of artillery, command facilities, signal installations, and supply dumps.

c. The transition from the deliberate attack to the exploitation may be abrupt or so gradual it is hardly distinguishable. After transition, units should make every effort to continue the advance without halting. Bypass enemy resistance when possible and make the most of available fire support when appropriate targets are presented. Fire support, target acquisition systems, and observers are positioned well forward with lead elements. Key fire support considerations are as follows:

- Plan fires to support hasty attacks.
- Consider using CAS and attack helicopters, which are well suited for exploitation.
- Coordinate with the FSO to establish FSCM between exploiting and converging forces.

- Keep the FSO advised of locations of lead elements to facilitate positive clearance of fires.
- Use FASCAM to delay or fix the enemy. Ensure the FSO considers the loss of maneuver space.

d. Once the exploitation begins, carry it out to the final objective. The enemy should be given no relief from offensive pressure. Should the lead force be unable to continue the mission, follow-and-assume forces must rapidly assume responsibility. Enemy troops encountered are not engaged unless they are a threat to the brigade or cannot be bypassed. This decision rests with the next higher commander; however, freedom of action is normally delegated to commanders in the exploitation.

e. Follow-and-support units clear the bypassed areas and expand the zone of exploitation. Follow-and-support forces are normally battalion or higher formations employed primarily in exploitation and pursuit operations to facilitate maintaining the momentum of the attack. They may also be used in a penetration. A force with a follow-and-support mission is not a reserve but a committed unit. Follow-and-support forces assist attacking units by relieving them of tasks that would otherwise slow their advance. Follow-and-support units can undertake the following:

- Destroy bypassed pockets of resistance.
- Relieve elements of the attacking force that have been left to block or contain enemy forces.
- Secure the flanks of a penetration to prevent the enemy from closing it.
- Expand the penetration by breaking through other enemy defenses.
- Secure lines of communications.
- Secure key terrain overrun or bypassed by the attacking unit.
- Protect key installations.
- Guard prisoners of war.
- Reinforce or assume mission of leading force.
- Widen breach lanes.
- Clear MSRs.

f. When augmented with additional CSS assets, these follow-and-supprt forces may also be assigned to control and process refugees and collect and manage casualties.

g. Decentralized execution is characteristic of the exploitation; however, the commander maintains enough control to prevent overextension of the command. Minimum control measures are used. Tactical air reconnaissance and Army aircraft maintain contact with the enemy movements and keep the commander advised of enemy activities. Close air support aircraft, deep FA fires, and attack helicopters can attack moving enemy reserves, withdrawing enemy columns, enemy constrictions at choke points, and enemy forces that threaten the flanks of the exploiting force. Security of ground supply columns must be considered and an aerial resupply may be necessary. Exploiting forces take advantage of captured supplies whenever possible.

4-10. PURSUIT

The pursuit normally follows a successful exploitation. The primary function of pursuit is to complete the destruction of the enemy force. As a successful exploitation develops and the enemy begins to lose the ability to influence the situation the brigade may be ordered to execute the pursuit. In the pursuit the brigade may point its advance toward a physical objective; however, the mission is the destruction of the enemy's main force.

a. Friendly forces in the exploitation are alert for indicators of an enemy collapse that would permit a pursuit operation. There are several indicators of a weakening enemy:

- Continued advance without strong enemy reaction.
- An increased number of captured prisoners, abandoned weapons, and unburied dead.
- A lessening of hostile artillery fire.
- A lack of enemy countermeasures.

b. The pursuit is ordered when the enemy force can no longer maintain its position and tries to escape. The commander exerts unrelenting pressure to keep the enemy force from reorganizing and preparing its defenses. The brigade may be a part of a corps or division pursuit, functioning as either the direct-pressure or encircling force.

c. The mission of a direct-pressure force is to prevent enemy disengagement and subsequent reorganization of the defense and to inflict the most casualties. Leading elements contain or bypass small enemy pockets of resistance that are then reduced by follow-and-support units. At every opportunity, the direct pressure force envelops, cuts off, and destroys enemy elements, provided such actions do not interfere with its primary mission. The enemy is not allowed to break contact.

d. The mission of an encircling force is to get behind the enemy and block his escape so that he can

be destroyed between the direct-pressure and encircling forces. The encircling force advances along or flies over routes paralleling the enemy's line of retreat to reach defiles, communication centers, bridges, and other key terrain ahead of the enemy main force. When conditions permit, brigades attempt a double envelopment of retreating enemy main forces or their subordinate elements. Hostile rear guards or forces on flank positions are not permitted to divert the main force from its mission. Air assault and airborne units are effective as enveloping forces. If the encircling force cannot outdistance the enemy, it attacks the enemy main body on its flank. If the enemy's main force establishes itself on a position from which it cannot be easily dislodged, the pursuing commander launches a hasty attack to restore fluidity.

e. Fire support systems are placed well forward with the lead elements of the direct-pressure force. Such positioning facilitates the delivery of fire support for both the direct-pressure and encircling force. Fire support performs two key tasks in the pursuit: slowing the retreat of enemy forces and preventing resupply and reinforcement of enemy force fires. Brigade CSS assets should follow the direct-pressure force to enhance their security. During a pursuit, the brigade may also serve as the division follow-and-support force. (See paragraph 4-10 on exploitation.)

Section III
OTHER OFFENSIVE OPERATIONS

Some offensive operations require special planning by virtue of their unique purpose or the circumstances in which they are conducted.

4-11. FEINTS AND DEMONSTRATIONS

The purpose of feints and demonstrations is to deceive the enemy by giving a false impression of the commander's intent. (FM 90-2 discusses tactical deception in detail.)

a. **Feint** The purpose of a feint is to draw the enemy's attention away from the area of the main attack. Feints must be of sufficient strength and composition to cause the desired enemy reaction. It is normally conducted by brigade and smaller units. They must appear real, therefore some contact with the enemy is required. This operation is most effective when it appears to pose a definite threat to the enemy, when the enemy has a large reserve that he has consistently committed early, or when there are several feasible courses of action open to the brigade commander. A properly planned and executed feint can cause the enemy to—

- Reposition main forces.
- Commit reserves too early.
- Shift supporting fires from the area of concentration.
- Reveal his defensive positions and fires.
- Become confused and indecisive.

b. **Demonstration.** A demonstration is an attack or show of force in an area where a decision is not being sought. Its purpose is to deceive the enemy without making contact. Forces use fires, movement smoke, EW assets, and communications equipment in support of a deception plan to help conduct a demonstration.

4-12. RAIDS

Raids are operations involving swift penetration of hostile territory to secure information to confuse the enemy, or to destroy his installations. Plans are made for the withdrawal of personnel at the completion of the mission.

a. Usually, raids coincide with other offensive operations either in a supporting or supported role. They are characterized by swift, violent action terminating in a planned withdrawal upon completing the assigned mission. Raids are usually planned at brigade level and executed at battalion level. Raids are usually conducted during limited visibility. The approach route should be different from the withdrawal route, which security elements must ensure is open.

b. The raiding force usually carries everything it requires to sustain itself during the operation. If not, resupply is normally by aircraft. Factors governing the amount of logistic support accompanying a raiding force include the—

- Type and number of enemy vehicles and weapons.
- Movement distance to the raid objective area.
- Length of time the raid force is to remain in enemy territory.
- Expected enemy resistance.

Section IV
LIMITED VISIBILITY OPERATIONS

The brigade often attacks at night or under other conditions of limited visibility. This offers the advantage of surprise, reduces enemy target acquisition and effectiveness of weapons, and reduces mutual support between adjacent enemy positions.

4-13. NIGHT/LIMITED VISIBILITY ATTACKS

Night/limited visibility attacks are an integral part of the brigade offensive operations; they are routine operations for infantry. The brigade may conduct offensive night operations to—

- Continue an attack that began in daylight.
- Seize or secure key terrain for future operations.
- Achieve surprise.
- Penetrate strong enemy defenses.
- Offset enemy air superiority.

a. **Types.** There are two basic types of limited visibility attacks—nonilluminated and illuminated. However, illumination is normally planned for every limited visibility attack so that it can be readily available if the enemy detects the attack. Permission to fire illumination may be retained at brigade or allocated to battalions. This depends on how the light may affect adjacent units.

(1) ***Nonilluminated attack.*** The infantry brigade normally conducts nonilluminated attacks to exploit its technological advantage. Nonilluminated, nonsupported attacks offer the best chance of gaining surprise. Care must be taken to avoid converging forces and fires. The penetration form of maneuver is one way of accomplishing this. For brigades that do not have NVDs, a linear assault is one technique. Another option is to infiltrate close to the enemy and then assault under illumination.

(2) ***Illuminated attacks.*** Illuminated, supported attacks are almost like daylight attacks. They may be most effective when speed is essentiail, when there is limited time for reconnaissance, or when the enemy is weak or disorganized. Once illumination is begun, it should be continued until the objective is secured. Sufficient ammunition must be available. The illumination rounds may be fired to impact on the ground, providing both light and markings to orient on the objective. They may also be placed behind the objective and in the air causing the enemy to be silhouetted.

(3) ***Combination.*** Illumination after a nonilluminated attack objective is secured may be used to support consolidation and reorganization. The brigade could also conduct both an illuminated and a nonilluminated attack at the same time but in different areas.

b. **Basic Considerations.** The following specific actions need to be taken if a night offensive operation is to succeed.

- Leaders may have to move forward.
- Keep the plan simple.
- Organize forces properly.
- Distribute organic night vision equipment.
- Conceal the preparations.
- Control the maneuvering forces.
- Coordiniate the support elements.
- Schedule rehearsals during daylight and limited visibility.
- Schedule additional preparation time.
- Perform a detailed recormaiss.ante and consider the use of guides.

c. **Additional Considerations.** Plan, prepare, and conduct night operations the same as those conducted in daylight. However, the following considerations also apply:

(1) More time is necessary to execute movements and emplace weapon systems.

(2) A clear definition of objectives and routes to them is essential.

(3) Intermediate objectives are necessary for control and to aid in maintaining direction.

(4) Smoke can further degrade enemy, as well as friendly, capabilities.

(5) Night attack control measures are normally quite restrictive (Figure 4-15, page 4-20). All control measures should be easily identifiable. The commander may use additional control measures to assist in C2. These may include the following:

(a) *Point of departure.* The PD is the exact place where units cross the LD. Normally, there will be more than one for each unit.

(b) *Release points.* A release point is a clearly defined control point on a route where the commander releases control of subordinate units to their commanders.

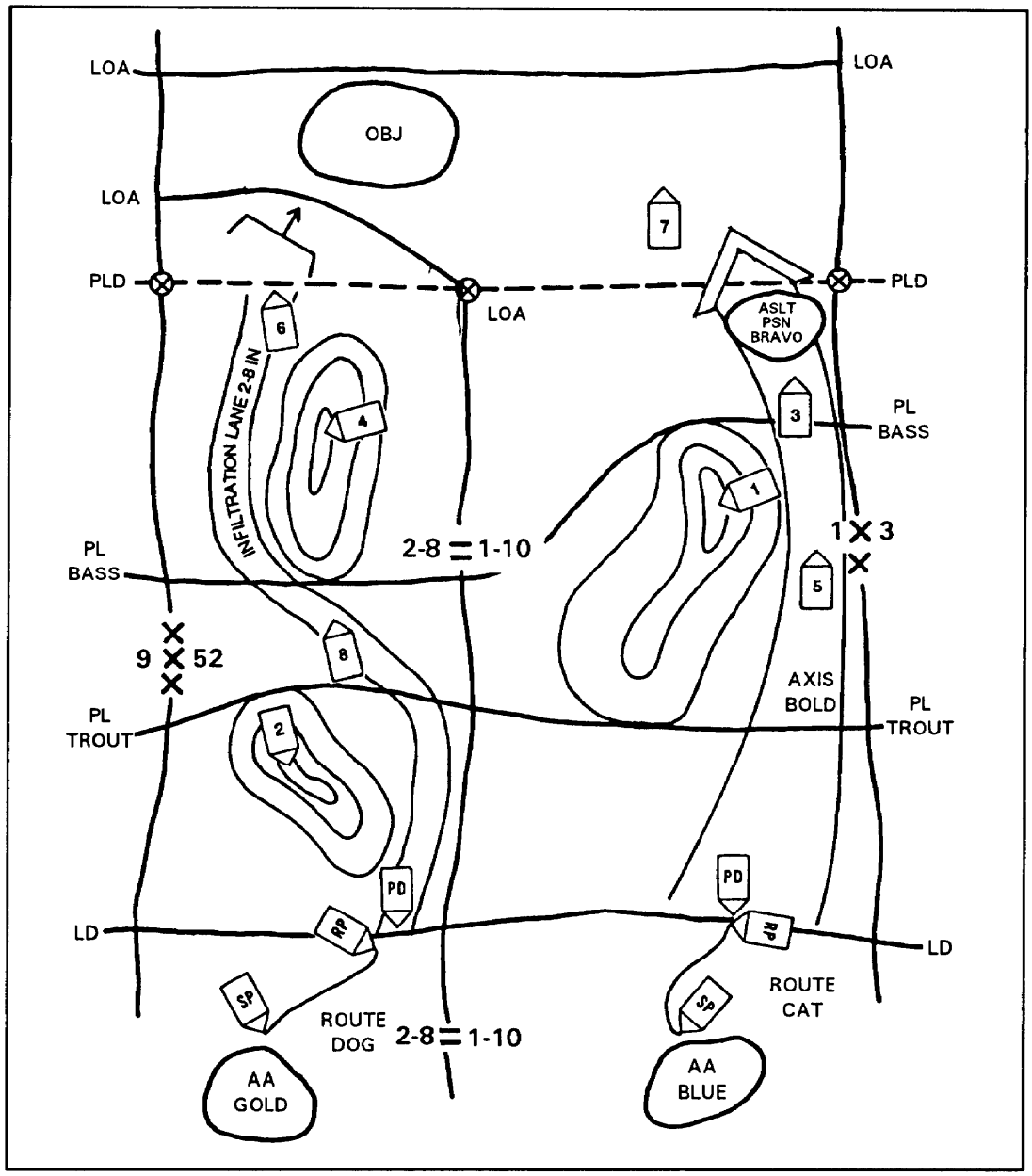


Figure 4-15. Brigade control measures for limited visibility attack.

(c) Probable line of deployment. The PLD is the line at which the brigade commander intends that his brigade be completely deployed before beginning the assault. If the attack is not discovered at the PLD, the brigade advances with stealth until discovered or ordered to assault. If obstacles must be breached, the PLD should be located on the enemy side of the obstacles whenever tactically feasible. This precludes deploying at the PLD or narrowing ranks to pass through gaps in obstacles and then redeploying.

(d) *Limit of advance.* This is easily recognized terrain feature beyond which attacking units will not advance. The limit of advance is a critical control measure since fire support elements are free to fire at targets beyond the CFL.

(6) Navigational aids and combat surveillance equipment may aid movement. Attack helicopters or AC-130s can provide excellent navigational guidance.

(7) Rehearsals on terrain and under light conditions similar to those expected in the attack are necessary.

(8) Reconnaissance is necessary in both daylight and during reduced visibility. Use reconnaissance to gain information about the terrain and the enemy. The following are examples of things to observe:

- Location of enemy positions.
- Nature of obstacles, barriers, and bypasses.
- Presence and number of enemy searchlights and night vision devices.
- Unoccupied sectors, gaps between sectors, or sectors held by weak enemy forces.
- Landmarks to coincide with graphic control measures.
- Terrain features that offer concealment.
- Routes to the LD, attack positions, PLD, objective, and limit of advance.
- Distance between checkpoints and phase lines.
- Location of TRPs.
- Structures or terrain on that horizon that can be used for guiding the direction of movement.

(9) Offensive operations at night may or may not have indirect-fire weapons support In determining the feasibility of a preparation weigh its probable effects on maneuver versus the effect of surprise stemming from an attack by stealth When not firing a preparation plan on-call fires for use in the event the element of surprise is lost. Plan fires to cover the attacking force if it must withdraw and to isolate the area of the attack. Also use indirect fires to aid in deception plans.

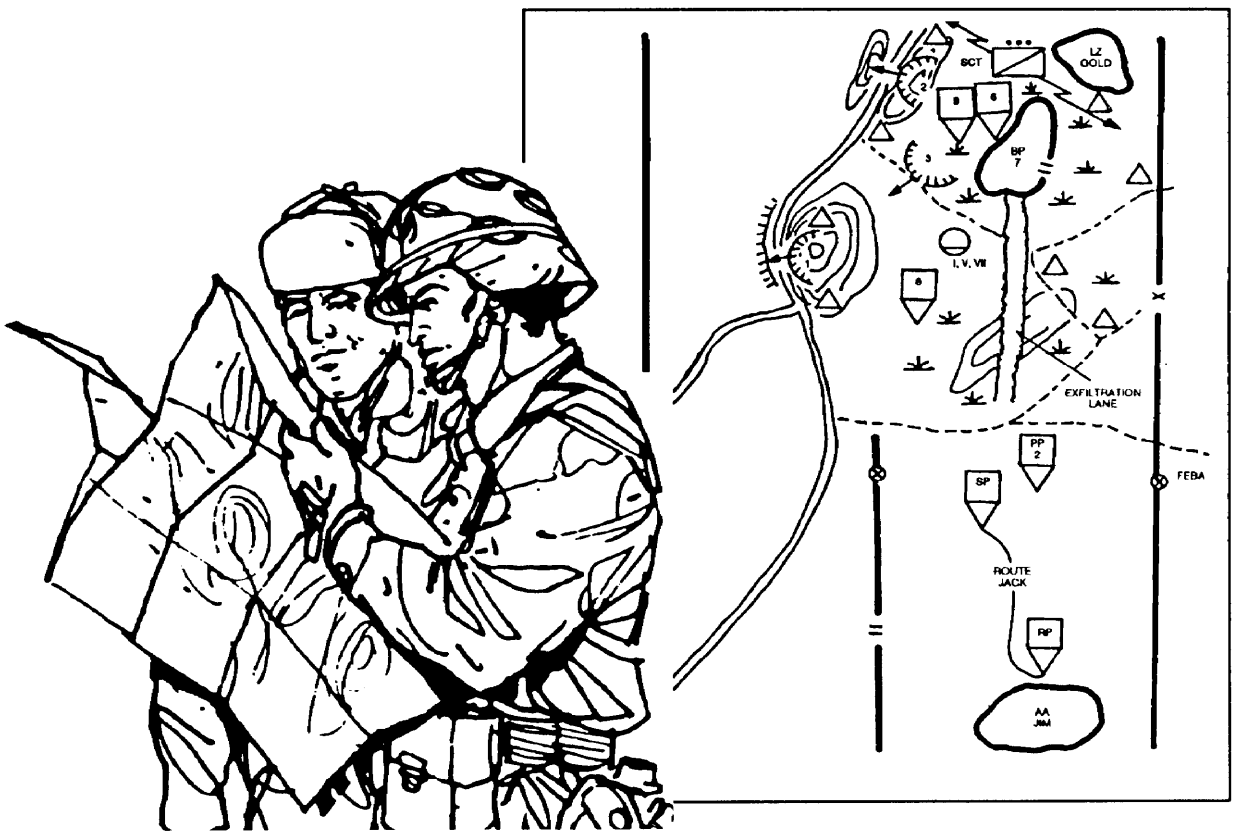
(10) Battlefield illumination aids in maintaining direction of movement and it facilitates coordination and control of maneuver forces and target acquisition. However, it reduces the element of surprise and the use of night vision devices. Carefully coordinate the use of illumination to avoid detrimental effects in adjacent brigade areas.

4-14. SMOKE OPERATIONS

Smoke is employed under proper METT-T conditions when it significantly increases friendly survivability without degrading operational capability. Smoke and obscurants are combat multipliers that can support the movement and positioning of forces on the battlefield and cover the logistical support of forces before, during, and after engagements with the enemy. Obscurants can conceal friendly operations, support battlefield deception activities, interfere with enemy target acquisition and fire-control systems, and disrupt enemy command and control. The smoke/decontamination platoon can provide smoke coverage from 0.5 to 1.7 km if smoke is to be 50 to 150 meters wide. The smoke screen can conceal ground maneuver, breaching, and recovery operations. Smoke can also be used for deception at night to counter enemy infrared sights.

Chapter 5

DEFENSIVE OPERATIONS



The immediate purpose of a defense is to defeat an enemy attack. Brigades perform a variety of operations in support of a division, corps, or JTF-level defense. They may attack, defend or delay across the full spectrum of the defensive framework as part of the division security, the main battle area, or reserve force. Brigades may also conduct offensive operations across the FLOT while the majority of the division or corps defends, or they may serve as a ground tactical force in support of rear operations. The infantry brigade conducts defensive operations to defeat an enemy atack, gain time, concentrate forces elsewhere, control key or decisive terrain, attrite enemy forces, or to retain tactical objectives. The ultimate purpose is to create conditions favorable to assumming the offense.

Future battlefields may be noncontiguous. Brigades are bypassed, penetrated, or encircled without loss of overall defensive integrity, but a penetration that threatens the integrity of the defense must be avoided The enemy's main effort must be identified and met with sufficient force and firepower. Periods in which the defender can develop superior combat power are brief, so the concentration of forces must be rapid and violent. The brigade must be able to defend by attacking the enemy throughout the depth of his formations from positions that are mutually supporting and arrayed in depth. A cohesive defense plan may incorporate ambushes, reverse slope positions, rapid violent counterattacks, and depth to disrupt the enemy.

Section I
FUNDAMENTALS OF BRIGADE DEFENSE

Brigade defenses combine fires, obstacles, and maneuver to create and exploit the exposed flank and rear of the enemy. The brigade uses existing and reinforcing obstacles to disrupt, turn, fix, or block the enemy attack. The enemy is forced onto unfavorable terrain where he receives destructive fires from mutually supporting positions. Additional battalions attack the depth of the enemy. Attack helicopters overwatch counterattacking or delaying forces and attack follow-on echelons in depth. Electronic warfare destroys the enemy's ability to command and control its forces and synchronize its artillery and air support. Indirect fires delay and weaken enemy forces, causing them to change avenues of approach, and limit their ability to resupply and reinforce committed forces. Smoke masks friendly locations, isolates enemy echelons, degrades the enemy's target acquisition, and further slows enemy maneuver. A thorough understanding of enemy doctrine is critical to the success of defensive operations.

5-1. CHARACTERISTICS OF DEFENSIVE OPERATIONS

Successful defensive operations are characterized by preparation, disruption, mass and concentration flexibility, and security.

a. Preparation. To properly prepare the defense, the commander must be familiar with the abilities and limitations of the enemy. This includes the enemy's organization, conduct of attack, weapons systems, and equipment. The terrain must be analyzed in detail from all perspectives and then verified from the ground. Emphasis is on preparing and concealing positions, routes, obstacles, logistical support, and command facilities. Deceptions are planned and prepared, and local rehearsals are conducted. Supplies are pre-positioned, and security forces are emplaced. Counterattack plans to support the brigade's defense and to place the brigade on the offense are key to retaining the initiative. Counterattack routes must be reconnoitered, improved, secured, and the counterattack rehearsed.

b. **Disruption.** The brigade must disrupt the synchronization of the enemy's operation to counter his initiative, to prevent his concentrating combat power against a part of the defense, and to force him to go where the brigade wants him to go. Disruption is achieved by defeating or misleading his reconnaissance forces, impeding his maneuver, disrupting his reserves, neutralizing his fire support, and interrupting his command and control. Defensive techniques vary with circumstances, but all defensive concepts of operation

aim at spoiling the attacker's synchronization. Strong security forces to defeat enemy reconnaissance, phony initial positions or dummy positions, and obstacles are some of the measures used to increase brigade security in the defense. Counterattack, counterbattery fires, obstacles, and retention of key or decisive terrain can be used to prevent the enemy from concentrating overwhelming strength against portions of the defense.

c. **Mass and Concentration.** The brigade commander must be able to concentrate forces and or mass the effects of fires at the decisive point and time. To accomplish this, he may economize in some areas, retain a reserve, shift priority of fires, and maneuver repeatedly to concentrate combat power during battle. Commanders must accept risks in some areas to concentrate for decisive action elsewhere. Obstacles, security forces, and fires assist in reducing these risks as forces are economized. The commander achieves concentration by designating a main effory, and he directs all other elements and assets to support and sustain this effort. He may also shift the forces by designating a new main effort as the situation changes. A commander weights the main effort by directing the tasks and purposes of supporting effort elements so as to create the conditions necessary for the main effort to accomplish its purpose. The commander may also weight the main effort by narrowing the sector, focusing counterattack plans in support of the main effort, assigning the main effort unit priority of obstacle preparation, giving the unit priority of indirect fire, and positioning the reserve to influence the main effort's area. Since concentration increases the risk of large losses from enemy fires, the concentrating forces must be masked by concealment and deception. The idea is to concentrate the effects of the forces, not to physically concentrate the forces themselves. Reconnaissance, surveillance, and security operations are vital to gaining the information and time needed to concentrate the brigade's forces and fires.

d. Flexibility. The brigade commander maintains his flexibility through detailed planning, sound preparation, organization in depth, retaining reserves and command and control. Flexibility requires the commander to "see the battlefield" to detect the enemy's scheme of maneuver in time to direct fires and maneuver against it. The commander does not limit his intelligence gathering efforts only to the forces in contact. He also concentrates on formations arrayed in depth. The enemy may try to bypass areas where the defense is strong. Hence, the brigade commander must ensure that he can detect and defeat the enemy along all possible avenues of approach. Aviation assets can be used to gather real-time intelligence. The brigade commander's plan must allow him to shift his main effort quickly if the situation changes while maintaining his synchronization. Also, alternate and supplementary positions are key to providing the flexibility he needs to effectively execute his defensive operations. Small reserves may be positioned near critical terrain or likely avenues of attack. Blocking positions, alternate positions, or even strongpoints may be established to deny the enemy a chance for a rapid breakthrough.

e. **Security.** The brigade commander must protect his force while in the defense. He normally establishes a security area. Security missions include screen, guard, and cover. However, the presence of a security force forward of the main battle area does not relieve the main battle area units from their own security responsibilities. All units must maintain security and contribute to the counterreconnaissance battle.

5-2. DEFENSIVE PATTERNS

The commander may use a variety of tactics, techniques, or procedures in the defense. The overall scheme must make the best use of maneuver and offensive tactics. Once the enemy has committed his forces, the defender's chief advantage is his ability to seize the initiative and counterattack over familiar ground. The defensive arrangements available to the commander include various combinations of mobile and area defenses. (FM 100-5 discusses mobile and area defense in detail.) Fire support considerations include the following:

- Consider HPTs for each phase of the defense. During the counter reconnaissance phase, targets will differ significantly from those in the MBA.
- Designate engagement criteria for each phase of the defense.
- Plan the CFL close to the forward elements to allow rapid engagement of enemy units.
- Consider NFAs around scout, COLT, and FO positions.
- When emplacing FSCMs, consider the minimum safe distance of each weapon system.

a. **Mobile Defensc.** The mobile defense aims to destroy enemy forces through decisive attack. A mobile defense uses a combination of offensive, defensive, and delaying actions. Divisions or larger forces normally conduct a mobile defense. A mobile defense is characterized by small forces committed to the defense of terrain and the use of a striking force to regain the initiative. It requires a committed striking force,

resourced for decisive attack against an exposed enemy. The striking force must have mobility equal or greater than that of the enemy force. Infantry brigades may be used in mobile defense to hold strongpoints in restrictive terrain, or strike unprepared infantry from close proximity.

b. **Area Defense.** An area defense denies the enemy access to designated terrain for a specific time, rather than destruction of the enemy. It differs from mobile defense in that the bulk of defending forces deploy to retain ground. They use a combination of defensive positions and small mobile reserves. Commanders organize the defense around the static framework provided by the defensive positions, seeking to destroy enemy forces by interlocking fires or local counterattacks. Infantry brigades normally use an area defense when depth is not essential. The depth of the force positioning depends on the mission task organization of the brigade, and nature of the terrain. When an area defense is conducted in depth, elements in the security area identify and control the enemy's main effort while holding off secondary thrusts. Counterattacks on the flanks of the main attack then seal off, isolate, and destroy penetrating enemy forces. However, this is much more difficult to execute due to lack of flexibility that stems from early commitment of forces to decisive combat and the limited tactical mobility of light forces.

c. **Fire Support Considerations.** The key fire support considerations during a defensive operation include the following:

- Consider HPTs for each phase of the defense. Targets during the counterreconnaissance phase differ from those in the MBA.
- Designate engagement criteria for each phase of the defense.
- Plan the CFL close to the forward elements to allow for rapid engagement of enemy units.
- Consider BFAs around scout, COLT, and FO positions in the forward positions.
- Consider the minimum safe distances of each weapon system when emplacing FSCMs.

5-3. OPERATIONS IN DEPTH

Forces at all levels must organize the defensive operations to facilitate the execution of the defensive missions. At brigade and higher echelons, the framework of the battlefield provides this organization. The enemy is engaged in three distinct areas-deep, close, and rear-but these engagements are planned and executed as one fight. Normally, brigades defend within the MBA or serve as a divisional reserve force. The defense framework (Figure 5-1) consists of the following complementary elements that synchronize the execution of the defensive plan:

- Deep operations in the area forward of the FLOT.
- Reconnaissance and security force operations forward, to the flanks, and to the rear of the defending force.
- A main effort in the MBA.
- Reserve operations in support of the main defensive effort.
- Rear operations to retain freedom of action in the rear area.

a. **Deep Operations.** Deep operations support the commander's basic scheme of maneuver by conducting operations against enemy forces not otherwise in contact. They prevent the enemy from concentrating overwhelming combat power against the brigade's MBA forces. They accomplish this by separating the enemy's echelons and disrupting his command and control, CS, and CSS.

(1) Corps and division commanders normally fight deep operations. Intelligence assets are used to acquire high value targets whose destruction severely restricts the ability of the enemy to conduct offensive operations. Airborne, air assault, and ranger units are suited for deep operations. The brigade normally takes part in higher level deep operations as part of a deep attack or deep raid. It can also conduct its own deep operations as described in Chapter 2, Paragraph 2-11.

(2) Effective execution depends on careful planning and IPB. The IPB should disclose likely enemy command and control elements, artillery units, and logistical support activities. The FSCOORD, S3, and S2 must cooperate folly to ensure that emphasis on deep operations supports the brigade commander's concept of the defense.

(3) The commander must also remain aware of the arrival of any enemy follow-on echelon's lead elements into his area of interest.

(4) The division conducts deep operations to support the brigade close-in battle. Division information gathering assets, such as the LRSD, normally play a major role in obtaining essential information. A brigade preparing to conduct a deep attack or a spoiling attack must be given the main effort of the division's deep operations. Electronic warfare assets may target critical enemy lines of communication to degrade their command and control. Air interdiction and supporting artillery fires may delay and disrupt follow-on echelon forces to lengthen the brigade's window for offensive action.

(5) Combat service support operations are difficult in deep operations since they require extensive resupply and evacuation planning.

b. **Reconnaissance and Security Operations.** Reconnaissance and security operations are essential to the success of the brigade defense as well as other brigade tactical operations. These operations are characterized by reconnoitering aggressively to reduce terrain and enemy unknowns, by gaining and maintaining contact with the enemy to ensure continuous information and by providing early and accurate reporting of information to the brigade. The challenge at the brigade level is in resourcing these critical operations. The brigade has no organic, dedicated reconnaissance or security forces. In order to provide these functions in support of brigade operations, the brigade can—

- Request additional reconnaissance and security forces (air or ground cavalry, LRSU elements, and division electronic intelligence gathering assets (such as GSR and REBASS).
- Designate organic infantry units to conduct these activities such as infantry companies or platoons or antiarmor companies or platoons.
- Place a subordinate battalion reconnaissance platoon as attached or OPCON to the brigade headquarters from the supporting effort or reserve battalion.
- Task subordinate battalions to provide the required information in support of brigade activities.

(1) The reconnaissance considerations in the defense include the facors of OCOKA from a friendly and enemy perspective. Specific considerations are:

- Battle positions, sectors, and EAs.
- Counterattack routes.
- Withdrawal routes.

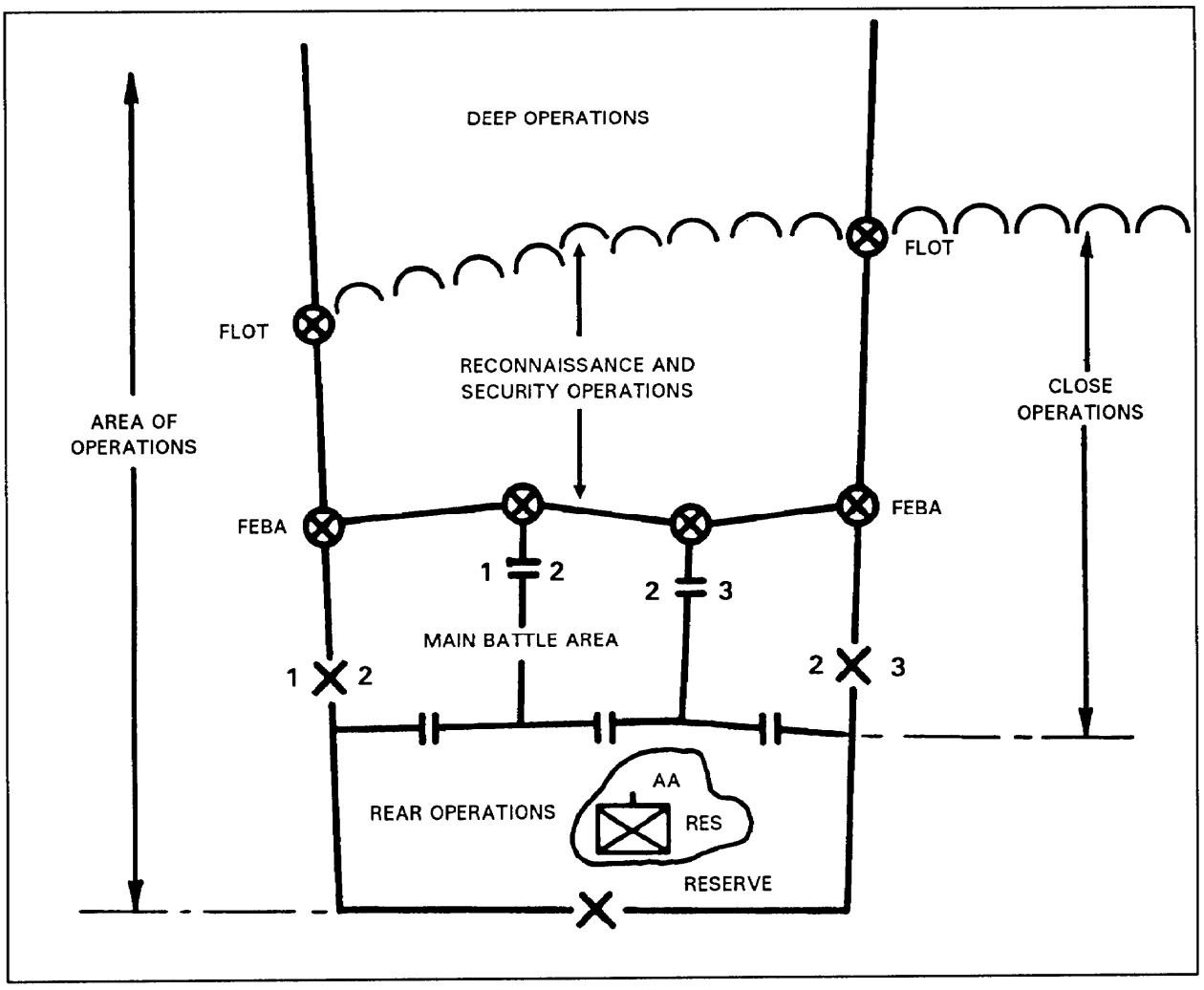


Figure 5-1. Defensive framework.

- Map corrections.
- Landing zones.
- Existing obstacles.

(2) The security operations forward of the FEBA include the following:

(a) A screening force maintains surveillance, provides early warning to the main body, impedes and harasses the enemy with supporting indirect fires, and destroys enemy reconnaissance elements within its capability.

(b) A guard force accomplishes all the tasks of a screening force. Additionally, a guard force prevents enemy ground observation of and direct fire against the main body. A guard force reconnoiters, attacks, defends, and delays as necesssary accomplish its mission. A guard force normally operates within the range of the main body indirect-fire weapons.

(c) 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 deceive, disorganize, and destroy enemy forces. Unlike screening or guard forces, a covering force is a tactically self-contained force (that is, it is organized with sufficient CS and CSS forces to operate idependently of the main body). The covering force denies the enemy unchallenged observtion of the main body and provides early warning and information about the enemy's dispositions while gaining time for the main body forces. As in all security operations, a covering force may be employed in the offense as well as the defense.

- The covering force is deployed as far forward of the main body as the terrain and composition of the covering force allow. The commander's estimate determines the size and composition of the covering force. All types of infantry units can fight a brigade covering force battle. However, units with the greatest firepower and mobility are best suited for the job. Mobility facilitates employment in depth across the brigade front. Light infantry forces should normally receive firepower/nobility augmentation. Additional assets include artillery, engineer, MI, ADA, Army aviation EW, and chemical (smoke or NBC reconnaissance) units.
- The size and composition of the covering force depends on the commander's estimate of the situation as influenced by the factors of METT-T. These factors are more important and complex, depending on the enemy's attack mode, depth of the area available for covering force operations, and time needed by MBA defenders to prepare for action. The covering force is normally tank heavy. A covering force operating in front of a division could consist of three or four tank-heavy battalion task forces or cavalry squadrons, with supporting attack helicopters, FA, ADA, and engineer units.
- When the enemy is attacking, the covering force fires long-range direct and indirect fires to slow the advance. As the enemy advances, the covering force adjusts positions, and where possible, continues to fight or screen far forward. As elements of the covering force approach the MBA, battle handover is executed with MBA forces.
- The covering force quickly passes through the MBA force. It may then assume BPs in the MBA or move to locations to rearm, reorganize, and prepare for future operations,

c. **Battle Handover.** The handover represents the transition of combat operation responsibility from the security force to the MBA force (Figure 5-2).

(1) Security forces hand over responsibility for the conduct of the battle to the MBA forces when the MBA forces are able to engage the enemy forces with direct and organic indirect-fire weapons. The headquarters that established the security force designates a phase line as the handover line. Based on recommendations by security force and MBA commanders, the higher headquarter's commander selects the actual location of phase lines, contact points, and passage points. When possible, the boundaries of the security force units coincide with those of the MBA units. Control measures are graphically reflected on overlays and are identified in the appropriate OPLAN, OPORD, or FRAGO.

(2) Security forces retain freedom of maneuver before passage of the battle handover line. The battle handover line represents the location where control of the battle is passed from the covering force to the MBA forces. It is usually 2 to 4 km forward of the FEBA. The MBA forces use direct fire and observed indirect fire forward of the FEBA to assist the covering force in its final delay, disengagement, withdrawal, and passage of lines. The transition occurs in some areas while the security forces continue to fight the enemy in others. The actual handovcr takes place at the time or event coordinated between the commanders or as directed by the brigade commander. Security forces must pass quickly through the MBA forces to reduce the vulnerability to fires. As security forces pass through

the MBA units, they may assume battle positions in the MBA or move to locations to rearm, reorganize, and prepare for future operations.

d. **Main Battle Area.** Forces at the FEBA or within the MBA fight the decisive defensive battle. Forces are positioned in the MBA so they can control or repel enemy penetrations. The brigade commander adjusts the initial defensive plan based on information received during security operations. He assigns battalions sectors, battle positions, strongpoints, or a combination of all three in the MBA based on his force's capability and METT-T. The location of battalion strongpoints or battle positions usually coincides with or

- Ensuring supporting efforts are tied to the main effort.
- Allocating additional ground maneuver forces.
- Narrowing the sector.
- Providing additional CS assets, especially engineers.
- Providing priority of fires.
- Positioning the reserve so that it is responsive to the main effort.
- Limiting the number of tasks for the main effort.

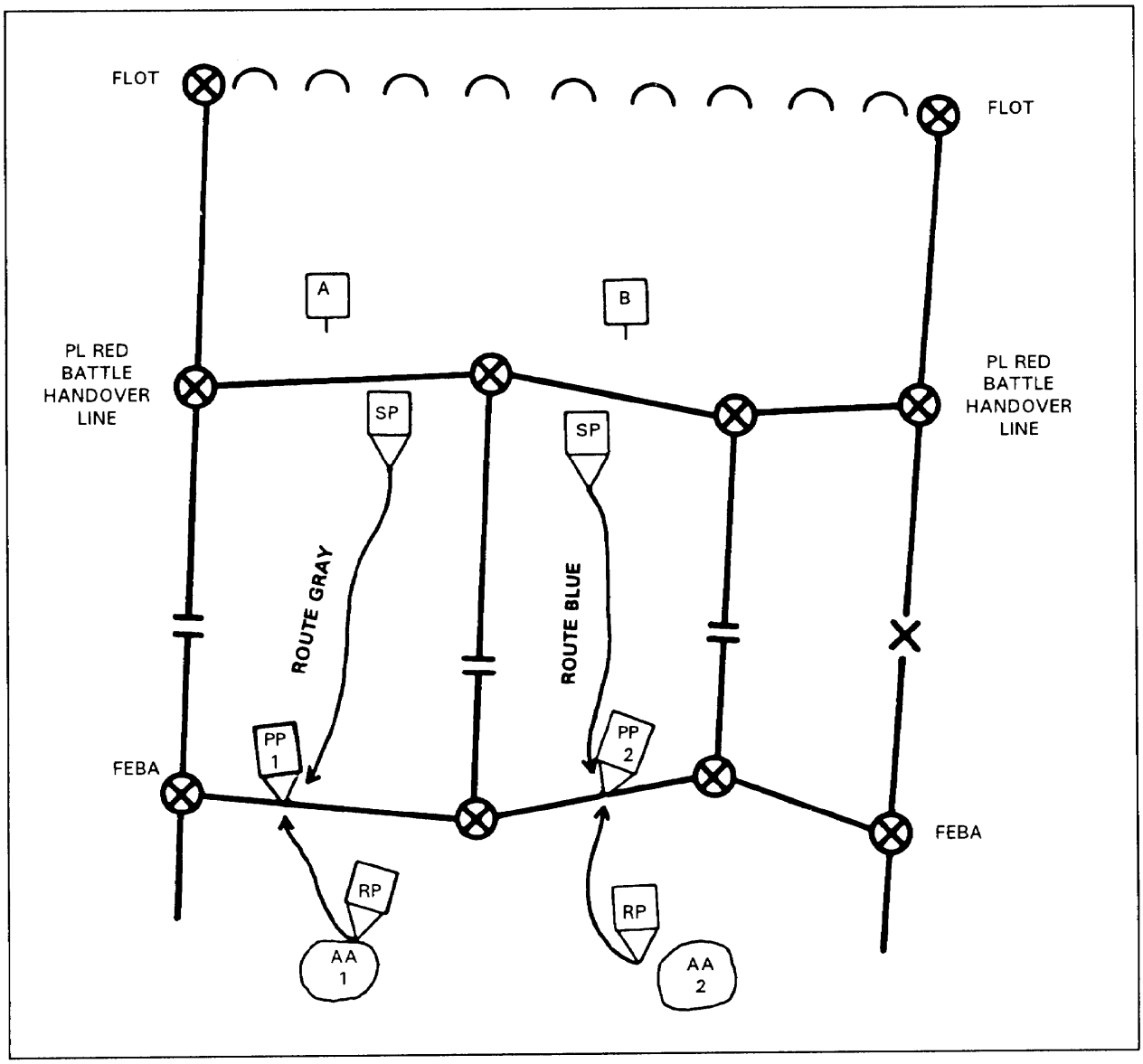


Figure 5-2. Battle handover.

(1) A defense may be structured around static, mutually supporting positions deployed in depth throughout the MBA. Obstacles are used to shape the battlefield and are routinely covered by direct and indirect fire. To enhance its effectiveness, the commander may hold out a large mobile reserve using available motorized and aviation assets and commit fewer elements to the initial MBA defense. The primary function of committed elements in such a defense is to slow the attack and fight it throughout the area. Mobile units then strike exposed enemy forces and engage those that have penetrated the defended area.

(2) Phase lines, sectors, battle positions, and strongpoints control the maneuver plan for the MBA defense as graphic representations of the commander's intent. The plan also provides for offensive maneuver within the defensive framework to take the initiative and exploit success. Spoiling attacks are planned to disrupt the enemy attack before it is launched. Counterattacks are conducted to defeat an attack after it has been launched.

(3) The brigade commander and staff must recognize the likelihood of penetrations of the MBA when they are fighting barge mobile forces. Penetration of the MBA and separation of adjacent units are apt to occur if nuclear and chemical weapons are being used. When this occurs, units must protect their flanks while striking at the enemy's flank in order to reestablish contact across areas of penetration.

(4) As the battle progresses, the brigade commander, in coordination with the division and corps, continues to fight the deep battle. He monitors events beyond the FLOT and follows the progress of enemy forces to prevent them from outflanking defensive positions or massing overwhelming combat power against committcd forces.

e. **Reserve Operations.** The primary purpose of reserve forces is to provide flexibility and retain the initiative through offensive action. The best use of reserves is for decisive attack against an exposed enemy weakness or unexpected opportunity. Reserves can be used to conduct counterattacks, reinforce forward defensive operations, block enemy forces that penetrate the brigade's defense, or react to a rear-area threat.

(1) In estimating the situation, the brigade commander must consider the size, composition and mission of the reserve force. Mobility is vital to the successful employment of the reserve force. They must have mobility equal to or greater than the attacking force. Thus, the planning of mobility assets is critical.

(2) Positioning of the reserve force must facilitate rapid response to the most likely area of commitment. Considerations include the routes and time needed to get to the likely area of employment and the location of fire support.

(3) Air assault forces are well-suited for a reserve role. They can quickly reinforce positions to the front, to the flanks, or in depth. Air assault forces are also suitable for swift assaults against attacks in rear areas. (See FM 90-4).

(4) The commander may hold attack helicopters, if availible, in depth and commit them as needed. They can respond quickly, thus extending the decision window for the commander. Their mobility and firepower often make them the quickest and most effective rneans of defeating surprise attacks and enemy penetations.

f. **Rear Operations.** The corps and division commanders normally fight rear operations; however, the brigade's tactical operations include rear area operations. (See Chaptcr 8).

5-4. DEFENSIVE OPERATIONS PLANNING

The division commander's intent depicts the brigade's role in the division battle. The brigade commander must understand the corps and division commanders' intents and align brigade operations with the overall mission. The brigade commander likewise transmits his intent to his subordinates. The analysis of METT-T is performed as a part of the commander's estimate with continuous revision as planning, preparation, and execution of the defense occurs.

a. Subordinates are given the greatest amount of time to prepare since the effectiveness of the defense depends on time-consuming tasks such as reconnaissance, fire planning, preparation of positions, installation of obstacles, positioning of supplies, and improvement of routes.

(1) Warning orders and subsequent oral instructions are used to transmit the concept of the operation and commander's intent. Commanders do not wait for the complete plan to start preparations.

(2) To effectively complete the COA, the commander must evaluate the human factor. This evaluation may indicate that some units care better suited for blocking missions than for counterattack or for defending wider rather than narrower sectors. For example, a unit that has suffered several key leader losses may require more planning time to execute counterattacks, and it may be better suited for defending a narrower sector or for use in a supporting role.

(3) The status of unit training, morale, and discipline must be evaluated before fitting forces to the ground. The leadership status of various available forces also affect the final shape of the COA.

b. The brigade commander uses decision points developed through the IPB process to trigger the execution of contingency plans for his reserve and other friendly actions. The DST is an excellent tool for command and control in the defense. The reserve makes the best use of the defensive preparation time to rehearse each contingency plan in order of priority. Rehearsals are conducted, both day and night to the lowest level possible.

c. The maneuver commander must integrate and synchronize all CS assets to increase combat power. To effectively focus combat power, the commander designates the brigade main effort. Designating the main effort links each subordinate commander's actions to those around him providing cohesion and synchronization. As the maneuver commander develops his battle plan for employing maneuver forces, he must visualize how he will synchronize the FA, ADA, EW, engineers. Army aviation and CAS assets at the decisive time and place on the battlefield.

d. The defending commander structures the battlefield with an obstacle system that canalizes the enemy, enhances the effects of fires, and protects friendly positions and maneuver routes. Once the fight starts, the timely identification of enemy attack efforts and targeting of EW assets is accomplished by integrating all-source intelligence. The fire support plan must provide close support of maneuver forces, counterflies, interdiction of deep assets, and other fires such as SEAD. The plan must integrate FA, CAS, and Army aviation to increase its effectiveness. The ADA priorities must be determined and forces positioned to support the maneuver forces.

e. Without proper distribution of fires and clear, easily recognizable method by which to focus the fires at a desired point, numerous weapons will engage the same target while leaving others free to maneuver.

(1) Defensive fire planning is difficult because most of the available tools employed to distribute and focus the fires are fixed on the terrain. Regardless of whether we defend in sector or prepare battle positions, the weapons are static, emplaced while we sight our TRPs and build an engagement area. The enemy, however, is not static; they enter the area of operations and begin moving through it; at some point, if they are not stopped, they exit the area. The challenge in defensive fire planning is to increase the principles of fire control and to use static fire control measures to orient fires on the enemy while they continue to move.

(2) When obstacles are employed, choose a fire control technique that supports achieving the specified obstacle effect (disrupt, fix, turn, or block). How and when fires are focused and massed differ substantially if the intent is to *turn* the enemy into an EA or to simply *disrupt* him.

(3) Brigade commanders must ensure their subordinates make use of the following techniques in directing fires in the defense:

- Dividing the EA.
- Sectors.
- Closest TRP.
- Target array.
- Fire patterns.
- Target array quadrant.
- Quadrants.

f. Fire support considerations include the following:

- Consider HPTs for each phase of the defense. Targets during the counterreonnaissance phase can differ significantly from those in the MBA.
- Designate engagement criteria for each phase of the defense.
- Plan the CFL close to the forward elements to allow rapid engagement of enemy units.
- Consider NFAs around scout, COLT, and FO positions in forward positions.
- When emplacing FSCMs consider the minimum safe distance of each weapon system.

g. Planning must include counterreconnaissance. This includes all measures taken to prevent hostile observation of a force, area or place. As part of counter-reconnaissance, security operations are conducted in all combat operations to defeat or mislead enemy R&S efforts to disrupt the enemy's synchronization. These operations include active measures designed to conceal, deceive, and confuse enemy reconnaissance elements (Figure 5-3, page 5-10).

(1) The brigade must integrate these measures into a detailed R&S plan designed to prevent the enemy from seeing and reporting the strength, composition, obstacles, and location of the brigade. The brigade's primary focus in counterreconnaissance is in providing and coordinating intelligence and fire support to help identify, fix, and destroy the enemy reconnaissance forces.

(2) The brigade S3 coordinates security efforts to ensure the brigade's operations are synchronized and executed effectively. He must use the brigade commander's estimate of the situation and the IPB process in planning security operations. All maneuver units must plan to counter enemy reconnaissance elements and patrols attempting to penetrate forward

security forces. The CS and CSS elements and all CPs must establish local security and make the best use of hide positions.

(3) Units must make the best use of all available night observation devices. The S2 consolidates these efforts into the R&S plan.

(4) Unity of command is of vital importance. Within the security area, counterreconnaissance is a task with the same detailed planning requirements as any other tactical mission. It requires practice, synchronization, and communication to execute properly. It also requires a headquarters to command and control the various elements. The elements include both "lookers" and "killers."

(5) The security force should immediately be emplaced when the brigade completes an attack or moves into a sector to establish a defense. It must be prepared to encounter mounted, dismounted, and stay-behind enemy. The security force should anticipate the enemy using RISTA platforms to gather intelligence on defending units. It consists of some or all of the following:

(a) *Battalion reconnaissance platoon.* These personnel are finders, not fighters. In security operations, they help locate enemy reconnaissance units for destruction by other elements or systems, such as calling for fire on enemy units they find.

(b) *Maneuver units.* Manning OPs and patrolling are normal infantry missions. Commanders should consider augmenting infantry with wheeled vehicles to increase mobility. Battalion-directed emplacement of PEWS can supplement other sensors, OPs, and patrols. If available, tanks or mechanized forces can be used to assist with the security effort.

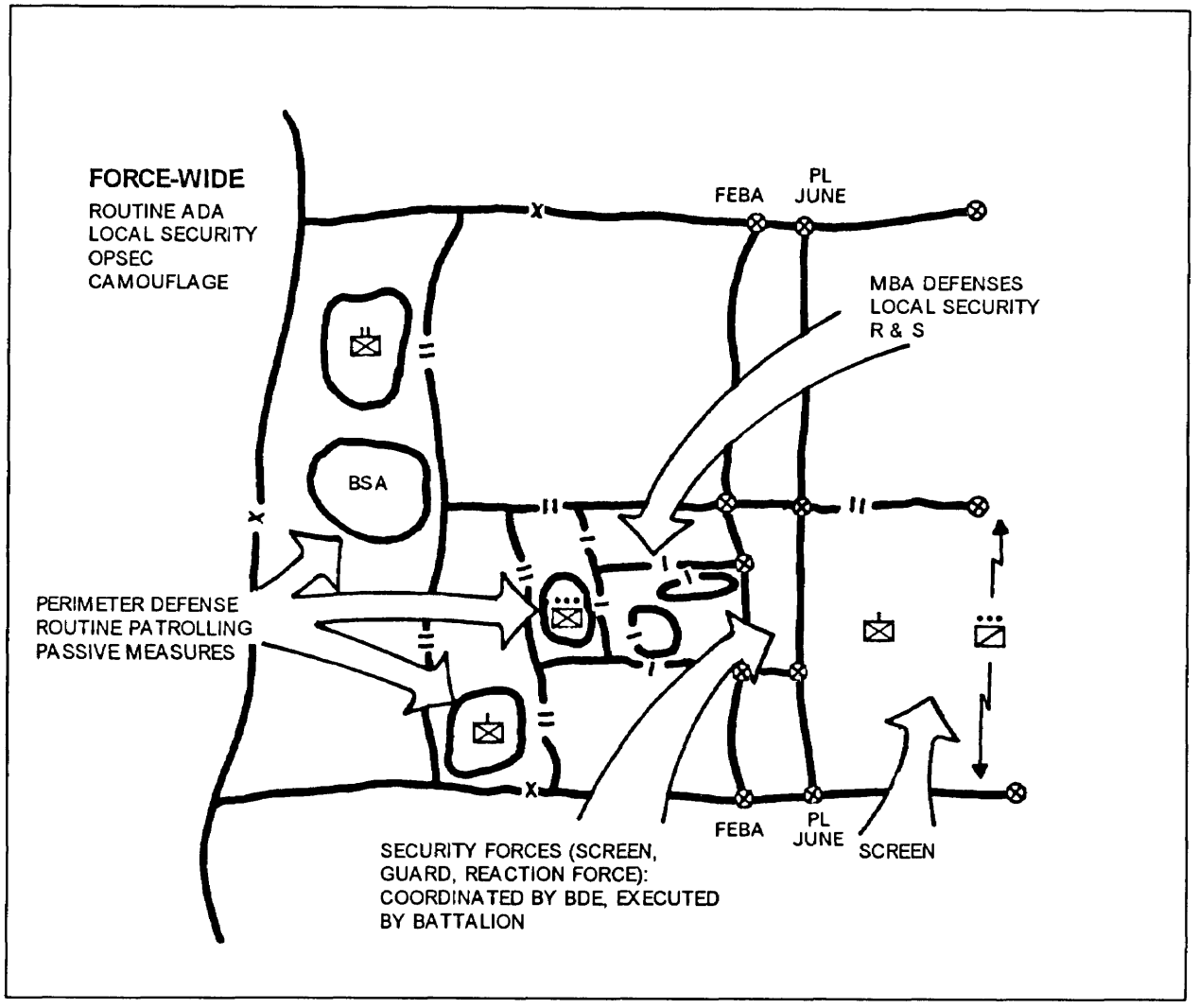


Figure 5-3. Counterreconnaissance considerations.

(c) Mounted antiarmor units. In addition to firepower and mobility, mounted antiarmor units provide a good long-range observation ability in all environments and conditions. The use of TOWs for security missions detracts from their ability to prepare for the defense.

(d) *Remotely monitored battlefield sensor system.* The REMBASS is available in some MI battalions. They should be emplaced along likely avenues of approach that cannot be covered by HUMINT or where redundant assets are to be placed in depth. They are most useful in covering dead space and broken terrain where observation would require more OPs or patrols than are available. The REMS can also assist in detecting attempts to breach friendly obstacles and in tracking enemy movements after withdrawal of security forces.

(e) *Ground surveillance radar.* When available, GSR can be used to assist in identifying enemy reconnaissance units during limited visibility. Since it is an LOS acquisition system, dead space must be covered by some other asset.

(f) *Aviation.* When available, air reconnaissance or air cavalry units can assist the counterreconnaissance effort. Air cavalry units can use organic attack helicopters, control indirect fires and CAS, or direct ground forces to intercept and destroy enemy reconnaissance forces.

(g) *Field artillery.* Responsive fire support is vital to successful accomplishment of the security mission. Based on the IPB, the FSO should develop a flexible fire support plan tailored to satisfy the commander's concept and intent. He should ensure it is distributed to the leaders of the security force. Batteries must be positioned according to METT-T in the defense, and the FSO should try to range at least one-third of the conventional artillery range forward of the lead maneuver unit.

(h) *Air defense assets.* Air defense assets deployed forward with security forces are necessary to provide early engagement for the main body. Denying enemy RISTA ensures defensive preparations are not interrupted, and unit dispositions are not targeted. The primary consideration is the main body and ADA weapons. Sensors should be positioned to achieve early engagement based on the air portion of the S2's IPB.

(6) Deception measures can be effective, but they must be believable. Deception is based on IPB and should have specific objectives. The skillful enplacement of heavy concentrations of smoke and frequent repositioning of units are effective deception techniques. Commanders must always assume the enemy is observing and must create a false picture of the units' dispositions. The deception operation must not disrupt position preparation or remove too many resources from the main effort.

(7) Planning and executing withdrawal of security forces to the MBA are critical. Too often units underestimate the speed of an enemy attack and begin their withdrawal too late. Specific guidance on both engaging the enemy and moving is required for the security force.

(a) The withdrawal of the security force should be planned as a rearward passage of lines under enemy pressure. Units receiving effective enemy fires cannot move unless those fires are suppressed or obscured. Commanders must issue precise instructions that preclude decisive engagement and must provide illumination suppression, and obscuration.

(b) For withdrawal to the MBA, route recognition signals and timing must be coordinated between forward security elements and company teams in the MBA. Withdrawal must be planned for both daylight and darkness. If practical, fullscale rehearsals of the disengagement should be conducted to ensure timing and coordination are sufficient and understood. Uncontrolled withdrawal to the MBA may result in fratricide caused by the effects of friendly obstacles, direct fire, or artillery. Contingency plans are developed for security units that are bypassed by enemy forces.

h. The commitment of the reserve may be the brigade commander's most critical decision during the defense. It is the most immediate way the brigade commander can influence the battle. Early in his planning, the brigade commander makes decisions concerning the size, composition, and mission of the reserve. A major purpose of the reserve is to retain initiative through offensive action. Other tasks of the reserve are to—

- Reinforce the defense of committed units.
- Contain enemy forces that have penetrated.
- React to rear area and flank threats.
- Relieve depleted units and provide for continuous operations.

i. The brigade commander may require his subordinate battalion commanders to obtain his permission before employing their reserves. He may also specify the location of their reserves. The brigade commander should use METT-T to dictate the size of the reserve. The reserve must remain hidden until committed. This protects it from enemy attack and enhances the shock effect when it is committed.

j. In addition to designated reserve forces, the brigade commander attempts to establish a new reserve from the least committed forces as soon as the original reserve is committed. This restores his ability to influence the battle with maneuver forces.

k. Logistical support must be considered during the planning and execution phases of each operation. The S4 must understand the brigade commander's tactical intent so that service support priorities can be established and logistical operations planned to ensure the supportability of the operation. Real estate management of the BSA and plans to conduct operations against Levels I and II area threats must be incorporated into the plan.

Section II
CONDUCT OF THE DEFENSE

For the brigade to succeed, it must counteract the enemy initiative. Security, good use of terrain, flexibility of defensive operations, and timely resumption of offensive actions are key to a successful defense. The commander uses the defense to gain time; time is needed to ensure a synchronized defense. The commander organizes his defense based on METT-T analysis and the higher commander's intent. He decides where to concentrate his effort and to economize forces. The commander assigns missions, allocates forces and fires, and establishes priorities and CSS resources. A properly conducted defense uses all available opportunities to seize the initiative. Once the enemy attacker has committed himself and moved into the defended area, the brigade commander strikes him with powerful fires and counterattacks in prepared engagement areas. Brigade commanders organize the battlefield by assigning a nonlinear defense, sectors, battle positions, strongpoints, or a combination.

5-5. DEFEND IN SECTOR

A defensive sector is an area designated by boundaries within which a unit operates and for which it is responsible. Defend in sector is the most common defensive mission conducted by forward battalions (Figure 5-4).

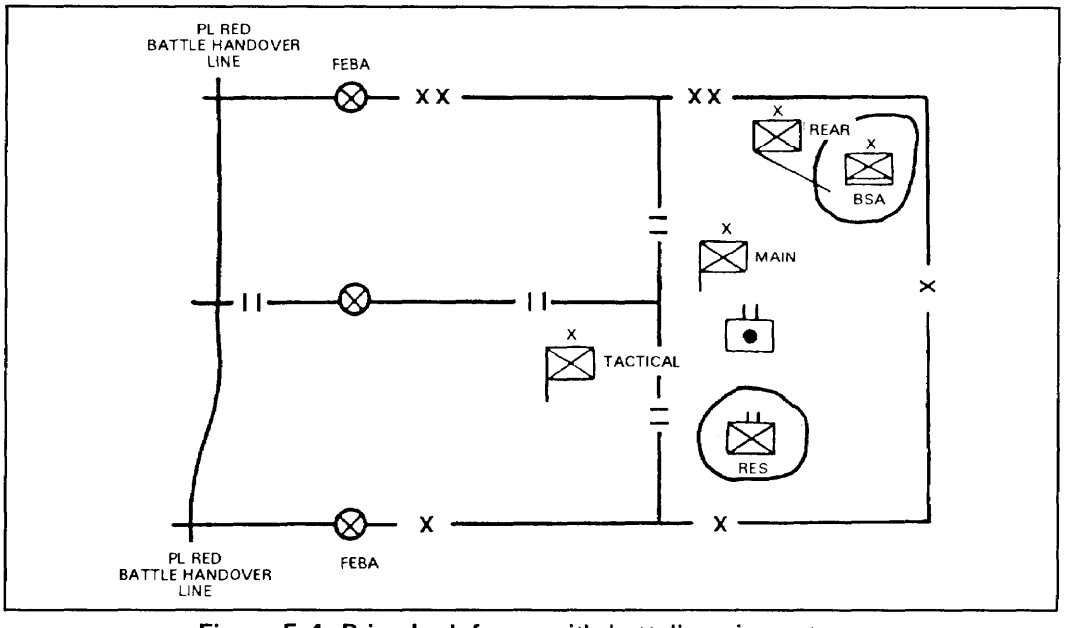


Figure 5-4. Brigade defense with battalions in sectors.

a. Sectors may be used in both the MBA and the covering force area. They orient on general enemy avenues of approach. They are used when the situation is vague, when multiple avenues prohibit concentration of battalions, or when the brigade commander wishes to allow subordinate commanders the greatest freedom of action. Sectors are normally deeper than they are wide to permit the defending unit to fight the battle in depth. A commander must defeat enemy forces within his boundaries, maintain flank security, and ensure unity of effort within the brigade commander's scheme of maneuver.

b. Sectors give commanders of battalions the freedom to decentralize fire planning. It enables thorough planning of fires and obstacles. It allows the commander to allocate his forces to suit the terrain to plan in depth, and to fully integrate direct and indirect fires.

5-6. DEFEND FROM BATTLE POSITIONS

A BP is a defensive location oriented on the most likely enemy avenue of approach (Figure 5-5). Its location is based on factors of METT-T. Security forces may operate outside BPs for early warning and all-round security. Units plan to maneuver within the BP as opportunities for offensive action arise, if such action is in compliance with the brigade conmmn-der's intent. When using battle positions, the brigade commander should designate sectors in order to expedite clearing fires and delineate patrol responsibilities.

a. Battle positions are used when the brigade commander wishes to retain control over the maneuvering and positioning of his battalions, and when terrain is open with good fields of fire. They are normally oriented on a defined avenue of approach and in a narrow sector.

b. If the brigade commander assigns a battle position, he is giving the battalion commander specific guidance on where to position his forces initially. Battle positions are used as follows:

- To control fires.
- To place fires as the enemy approaches.
- To block enemy avenues of approach.
- To control critical terrain.
- To organize where multiple positions can concentrate fires on one engagement area.
- On clearly defined avenues of approach.
- On routes into the defender's flanks.
- For positions near potential enemy airborne or air assault landing zones.
- For reverse slope and counterslope defenses.
- To coordinate terrain for battalion CS and CSS operations near the BPs.

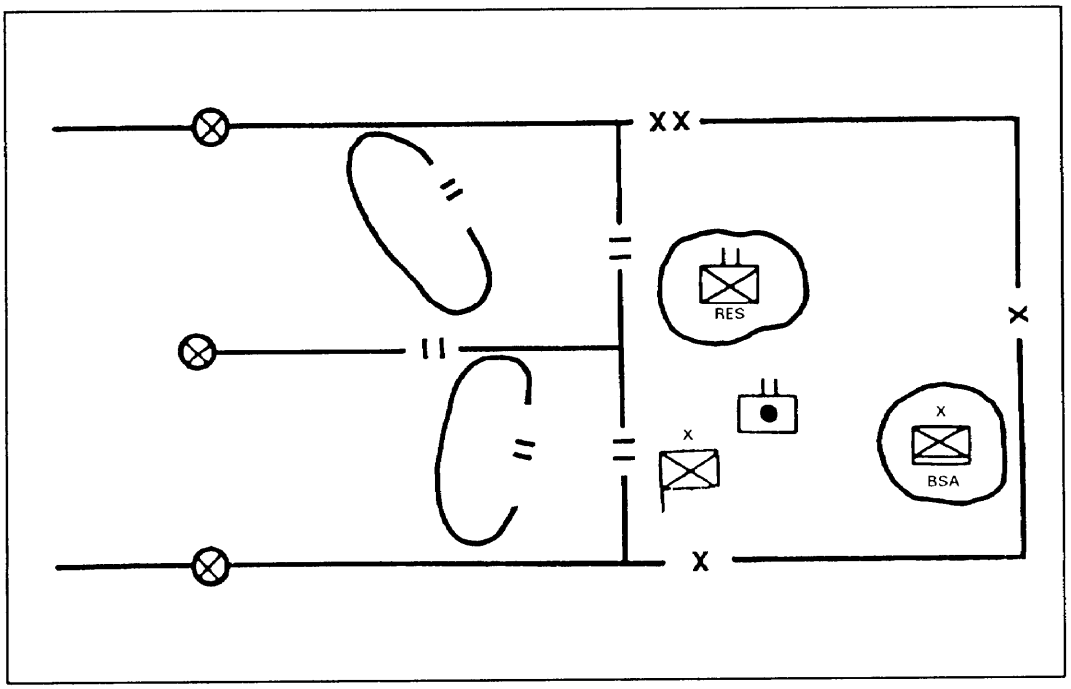


Figure 5-5. Brigade defense with battalions in battle positions.

5-7. DEFEND A STRONGPOINT

A strongpoint is a fortified defensive position, which is used to shape and control anticipated enemy penetration into the defended area (Figure 5-6). This is the most restrictive form of defensive mission in that the brigade commander selects the precise location of the battalion defense and normally reserves withdrawal authority. It is usually prepared by a battalion to defeat an attack from any direction. A strongpoint is essentially a battle position that cannot be easily overrun or bypassed by tanks and that can be reduced by infantry only with the expenditure of much time, effort, and an overwhelming force. Strongpoints can be established in isolation when restrictive terrain is on its flanks. It may also be tied to defensive positions of units on its flanks, In all cases, the use of strongpoints must be integrated into the overcall brigade plan.

a. A strongpoint in small urban areas, astride routes, or along avenues of approach may halt a superior enemy force. To be effective, it must be a surprise to the enemy. A strongpoint causes congestion and limits his maneuver, and is best used to set up a counterattack.

b. A strongpoint takes several days to construct and is constructed from inside out. It consists of an integrated series of well-protected fighting positions connected by covered routes/trenches and reinforced with extensive protective obstacles. A strongpoint is designed to withstand artillery fire strikes, and mounted and dismounted assaults. It focuses on fortifications and protective obstacles throughout the depth of the position.

c. The commander must consider the high cost (to include manpower, engineer support and barrier material) to develop an effective strongpoint. The force that establishes the strongpoint may become isolated or defeated in detail. As a minimum, they lose their freedom to maneuver outside the strongpoint. Other engineering requirements outside the strongpoint might need to be sacrificed since the strongpoint receives priority of personnel and materials.

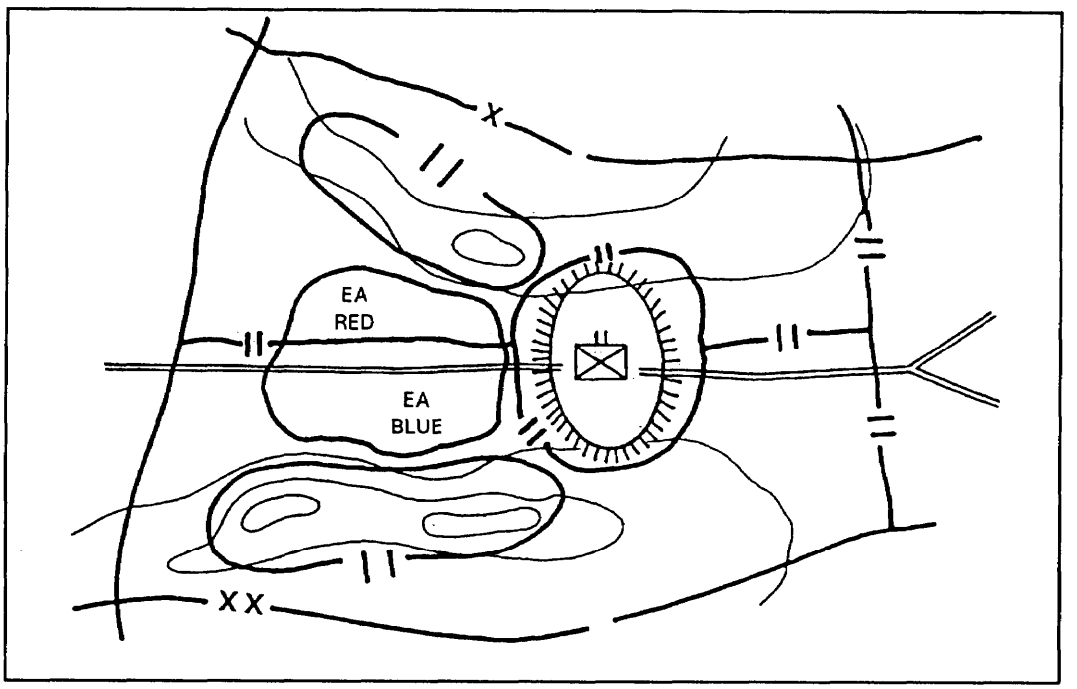


Figure 5-6. Strongpoint.

SECTION III

OTHER DEFENSIVE OPERATIONS

The brigade may conduct defensive operations that require unique planning considerations. These include attacks from the defense, reverse slope defense, perimeter defense, stay-behind or hide forces, and defense against armor.

5-8. ATTACKS FROM A DEFENSE

While conducting defensive operations, the brigade must always be ready to assume the offensive. From a defensive posture, the brigade can quickly conduct either a spoiling attack or a counterattack. The key difference is that a spoiling attack is executed before the enemy initiates his attack, and a counterattack comes after the enemy attack.

a. **Spoiling Attack.** The spoiling attack delays, disrupts, and destroys the enemy's capability to launch its attack or commit a following echelon Its objective is to destroy enemy personnel and equipment, not to secure terrain and other physical objectives. Spoiling attacks are not conducted if the loss or destruction of the force jeopardizes the ability of the command to accomplish its defensive mission. The spoiling attack has many of the characteristics of a hasty or deliberate attack.

b. **Counterattack.** The brigade may counterattack with either a reserve unit or a lightly committed forward unit. The brigade commander may initiate this operation after the enemy launches the attack, after identification of its main effort, or after creation of an assailable flank. The conduct of a counterattack is similar to arty other attack, but timing is critical to synchronize it with the overall defensive effort. The counterattack force should take the initiative from the enemy and exploit success whenever possible.

5-9. REVERSE SLOPE DEFENSE

The brigade rarely conducts a reverse slope defense along its entire front. However, there may be situations where subordinate units or weapons systems maybe effectively employed on the reverse slope (Figures 5-7 and 5-8, page 5-16). The reverse slope defense can be used—

- When the forward slope is made untenable by enemy fire.
- When the forward slope has been lost or not yet gained.
- When the terrain on the reverse slope affords better fields of fire than the forward slope.
- When the possession of the forward slope is not essential for observation.
- When failing to do so would create a dangerous salient in friendly lines.
- When the lack of cover and concealment on the forward slope makes it untenable.
- When seeking to gain protection from mass fires.
- When surprising the enemy and deceiving him as to the true location of the defensive positions.

True reverse slope situations may be undesirable because they may rely excessively on frontal fires. The reverse slope effect can still be maintained using the alternative in Figure 5-9, page 5-16.

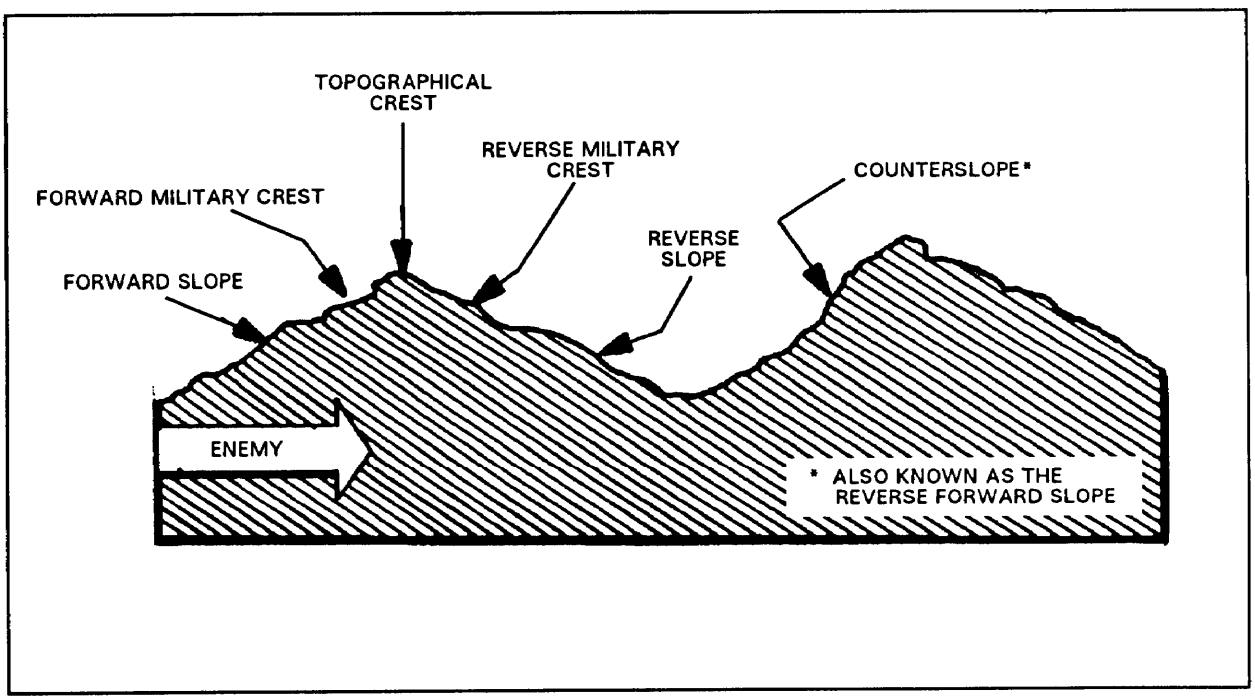


Figure 5-7. Reverse slope defense.

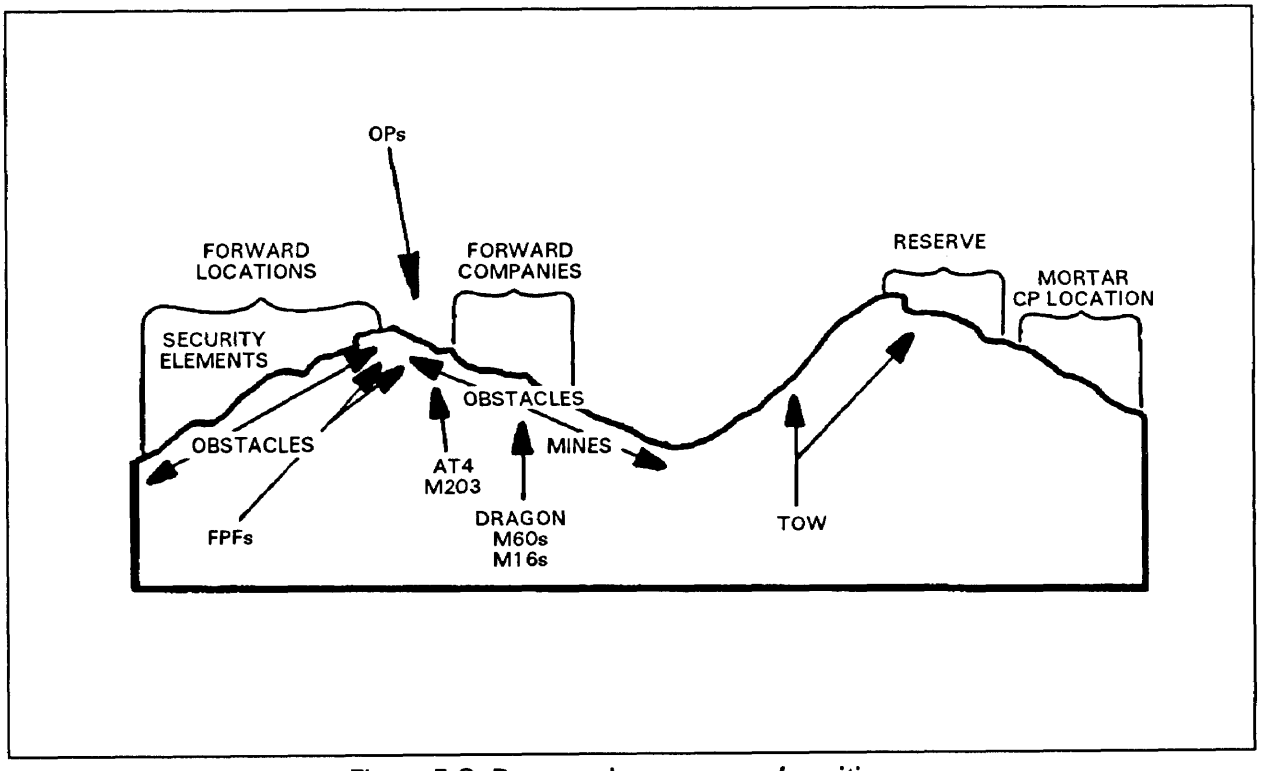


Figure 5-8. Reverse slope weapons' positions.

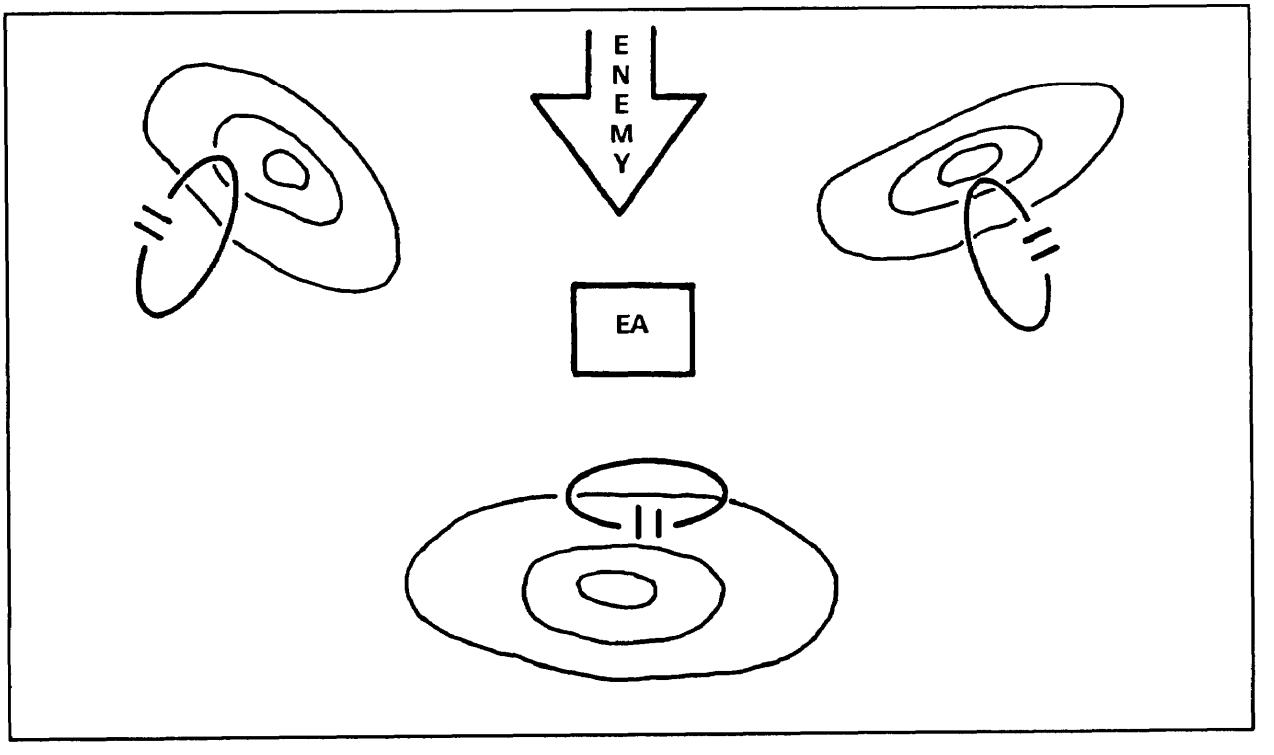


Figure 5-9. Reverse slope effect--alternative pattern.

5-10. PERIMETER DEFENSE

This defense is appropriate when the brigade is not tied in with adjacent units and must hold critical terrain (Figure 5-10). A perimeter defense orients in all directions. The brigade can organize a perimeter defense to accomplish a specified mission or to provide self-protection.

a. This type of defensive operation can be used when the brigade elements are in assembly areas, behind enemy lines when securing an isolated objective, or bypassed or isolated by the enemy. It can also be used when the unit must defend in place, is in an airhead, or when it must prepare and defend from a strongpoint.

b. Maneuver elements of the brigade are assigned to defend specific portions of the perimeter. The width, depth, and type of force required for a given perimeter defense depends on the factors of METT-T. Positioning of forces must provide space for dispersing antiarmor weapons and CS and CSS elements. The perimeter line must take advantage of key terrain and obstacles while ensuring that the perimeter is defendable.

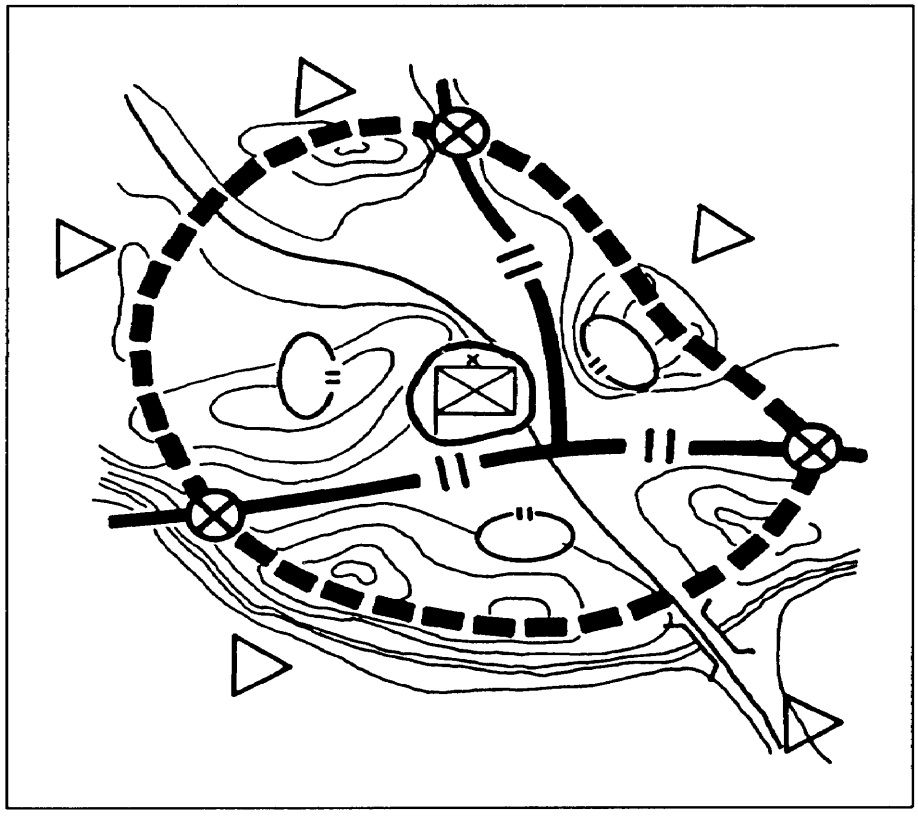


Figure 5-10. Brigade perimeter defense.

5-11. STAY-BEHIND OR HIDE FORCES

The main purpose of a stay-behind or hide force is to destroy, disrupt, and confuse the enemy. The force must achieve complete surprise. A commander may take advantage of terrain to hide an offensive force in a defense until forward enemy elements have passed his unit. Units bypassed by the enemy may be ordered not to break out immediately. The higher commander may capitalize on the unit's position and use it for offensive action in the enemy's rear. Stay-behind or hide missions are high risk and should be considered only after exhaustive analysis of METT-T. Stay-behind operations are usually conducted by battalions (Figure 5-11, page 5-18). The following points should also be considered when planning a stay-behind or hide mission.

a. The force should consist of enough combined arms, CS, and CSS elements to sustain its fighting capacity for the duration of the mission.

b. The return routes or axes for the force should be planned in advance, with rally points established forward of and behind friendly forces lines.

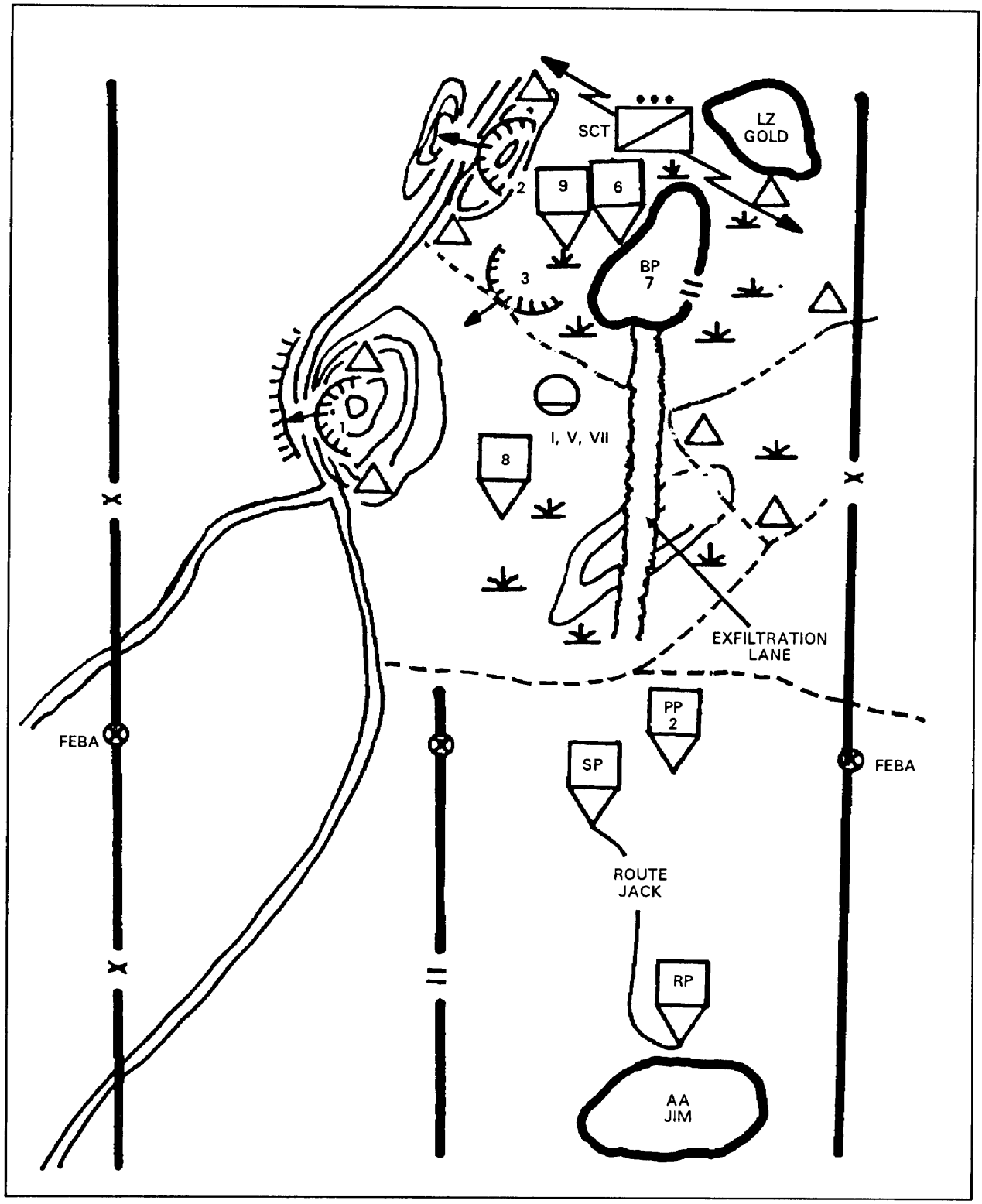


Figure 5-11. Controlled measures used by a battalion in stay-behind/hide force operations.

c. The force may be required to conduct a breakout from encirclement after completing its mission. After the breakout, the force may link up with elements of its parent organization or elements from other organizations.

d. The return routes for the stay-behind force must be the best covered and concealed routes available. Obstacles along these routes that cannot be bypassed should have guarded lanes or gaps. Stay-behind operations eventually require reentry into friendly lines or linkup operations, often in more than one locat ion. These contacts must be carefully coordinated to prevent fratricide.

e. Camouflage, cover, concealment, and SIGSEC must be planned in detail.

f. Units may be employed using several techniques forces. Some options are as follows:

- Air assaults into enemy areas to establish area ambushes.
- Infiltration to establish a position from which enemy command and control can be disrupted.
- Remain in position as enemy units pass the hiding force's location.

5-12. MODERN DEFENSE AGAINST ARMOR

Infantry brigade sectors may contain approaches that armor forces can use. While these approachcs are not normally suitable for major breakthrough efforts by large enemly armor forces, they may pose a major threat to the continuity of the brigade or division defense. If penetration by mounted forces occurs, adjacent units become vulnerable to attacks from the flanks and rear. These armor approaches usually cannot be defended by a linear array of forces. Such an array is vulnerable to being rapidly overrun or penetrated while being suppressed by massive artillery, smoke, and direct fires. To avoid rupture, the brigade arrays forces in depth on armor approaches (Figure 5-12). This requires narrower fronts, more forces, or both.

a. This disposition of the brigade contains a series of mutually supporting antiarmor battle positions on armor-restrictive terraian; they are protected by infantry and strengthened by obstacles. The forward positions are designed to block enemy infiltration by dismounted infantry and attrit armor forces. If certain positions become untenable during the battle, units may be ordered to withdraw according to previously prepared plans. The depth of the defense is derived mostly from the initial positioning of forces. Maneuver to gain additional depth may be limited.

b. Defense-in-depth dispositions are stronger against armor; but, they are somewhat more vulnerable to infantry attack or combined arms action directed against one position at a time. Therefore, when preparing antiarmor positions, emphasize all-round security and mutual support. Each antiarmor battle position should have:

- Dug-in fighting positions with at least frontal cover. Positions must be continually improved as time and resources permit.
- All-round defense.

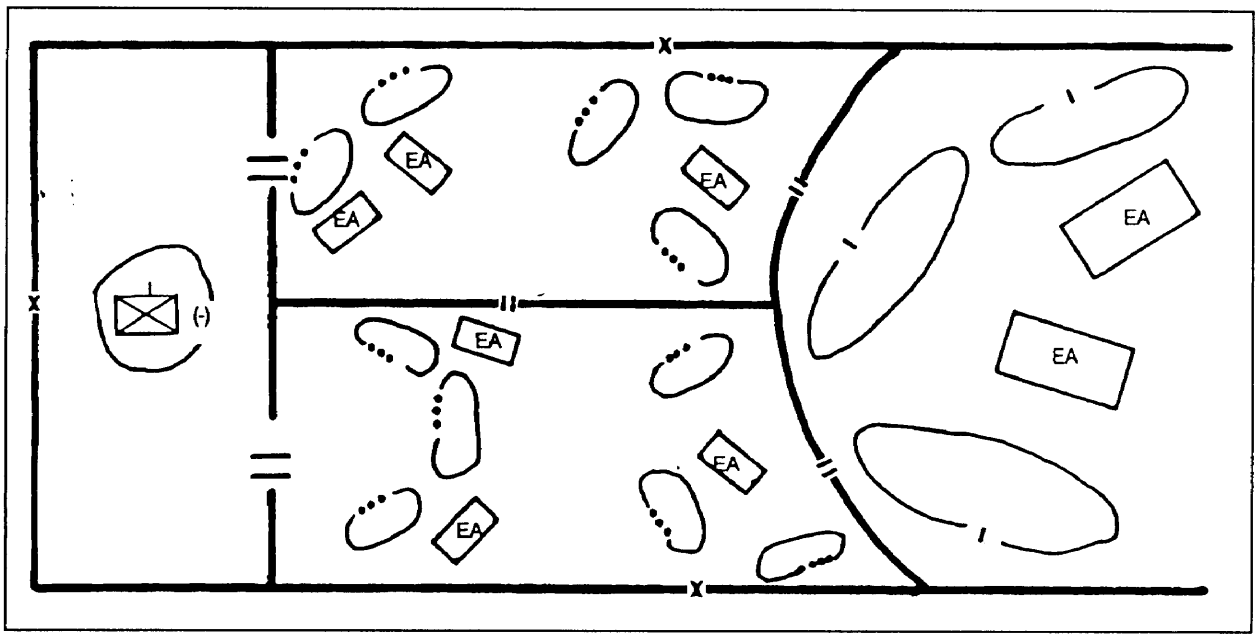


Figure 5-12. Brigade defense against armor.

- Protective mines and other obstacles to make the positions as tank proof as possible.
- Mutually supporting positions for antiarmor weapons, sited to achieve flank shots whenever possible.
- Coordinated direct-fire planning in each EA to avoid fratricide with other friendly positions.
- Covered and concealed routes for resupply or withdrawal.
- Armor ambushes between battle positions to preclude mounted bypass during limited visibility.
- Extensive patrolling during limited visibility to preclude dismounted infiltration.

c. When deploying in depth the intent is to defeat the mounted attacker by confronting him at the same time with antiarmor fires from multiple positions as he attempts to maneuver around them. Mines, other obstacles, infantry positions, and patrols close gaps that, because of terrain masking or heavy woods, cannot be covered effectively by fire. The attacker is engaged at long ranges with fires from tactical aircraft, attack helicopters, and field artillery, and then by organic antiarmor weapons positioned to deliver fires at the greatest ranges from multiple directions. As the enemy closes, antiarmor weapons may move to alternate and supplementary firing positions within the battle position to continue firing and to avoid being bypassed. Fields of fire are cleared to fully exploit the range of all antiarmor weapons.

(1) Deploying in depth is appropriate when defending against an enemy possessing greater ground mobility (mounted or mounted and dismounted), when armor-restrictive terrain is available or terrain can be made armor restrictive for unit positions, or when the terrain throughout the sector allows direct-fire engagement of both mounted and dismounted attackers.

(2) When the brigade defends in depth it organizes and positions elements to mass antiarmor fires on enemy AAs from positions on armor-restrictive terrain. Examples of terrain for such positions are: villages or towns; steep hills or ridges; terrain that has been reinforced with artificial obstacles; terrain near unfordable water or marshes; terrain with large boulders or lava beds; or thick woods with large trees.

Section IV
LIMITED VISIBILITY OPERATIONS

Aggressive limited visibility defensive operations can break up enemy attacks and permit the isolation and destruction of smaller enemy formations. With a detailed knowledge of the terrain and night vision equipment, brigade forces can operate effectively at night.

5-13. CONSIDERATIONS

Basic considerations in the night/limited visibility defense are as follows:

a. **Patrols should be increased.** Observation posts and early warning sensors are required for advance warning. Audio and visual recognition signals **must be** developed for use during limited visibility, particularly in a chemical environment.

b. **Tactical plans must be simple.** Units must train under limited visibility conditions. Execution must be decentralized with reliance on well-trained, confident, small-unit leaders. Detailed reconnaissance must be conducted during daylight as well to ensure execution of brigade plans. Movement takes longer during limited visibility; consider this when displacing units and planning counterattacks.

c. The psychological effect of limited visibility may require tighter formations and the need for special navigation skills. Smoke, snow, and heavy rain degrade most vision systems. Units may have to close in on the avenues of approach they are defending. Sensors and radar can sometimes lessen the effects of snow and rain.

d. The changing of natural and man-made battlefield conditions during daylight affects visibility. Weapons sited to take advantage of long-range fields of fire and observation during good visibility may not be effective when fog, haze, smog, or smoke is present. Weapons systems and defensive positions may have to be repositioned, especially to cover dismounted avenues of approach and obstacles.

e. The plan for a night/limited visibility defense should incorporate the following:

- Positioning night vision devices (including thermal viewers) where their capabilities are best used.

- Using long-range detection equipment (radar, sensors, night observation devices) on well-defined avenues of approach as part of a detailed surveillance plan.
- Repositioning forces to concentrate on the avenues of approach that the enemy is apt to use at night.
- Increasing the number of scouts, OPs, patrol missions, and armor-killer teams forward on secondary avenues of approach.
- Using nuisance obstacles and early warning devices along likely night avenues to slow the enemy and to provide early warning.
- Using OPs and patrols to prevent enemy infiltration between battle positions.
- Planning and rehearsing the required movement of units and the massing of fires on main avenues of approach.
- Repositioning weapons to compensate for the disparity between day and night acquisition ranges.
- Ensuring TRPs are visible throughout the night.
- Planing illumination on or behind likely engagement areas.

f. Commanders can expect an attacker to use limited visibility conditions—

- To conduct reconnaissance operations to locate the defender's weapons, obstacles, and positions.
- To breach obstacles.
- To move elements through gaps in the defender's coverage caused by reduced weapons' ranges.

g. The risk of fratricide increases during limited visibility operations. Situational awareness enhanced by the use of global positioning systems receivers, real-time tracking of units by TOC personnel, positive clearing of all indirect fires, and close coordination with adjacent units all contribute to reducing this risk.

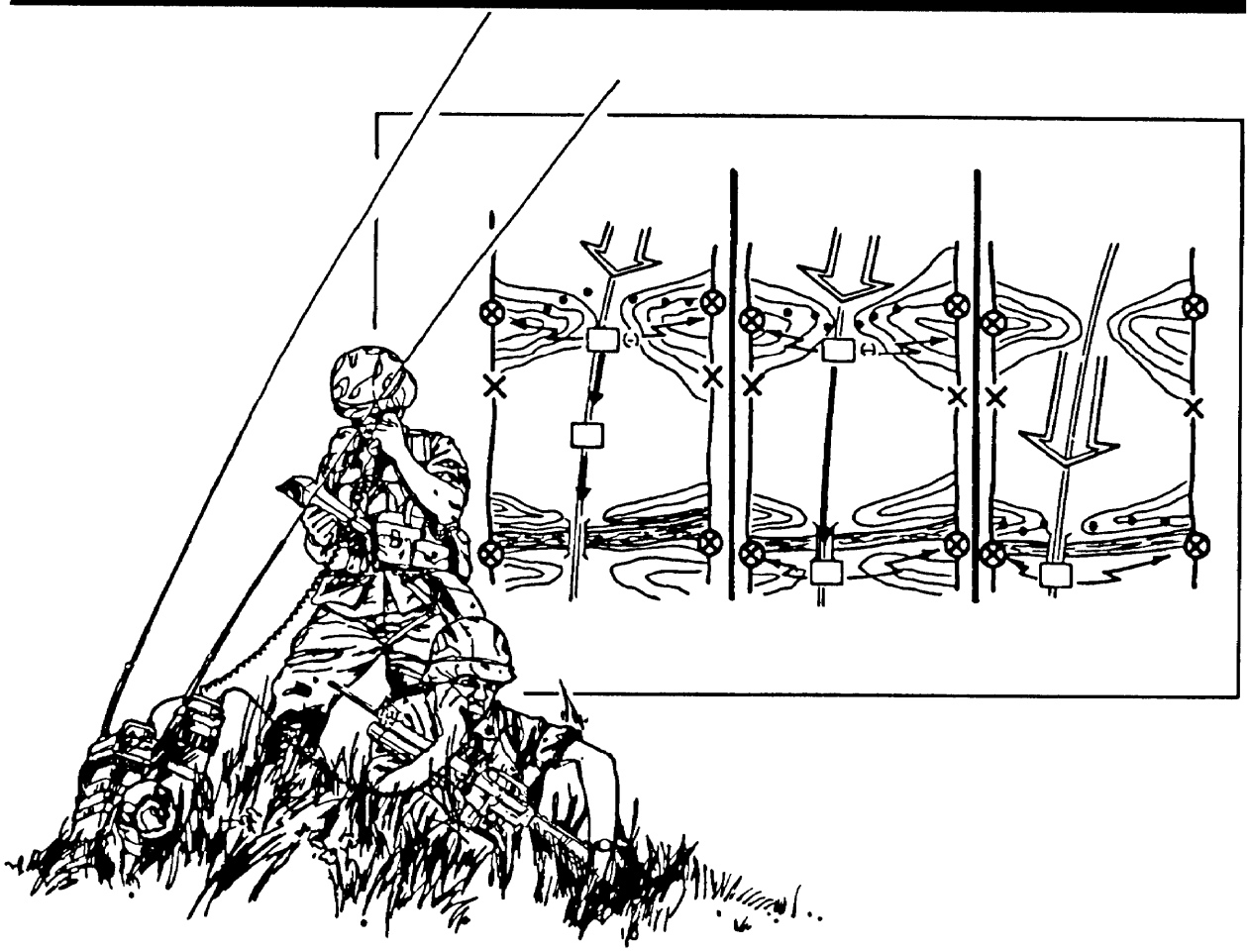
5-14. SMOKE OPERATIONS

Obscurants are used by the commander to conceal friendly unit locations, screen friendly maneuvers, support deception, and disrupt enemy offensive operations. Obscurants can slow and disrupt enemy movement and deny selected routes and landing zones. By forcing the enemy to tighten normal tactical formations for command and control, obscurants can cause the enemy to present a better target. Smoke operations supporting defensive operations must be incorporated early in the planning process. Some considerations include:

- Planning must be synchronized with the battle operating systems.
- The smoke platoon must be included in the brigade/battalion OPORD for smoke operations to ensure synchronization of effort.
- The plan for using smoke must be coordinated with the battalions whose areas will be affected by its employment.
- Security must be provided to smoke elements to include fire-support arrangements.
- The use of obscurants reduces the effectiveness of friendly night vision devices.

Chapter 6

RETROGRADE OPERATIONS



A retrograde operation is a maneuver to the rear or away from the enemy. It is part of a larger scheme of maneuver to regain the initiative and defeat the enemy. Its purpose is to improve the current situation or prevent a worse situation from occurring. lts objectives are to gain time, to preserve forces, to avoid combat under unfavorable conditions, or to maneuver the enemy into an unfavorable position. Retrograde operations may facilitate repositioning forces, shortening LOCs, or permitting unit withdrawals for employment elsewhere.

6-1. TYPES OF RETROGRADE OPERATIONS

Retrograde operations allow the commander to improve the current situation or prevent a worse one from occurring. During the conduct of a retrograde operation the brigade may harass, resist, delay, or damage an enemy. Retrogrades may be conducted at the direction of higher headquarters or may be dictated by enemy action.

a. The three types of retrogrades are *delays, withdrawals,* and *retirements.* These types of retrogrades share some common characteristics and may at times appear indistinguishable from each other. One type of retrograde may transition to another (for example, as from a withdrawal to a retirement). The brigade may also transition from any other operation (for example, offensive or defensive operations may transition into a delay as when confronted with a superior force on indefensible terrain).

b. The most critical distinction among the types of retrograde are their purposes or the intent of the commander executing the operation. The intent of a delay is to maintain contact with the enemy and trade space for time. The intent of the withdrawal is to break contact and disengage a force from the enemy in order to free the force for other missions. The intent of the retirement is to tactically move a unit not in contact with the enemy to a new location.

c. Retrogrades on nonlinear battlefields will be even more challenging than retrogrades on linear battlefields. Without the sanctuary of nearby rear areas or the combat power of adjacent forces to assist the unit in retrogrades, the brigade on a nonlinear battlefield must look more to his own resources. The roles once played by adjacent units and DS artillery may be played by long-range fires, CAS, and army aviation, if available.

d. Every movement away from the enemy may be a movement toward another enemy force, This requires the retrograde be conducted as an offensive operation, such as an approach march-type movement to contact. Normally, the retirement is not conducted on a nonlinear battlefield.

6-2. CONSIDERATIONS

As in offense and defense, the analysis of METT-T influences retrograde operations. The following are other basic planning considerations that influence all retrograde operations.

a. **Leadership and Morale.** Commanders and leaders must make sure soldiers understand the purpose of retrograde operations and their role in them. The leader's presence is critical in passing out information, making decisions, motivating soldiers and reducing rumors. The fact that the unit is moving away from the enemy will cause anxiety and speculation that may hinder the combat effectiveness of the members of the brigade.

b. **Reconnaissance and Security.** Accurate and timely intelligence is essential during a retrograde operation. The intelligence requirement increases as the brigade forces are echeloned to the rear and combat capabilities reduced. The brigade commander must task-organize a security force that can—

- Cover enemy avenues of approach.
- Deceive the enemy and defeat his intelligence efforts.
- Overwatch retrograding units.
- Provide rear guard, flank security, choke points, and demolition guard.

c. **Mobility.** To conduct a successful retrograde, the brigade seeks to increase its mobility and to slow the enemy force significantly or halt it.

(1) The brigade's mobility is improved by the following:

- Reconnoitering the routes and positions.
- Improving existing road networks and controlling traffic flow.
- Executing well-reheased unit movement SOPs.
- Using NBC contamination avoidance techniques.
- Positioning air defense to provide area coverage and security forces at critical choke points.
- Evacuating civilian refugees or restricting their movement to routes not used by the brigade.
- Evacuating casualties, recoverable supplies, and unnecessary equipment early.
- Displacing nonessential CSS activities.

The enemy's mobility is reduced by the following:

- Occupying and controlling key terrain that dominates high-speed avenues of approach.
- Destroying roads and bridges on avenues not needed for the brigade's forces.
- Executing preplanned demolitions and reserved demolitions after brigade forces have passed.

- Improving existing obstacles with reinforcing obstacles and covering them with direct or indirect fire and observation.
- Employing indirect fire and smoke to degrade the enemy's vision and slow his rate of advance.
- Conducting spoiling attacks to keep the enemy off balance and force him to react.

d. Deception. The use of deception may conceal movement of the brigade's forces, surprise the enemy, and reduce the brigade's vulnerability. Deception is facilitated by the following:

- Taking advantage of limited visibility conditions.
- Employing both projected and generated smoke.
- Using infiltration techniques to disguise or hide the relocation and evacuation of units and material.
- Employing dummy minefields and decoy positions.
- Maintaining normal radio traffic patterns and artillery fires.
- Conducting overt preparations for operations other than those planned.
- Using feints and demonstrations.
- Conducting deceptive EW and psychological operation measures, if assets are available.

e. Avoiding Decisive Engagement. The brigade must maintain some freedom of action and be able to present the enemy with unexpected and threatening situations that cause the enemy to react. These situations create opportunities for the brigade to regain the initiative and dictate the terms and conditions of the battle. Once the brigade becomes decisively engaged with the enemy, it loses this freedom of action, must conform to the enemy's actions, and risks the destruction of the entire force by fighting on unfavorable terms. It is imperative that the intent of the retrograde is understood by all subordinate commanders and leaders. The intent should also be operationally manifested to subordinate units by providing specific disengagement criteria to each echelon. This allows the leader in contact to recognize the battlefield conditions that require him to act to presume his force and avoid decisive engagement.

6-3. BATTLEFIELD OPERATING SYSTEMS

Some of the battlefield operating systems have significant affect on the planning considerations for retrograde operations.

a. **Fire Support.** The commander must ensure that the fire plan augments mobility of the force. He must—

(1) Orient fires on enemy avenues of approach. Plan triggers to inflict the greatest destruction on the enemy while providing obscuration of friendly disengagement.

(2) Identify decision points in order to mass fires on high payoff targets and establish smoke screens for disengagement.

(3) Use FASCAM with consideration for time requirements to employ and its affect on the firing batteries ability to provide continuous fire support. Use only on compartmentalized terrain. FASCAM employment must be coordinated with the engineer staff officer.

(4) Position forward observers along routes to overwatch friendly movements. Use COLTs and FCTs to increase the effectiveness of the counterreconnaissance battles by attaching them to battalion reconnaissance platoons.

(5) Plan for the employment of CAS, along with the necessary control measures.

(6) Allocate FPFs to forces in vulnerable areas.

(7) Ensure firing battery positions and displacement plans provide for continuous coverage across the sector IAW the brigade commander's intent for fire support.

b. **Air Defense.** Air defense is critical throughout retrograde operations.

(1) Ensure air defense priorities and allocation support mobility of the force.

(2) Ensure overmatching coverage of flanks, choke points, and the rear.

(3) Integrate ADA assets into the scheme of maneuver.

(4) Incorporate passive air defense measures, increasing movement during limited visibility.

c. **Combat Service Support.** The FSB should be positioned to the rear of the force as far as possible without sacrificing the quality of support.

(1) Ensure essential support equipment and personnel remain forward.

(2) Plan evacuation operations.

(3) Prestock high-usage items.

d. **Command and Control.** Retrograde operations are characterized by widely disperesed forces, independent actions, and vague enemy situations. The greatest flexibility in missions give to subordiantes allows the rapid application of maneuver to exploit enemy weaknesses. Planning is centralized at brigade while the execution is decentralized. The brigade

commander controls retrograde operations by the following:

(1) Articulating his intent for the retrograde.

(2) Establishing control measures. The control measures must clearly support the commander's intent and scheme of maneuver. These control measures may include phase lines, bounderies, checkpoints, delay positions, and routes of movement.

(3) Designating the time and routes of the withdrawal.

(4) Limiting rearward movement without prior approval.

(5) Coordinating road movement priorities.

(6) Early siting and positioning of communications.

e. Mobility and Survivability. Engineers use obstacles (friendly obstacles, enemy obstacles and terrain obstacles) and other resources to reduce enemy mobility. Ideally, a battalion-sized force of engineers supports each committed brigade in the delay. Base on time available, engineers are employed—

- To prepare point obstacle targets (road craters, abatis), destroy bridges, and block tunnels. Execution is normally delegated to the maneuver unit having responsibility for the area of operations.
- To emplace hasty minefield, cut antitank ditches, and emplace other antiarmor obstacles to block enemy high-speed avenues of approach and to canalize the enemy into choke points.
- To conduct denial operations against any resources that the enemy can use to sustain the attack.
- To improve routes between battle positions.
- To prepare LZs and airfields to facilitate rapid retrograde operations.

6-4. DELAYS

A delay is an operation in which the brigade, under enemy pressure, trades space for time. In the delay, the destruction of the enemy is secondary to slowing his advance to gain time. Delay operations are conducted by delaying in sector or by delaying forward of a specified line for a specified time. These are referred to as low risk and high risk delays respectively. The delaying force must have a mobility advantage relative to the enemy. The infantry brigade will not normally delay against enemy mechanized or motorized forces in trafficable terrain. If required to do so, the mobility and firepower must be enhanced. The brigade may conduct a delay as a part of the following:

- Covering forces for defending or withdrawing MBA forces.
- The advance guard or covering forces when unexpectedly meeting superior forces, as in a movement to contact.
- An economy of force operation conducted to fix or contain an enemy attack on a less critical avenue of approach.

The delay is an economy-of-force operation that creates time to allow other actions to take place. Brigades may delay when its forces are insufficient to attack or defend or when the scheme of maneuver dictates maneuvering the enemy into an area for subsequent counterattack. Delays gain time for friendly forces to reestablish the defense, to cover a defending or withdrawing unit, to protect a friendly unit's flank, and to participate in an economy of force effort. Delays also slow or break up enemy momentum or do not allow it to begin.

a. **Degrees of Risk.** The commander specifies the degree of risk, which is used to aid in understanding how the delay is to be fought. He determines whether time or the preservation of the force is more important. Specified times for holding the enemy forward of delay lines or positions indicate increased degrees of risk.

(1) ***Low risk.*** The brigade must delay the enemy as long as it can without accepting decisive engagement. At the same time, it must maintain the combat effectiveness of the task force. No time limit is specified-the brigade trades space for time. This is difficult for a light force to do without additional mobility assets.

(2) ***High risk.*** A delaying force that must hold the enemy forward of a delay line or other location for a specified time is described as accepting a high degree of risk. The brigade may have to accept decisive engagement to gain more time.

b. **Conducting a Delay.** Planning considerations in conducting a delay include:

(1) ***Centralized control and decentralized execution.*** A delay mission is normally performed with maximum forces in contact and minimum forces in reserve. This results in a series of independent actions by units across the front. Each commander must have the freedom of action to engage the enemy. In the delay, the unit must maintain enemy contact and flank security. This ensures the enemy does not bypass or surround elements of the delay force. In addition, it prevents a penetration of the brigade's forces.

(2) ***Maximize use of terrain.*** Delay forces must make the best use of terrain. The brigade may conduct

its delay by organizing battalion sectors or battle positions. Delay positions should be on terrain that controls likely avenues of enemy approach.

(3) ***Force the enemy to deploy.*** Engagement at the greatest ranges 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 determines that the friendly forces are delaying. He uses mass and momentum to develop sufficient pressure to cause friendly forces to fall back. Therefore, the delay must be tenacious enough to leave him in doubt about the friendly mission. When the enemy commander believes he has encountered the main friendly defenses, he will then deploy.

(4) ***Use of obstacles.*** The commander uses obstacles to disrupt, turn, fix, or block the enemy's forward progress and to provide security to the flanks of the delaying force. This includes the use of demolitions, mines, field expedients, and obstacles. To obtain the greatest effectiveness, obstacles are covered by observation and fire. The commander examines the obstacle plan during the rehearsal to determine its effectiveness. Scatterable mines delay the enemy passage through choke points or compartmentalized terrain. The countermobility effort is shifted to the sector in which the enemy is making the most progress.

(5) ***Maintain contact.*** The brigade forces reconnoiter continuously to establish and maintain contact with the enemy. This requires visual observation of the enemy and the ability to observe and adjust fires (artillery, mortars, tactical aircraft, attack helicopters, and naval gunfire). It also includes maintaining freedom of maneuver to avoid decisive engagement or to break contact on order. An order to break contact may involve a battle handover and a rearward passage of lines through another unit.

(6) ***Avoid decisive engagement.*** Delay positions are occupied long enough to cause the enemy to deploy, develop the situation, and maneuver to attack each position. The delay force must displace to the next delay position before becoming decisively engaged and losing its freedom of action. However, in the high-risk delay, decisive engagement may be unavoidable. The commander must establish disengagement criteria in order to help his subordinates avoid decisive engagement.

(7) ***Coordination.*** The repositioning of forces rearward during the delay has significant affects on other units in the sector. The brigade must coordinate its actions with higher and adjacent units to ensure continuous coverage across the front and prevent gaps in fires and forces while in contact with the enemy. The repositioning of forces may also expose the flnks of adjacent units and leave them vulnerable to enemy attack.

6-5. CONDUCT OF DELAY

Brigades conduct the delay by using one of two methods or a combination. The methods are *delaying from successive positions* and *altermte positions. The* method selected depends on the width of the front, the terrain, the forces available, the enemy, and the amount of time required of the delay. In either method, a mobility advantage over the enemy is required.

a. **Delay From Successive Positions.** A delay from successive positions involves fighting rearward from one position to the next, holding each as long as possible or for a specified time (Figure 6-1, page 6-6). In this type of delay, all battalions are committed on each of the brigade delay positions or across the sector on the same phase line.

(1) A delay from successive positions is used when a sector is so wide that available forces cannot occupy more than a single line of positions. The disadvantages of this delay are lack of depth, less time to prepare successive positions, and the possibility of gaps between units. When ordered to move, the brigade disengages, then moves and occupies the next designated position.

(2) A part of the unit displaces directly to the rear when the order to begin the delay is received and occupies the next designated position. The rest of the unit maintains contact with the enemy between the first and second delay positions. As these elements pass through the second position, the forces on that position engage the enemy at the greatest effective range. When the brigade can no longer hold the position without becoming decisively engaged, it moves to the next successive position.

(3) When conducting a delay from successive positions, the brigade may retain a reserve if the division has none. The reserve will frequently be small and employed as a counterattacking force. It protects a threatened flank, secures vital rear areas, or provides overwatch fires to a withdrawing unit.

(4) If a high risk delay is required or becomes necessary, the brigade retains the terrain until the conditions requiring the high risk delay are met. The battalion then disengages and resumes the delay.

b. **Delay from Alternate Positions.** A delay from alternate positions can be used when a force has a narrow sector or has been reinforced to allow positioning in depth (Figure 6-2, page 6-6). This is the preferred method of delay.

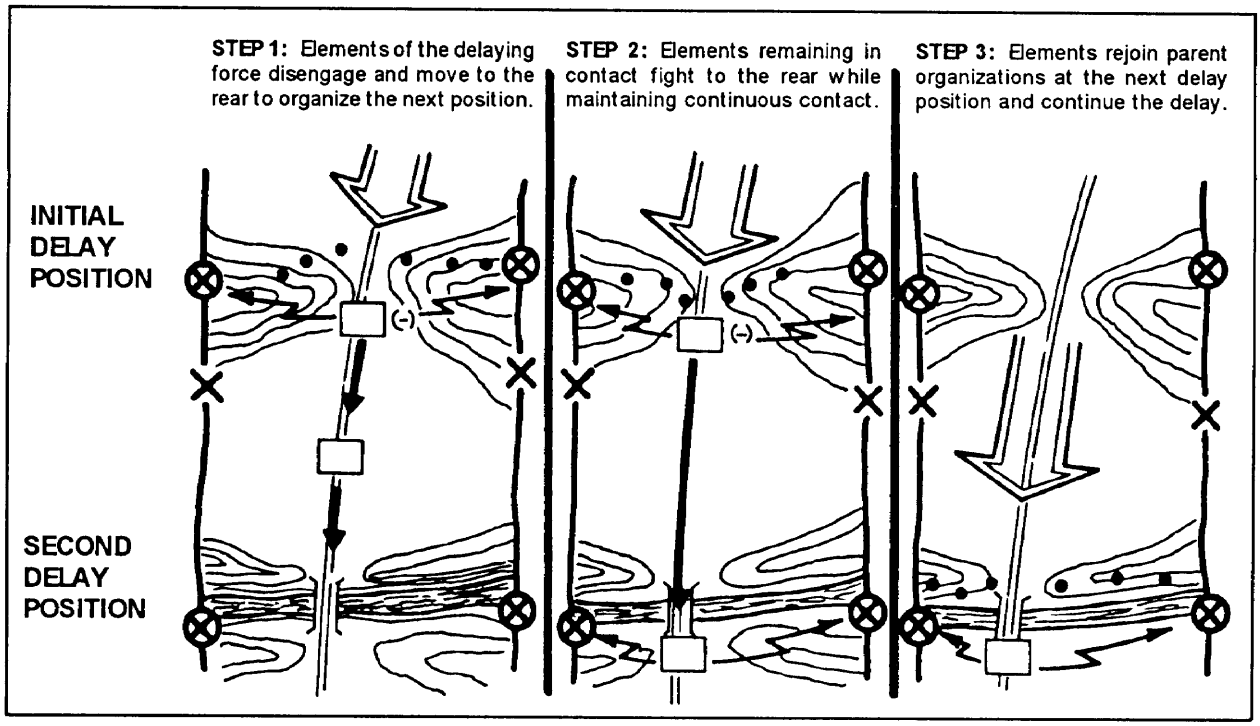


Figure 6-1. Delay from successive positions.

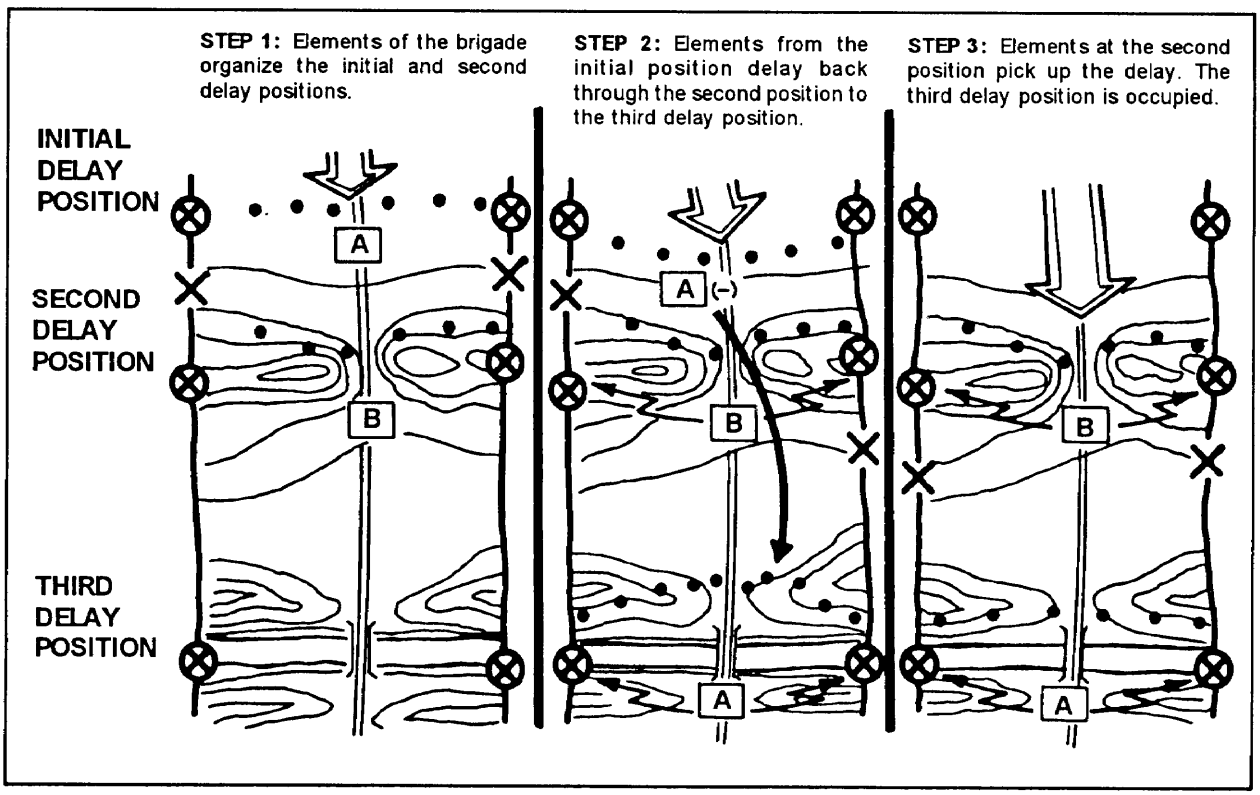


Figure 6-2. Delay from alternate positions.

(1) One or more battalions employ this method to occupy the initial delay position and engage the enemy. The other battalions occupy a prepared second delay position. These elements alternate movement in the delay. While one element is fighting, the other occupies the next position in depth and prepares to assume responsibility for the fight.

(2) Units occupying the initial delay position can delay between it and the second position. When the delaying units arrive at the second delay position, they move through or around the units that occupy the second delay position. The units on the second delay position assume responsibility for delaying the enemy; the delaying procedure is then repeated. Moving around the unit on the next delay is preferred because this simplifies passage of lines. The alternate method provides greater security to the delay force and more time to prepare and improve delay positions.

(3) Normally, when delaying from alternate positions, the brigade commander does not maintain a reserve. The forces not in contact with the enemy are available to function in the role of a reserve if needed.

6-6. WITHDRAWALS

A withdrawal is an operation in which a force in contact disengages from the enemy. The purpose of a withdrawal is to remove a unit from combat, adjust defensive positions, or relocate forces. A withdrawal may free a unit for a new mission. A withdrawal may be executed at any time and during any type of operation. Brigades normally withdraw using a covering force and a main body. There are two types of withdrawals: assisted and unassisted. In an *assisted* withdrawal, the next higher headquarters provides the security forces that facilitate the move away from the enemy. In an *unassisted* withdrawal, the brigade provides its own security force. Withdrawal are generally conducted under one oft two conditions: under enemy pressure and not under enemy pressure.

a. Regardless of the type or condition under which it is conducted, all withdrawals share the following planning considerations:

(1) *Keep enemy pressure off the withdrawing force.* Position security elements to delay the enemy. Emplace obstacles and cover by fire to slow his advance.

(2) *Maintain security.* Know the enemy's location and his possible courses of action. Observe possible enemy avenues of approach.

(3) *Gain a mobility advantage.* Gain the advantage by increasing the mobility of the brigade, reducing the mobility of the enemy, or both.

(4) *Reconnoiter and prepare routes.* Each unit must know the routes or lanes of withdrawal. Establish priority of movement and traffic control if two or more units move on the same route.

(5) *Withdraw nonessential elements early.* Withdrawing nonessential elements early may include some C2 and CSS elements.

(6) *Move during limited visibility.* Movement under limited visibility provides concealment for the moving units and reduces the effectivenessss of enemy fires.

(7) *Concentrate all available fires on the enemy.* Alternate movement between elements so seine of the force can always place direct or indirect fires on the enemy.

b. *Withdrawing Under Enemy Pressure.* Withdrawing under enemy pressure demainds superior maneuver, firepower, and control It is executed in the same manner as a delay, although its ultimate purpose is to break contact with the enemy rather than maintain it as in the delay. When conducting a withdrawal under enemy pressure, the brigade is organized into a security force and a main body. When planning a withdrawal under enemy pressure, the following considerations apply:

(1) Use control measures that facilitate the accomplishmeint of the commanlder's intent. These control measures may include-sectors, battle positions, phase lines, routes, passage points and lanes, contact points, checkpoints, and battle handover lines.

(2) Success depends on facilitating the disengagement of the main body by massing its own fires and the overwatchiilg fires provided by the security element.

(3) The divisioin commander may place adjacent units in overwatch, or he may require them to conduict security operations or limited counterattacks to support the withdrawing brigade.

(4) To assist withdrawing elements, the security force must be strong enough to detect and engage the enemy on all avenues of approach. The brigade may form its own security force from forward battalion elements. The security forces must:

(a) Stop, disrupt, disengage, or reduce the enemy 's ability to pursue.

(b) Reduce, through smoke and suppressivc fires, the enemy 's capability to observe the movement of the main body.

(c) Rapidly concentrate additional combat power in critical areas.

(5) As the order to withdraw is given, the brigade must engage the enemy with concentrated direct and indirect fire to enable the withdrawing force to disengage,

conduct a rearward passage through the security force, assemble, and move to their next position.

(6) The security force assumes the fight from the forward elements. This includes delaying the enemy advance while the bulk of the brigade conducts movement to the rear. On order, or when other predetermined criteria are met, the security force disengages itself and moves to the rear as a rear guard. Depending on the brigade's next mission, the security force may be required to maintain contact with the enemy throughout the operation.

c. When the brigade conducts a withdrawal not under enemy pressure, it must plan as though enemy pressure is expected, and then plan for a withdrawal without pressure. Withdrawal not under enemy pressure requires the formation of a DLIC.

d. Reconnaissance and deception are critical to conducting a withdrawal not under enemy pressure. The commander must be aware of the activities and movements of any enemy in the area that could influence his operation. He must also ensure the security of his force against surprise. The commander must project the impression that he is conducting operations other than a withdrawal. If the enemy becomes aware that the brigade is withdrawing, he may choose to exploit the brigade's relative vulnerability by attacking or employing indirect fires against elements in movement. Therefore, deception and OPSEC measures are essential to the success of a withdrawal not under enemy pressure. These measures include:

- Maintaining the same level of communications.
- Continuing the use of patrols.
- Moving during limited visibility.
- Maintaining the same level of indirect fires.
- Avoiding compromise of the operation by radio.
- Maintaining noise and light discipline.
- Using the DLIC to deceive the enemy into believing that friendly forces are still in position by simulating or continuing normal activities.

6-7. DETACHMENTS LEFT IN CONTACT

The DLIC is a force organized from within the brigade that maintains contact with the enemy while the majority of the brigade withdraws. The DLIC usually comprises one third of the available combat power. A three-battalion brigade may direct that three rifle companies, augmented with the necessary combat support forces and increased mobility and firepower, form the DLIC.

a. Two techniques for organizing the DLIC are designating one battalion as the DLIC or forming a new organization under the brigade S3. When one battalion forms the DLIC, it repositions its force through a series of company-sized relief in place operations with companies in the other battalion's sectors. The advantages of this technique is that command and control is facilitated by the organic nature of the units involved and the focus of the force as a whole is dedicated toward one mission-maintaining contact and preparing to fight a delay, if necessary. The disadvantages are the time needed to reposition and the increased amount of movement in the sector that may signal a vulnerability to the enemy.

b. Forming a new organization under a new controlling headquarters also has advantages and disadvantages. The advantages are that the units of the DLIC may have to do less repositioning and some may not have to move at all. This advantage helps to deceive the enemy as to the intentions of the brigade. The disadvantage is that if the organization is ad hoc in nature, its ability to fight as a team is decreased. This organization must train together in order to avoid this disadvantage.

6-8. RETIREMENTS

A retirement is a retrograde operation in which a force not in contact moves tactically to the rear or away from the enemy. Brigades and larger forces normally conduct retirements. A withdrawal may become a retirement once forces have disengaged from the enemy, and the main body forms march columns.

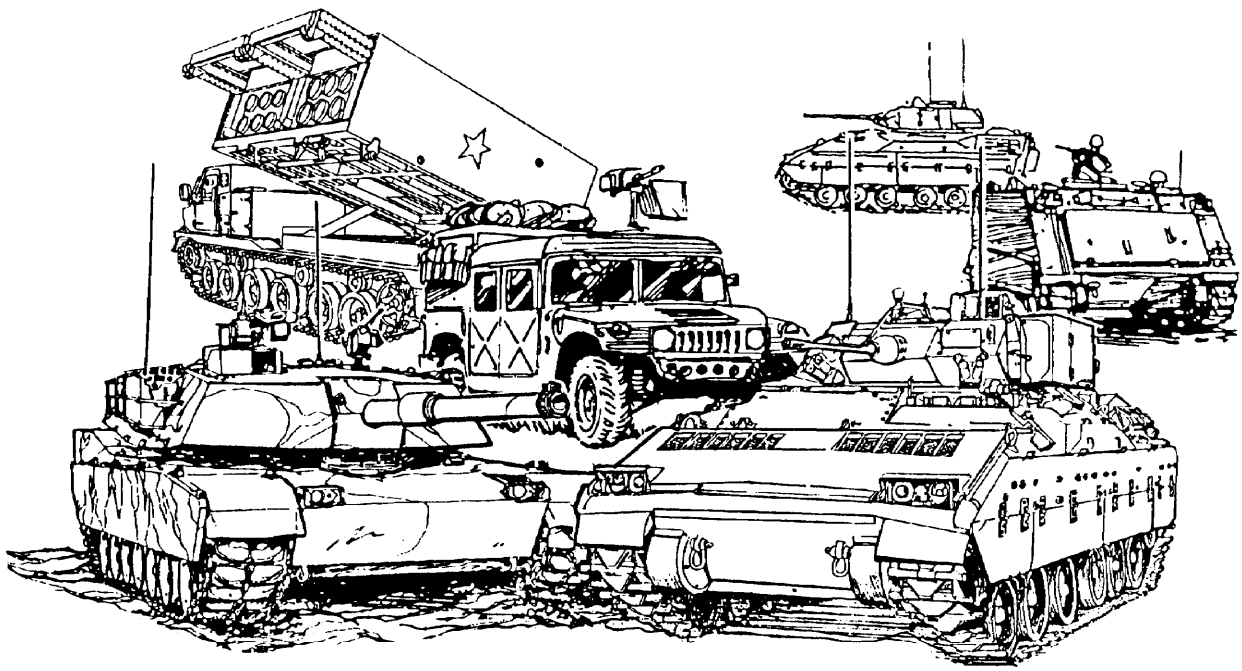
a. A retirement is conducted to occupy more favorable terrain, to conform to the disposition of another force, to permit the employment of the brigade in another sector, or to increase the distance between the brigade and the enemy.

b. A retirement is conducted as a tactical movement to the rear. The brigade may move on one or more routes depending on the routes available. Security for the main body is similar to that for a movement to contact using advance, flank, and rear guards. As in all tactical movements, all-round security must be maintained.

THIS CHAPTER COMPLIES WITH STANAG 3146.

Chapter 7

OTHER TACTICAL OPERATIONS



The brigade conducts other tactical operations to support offensive and defensive operations. These operations may require augmentation with specialized equipment or personnel from division or corps, which must be synchronized.

7-1. LINKUPS

Linkup operations join two friendly forces—both could be moving toward each other or one may be stationary. The brigade may conduct a linkup separately or as part of a division operation. Linkup operations may require a passage of lines.

a. Planning and coordination for operations following a Iinkup take place in advance. They are modified when the linkup occurs. Linkup operations may be conducted—

(1) To join forces for the encirclement of an enemy force.

(2) To join a force thst has broken out of an encirclement with a friendly force.

(3) To join an attacking force with another force that has conducted an air assault or airborne assault into the enemy's rear.

(4) When converging friendly maneuver forces meet.

b. A linkup is complex; it requires detailed planning and coordination.

(1) The headquarters directing the linkup establishes control measures, such as linkup points and alternate linkup points, linkup rally points, axes of advance, boundaries between converging forces, restrictive fire lines, coordinated fire lines, and other measures to control maneuver and fires (Figure 7-1).

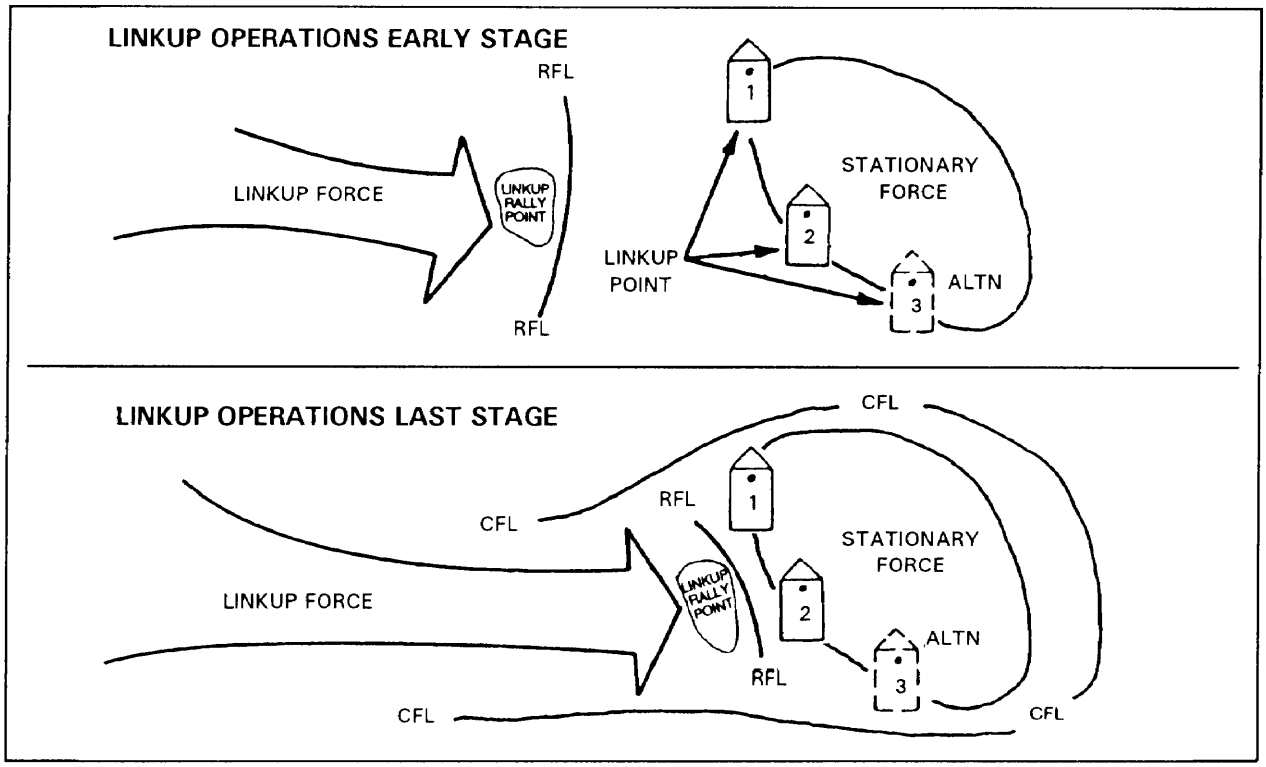


Figure 7-1. Linkup control measures.

(a) When one of the units involved is stationary, linkup points are usually located where the moving force's routes arrive at the stationary force's security elements. Alternate linkup points are also designated, because enemy action may interfere with the linkup at primary points. These points must be easily recognizablc to both forces. Stationary forces assist in the linkup; they open lanes in mine fields, breach or remove selected obstacles, furnish guides, and designate assembly areas.

(b) While small contact teams meet at the linkup point, the remainder of the units wait in their linkup rally points. After the linkup is complete, the units may consolidate in one of the unit's linkup rally points.

(c) Linkup between two moving units is a difficult operation. Primary and alternate linkup points for two moving units are established on boundaries where the two forces are expected to converge. As linking units move closer, positive control must be coordinated to ensure they avoid firing on each other and to ensure the enemy does not escape between the two forces. Leading elements of each force should monitor a common radio net (Figure 7-2).

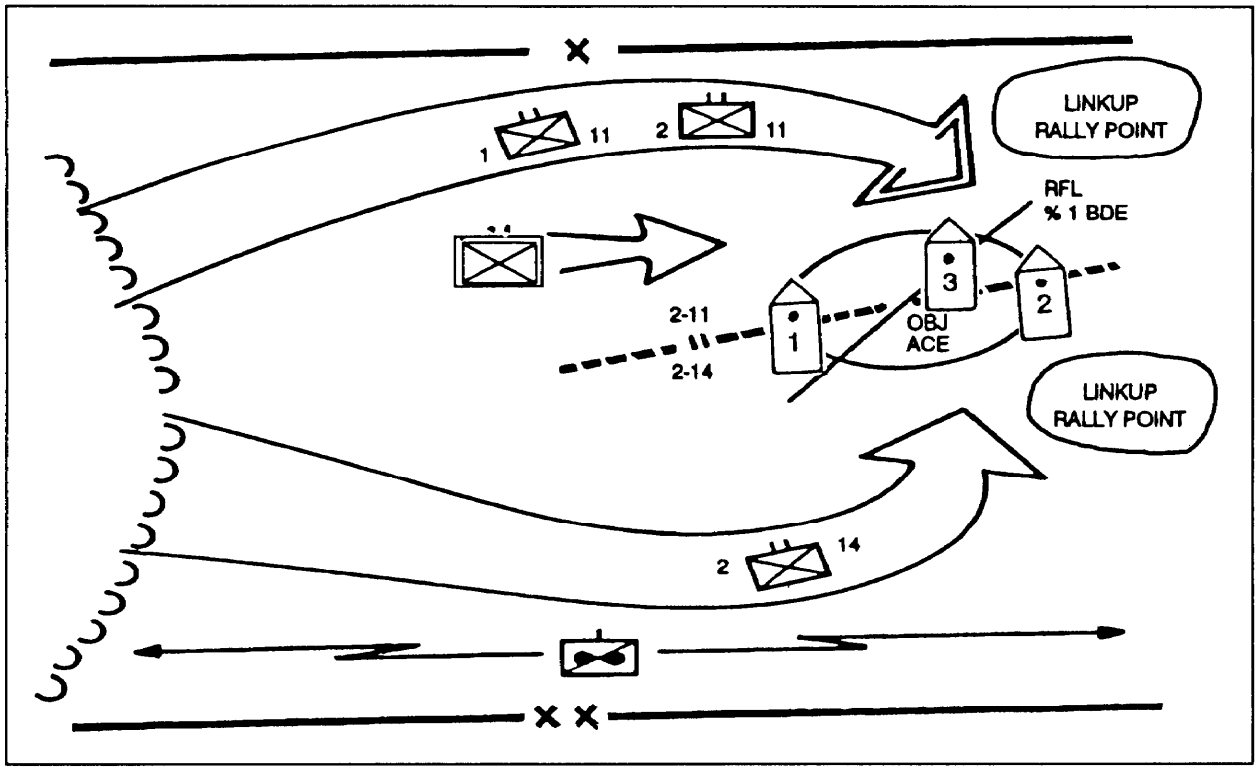


Figure 7-2. Linkup of two moving forces.

(2) The headquarters directing the linkup operation must also establish the command relationships and responsibilities of the forces involved.

c. Unit commanders involved must establish liaison early and maintain it throughout the operation. If METT-T factors permit, liaison is face-to-face. As the distance closes between the forces, the significance of close liaison increases. As a minimum, units exchange the following information:

- Linkup control measures.
- Enemy and friendly situations.
- Location and types of obstacles.
- Fire support plan to include coordinating measures.
- Air defense control measures.
- Far and near recognition signals day and night.
- "Linkup is imminent" code word.

d. The communications plan includes the communications means between the two forces (primary and alternate). Forces exchange SOI information if the they are not from the same parent organization. The use of a common frequency enhances coordination and responsiveness.

e. To prevent the possibility of friendly soldiers exchanging fires, commanders establish far and near recognition signals for both ground and air elements.

7-2. PASSAGE OF LINES

A passage of lines is a complex operation involving one unit passing (rearward or forward) through the positions of another. It requires detailed coordination extensive planning, and close supervision between the moving and stationary units (Figures 7-3 and 7-4, pages 7-4 and 7-5). It is normally an implied task in the conduct of offensive, defensive, or retrograde operations.

a. A passage of lines may be conducted to—

- Continue an attack or counterattack.
- Envelop an enemy force.
- Pursue a fleeing enemy.
- Withdraw security forces or MBA forces.
- Effect a relief operation.

b. Primary considerations in planning a passage of lines include the following:

(1) ***Command and control.*** Normally, the passing unit tactical CP collocates with the tactical CP of the stationary unit. The time and event of any changes

in responsibility must be coordinated between unit commanders and remain within the higher commander's intent.

(2) ***Movement.*** Priorities for use of routes and control of movement times must be set. The passing unit uses multiple routes through the passed units and avoids the use of assembly areas. The passing unit coordinates with the stationary unit to obtain current information on obstacle emplacement. If the tactical plan requires a wide passage lane, coordination for opening lanes must be linked to actions at the contact and passage points.

(3) ***Control measures.*** Control measures are essential to coordination and to enhance C2 during the passage.

(4) ***Battle handover.*** The responsibility for control of the zone or sector passes from one force to another at the handover line. The higher headquarters directing the passage establishes the BHL. The subordinate commanders coordinate the exact location and conditions for the transfer of responsibility at the BHL. The stationary forces must be prepared to conduct operations in support of the passing force should the enemy attack or interfere with the passage.

(5) ***Planning passage of lines.*** In planning passage of lines, air defense is absolutely essential. Whether passing forward or to the rear, the moving unit is forced to move slower and often in some type of column formation during the passage. As a result, air defense must be coordinated with the stationary unit. In most cases, the air defense unit deployed with the stationary supported force is able to protect the passing force, allowing the passing force's supporting air defense assets to move with them. However, if the passing force requires static air defense coverage, the terrain is coordinated with the supported stationary force.

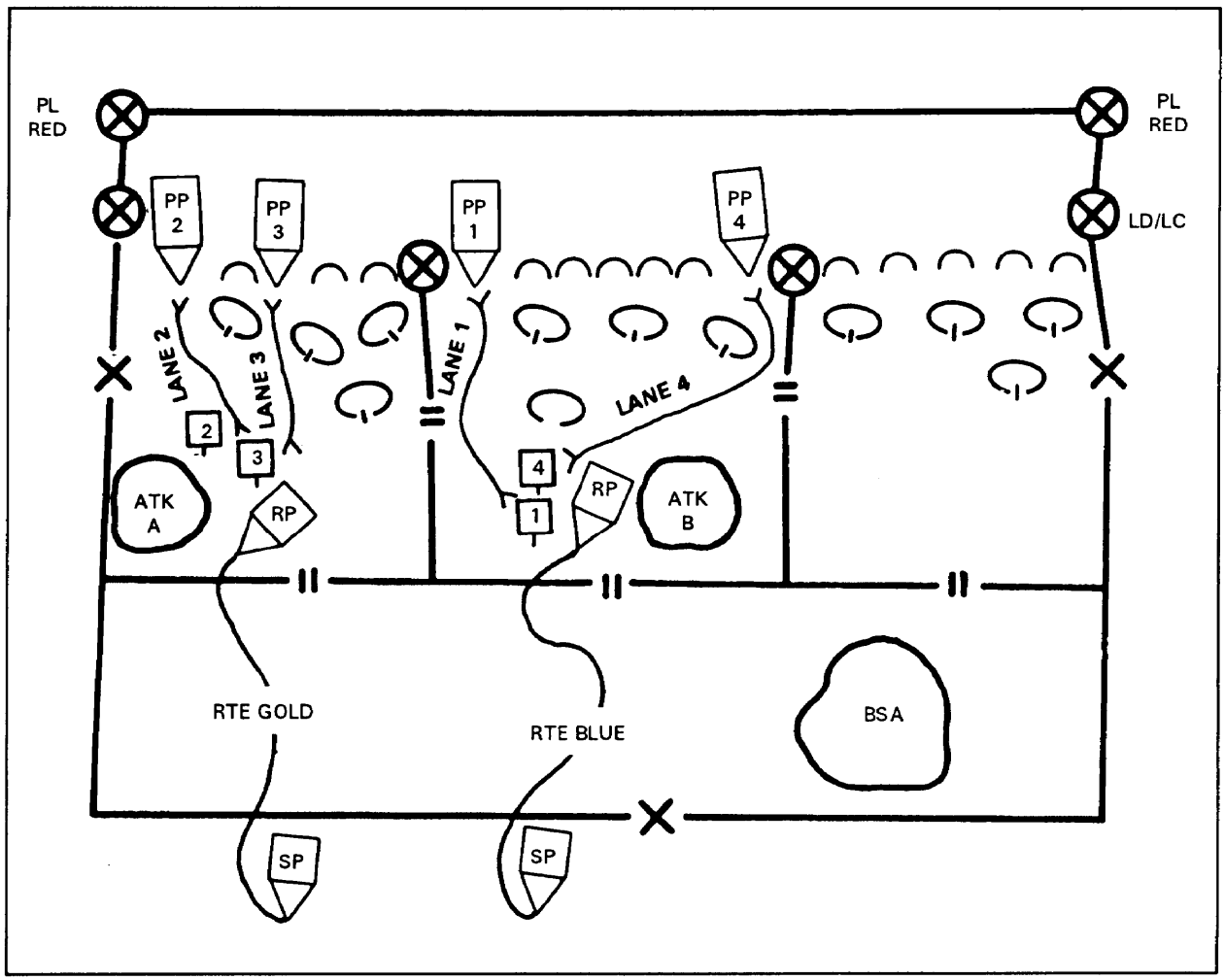


Figure 7-3. Forward passage of lines graphic control measures.

(6) ***Fire support.*** Integrate fire support of both the stationary and passing units. There must be clear agreement on who has authority to call for and to clear fires during the passage of lines. Normally, this is the stationary unit.

(7) ***Reconnaissance.*** Thoroughly reconnoiter all routes used (to, through, and beyond the area of passage).

(8) ***Liaison.*** Liaison involves the exchange of information to include the following:

- Time to pass.
- Tactical and communications plans to include signal operation instructions (SOI).
- Deception plan.
- Day and night recognition signals.
- Designation and types of units to pass.
- Control meaasures.
- Mission and scheme of maneuver.
- Fire support plan to include available fire support assets and their locations.
- Enemy situation and their capabilities of interfering with the passage.
- Reaction forces.
- Day and night locations of friendly units.
- Maintenance suppport.
- Medical evacuation support.
- Observation posts and patrol routes.
- CS and CSS assets available, their ability to support the passing unit, and their location.
- Terrain information.

(9) ***Engineers.*** Engineers exchange information on obstacles, terrain, demolitions, and enemy defenses.

(10) ***Air defense.*** In planning a passage of lines, air defense is essential. Whether passing forward or to the rea, the moving unit is forced to move slower and often in some type of column formation during the passage. As a result, air defense must be coordinated with the stationary unit. In most cases, the air defense unit deployed with the stationary supported force is able to protect the passing force, allowing the passing force's supporting air defense assets to move with the unit. However, if the passing force requires static air defense coverage, the terrain must be coordinated with the supported stationary force.

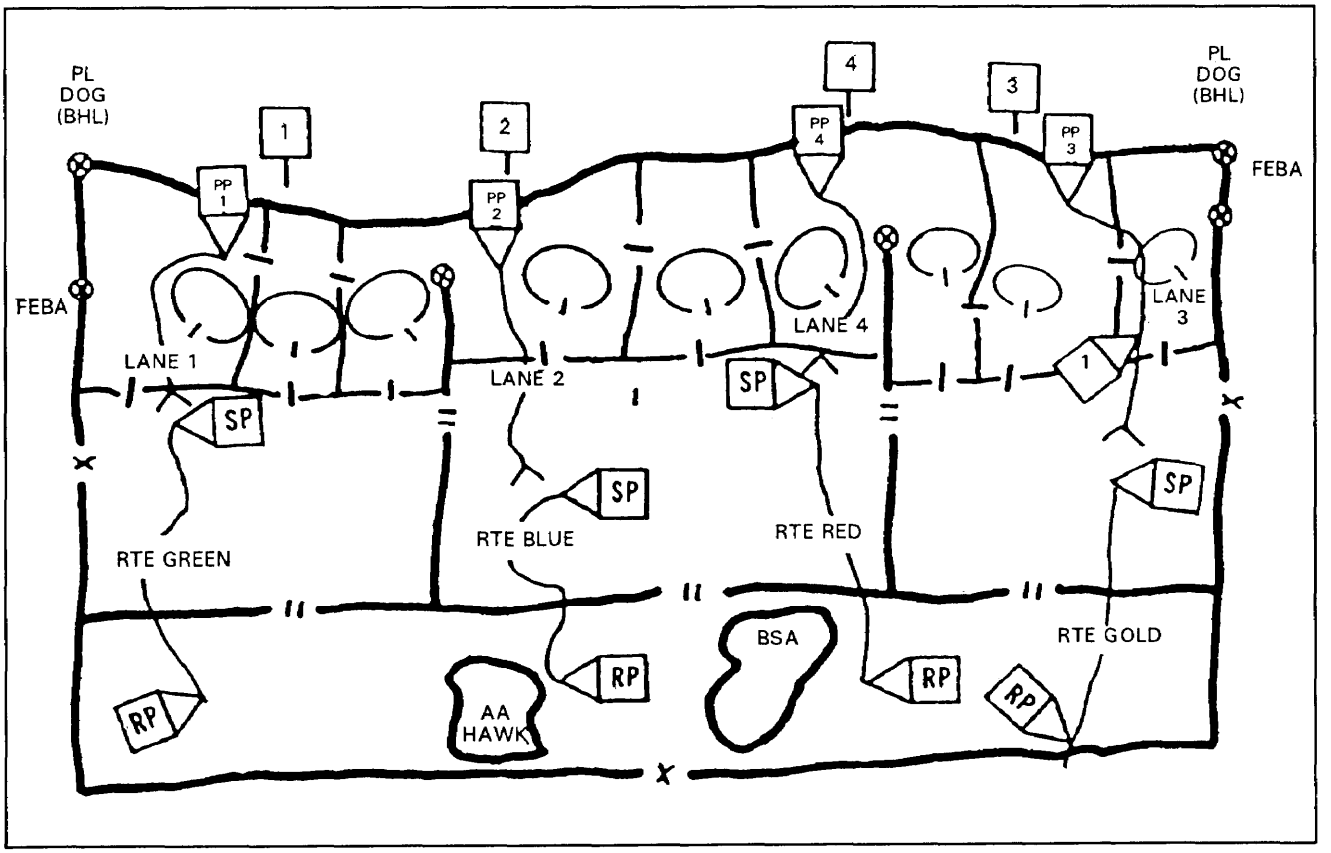


Figure 7-4. Rearward passage of lines.

7-3. RELIEF IN PLACE

In a relief in place, a deployed brigade is replaced by another brigade, which assumes the missions and the assigned sector or zone of action of the outgoing brigade. Relief operations may be conducted during either offensive or defensive operations (Figure 7-5).

a. **Purpose.** The purpose of a relief in place is to maintain the combat effectiveness of the committed brigade. A relief in place should be conducted during a lull in the battle. It may be conducted to—

- Introduce a new brigade into combat.
- Reconstitute a brigade.
- Allow a brigade to rest.
- Decontaminate a brigade.
- Change the mission of a brigade.

b. **Considerations.** Some points to be considered in planning a relief in place include the following:

(1) ***Exchange of plans and liaison personnel.*** The tactical CPS are collocated to assist in the relief, The outgoing brigade leaves liaison personnel with the incoming brigade until the incoming brigade becomes familiar with the situation.

(2) ***Sequence of relief.*** The relief in place is conducted in stages—either rear to front, or front to rear. If front to rear, reserves are relieved first, followed by

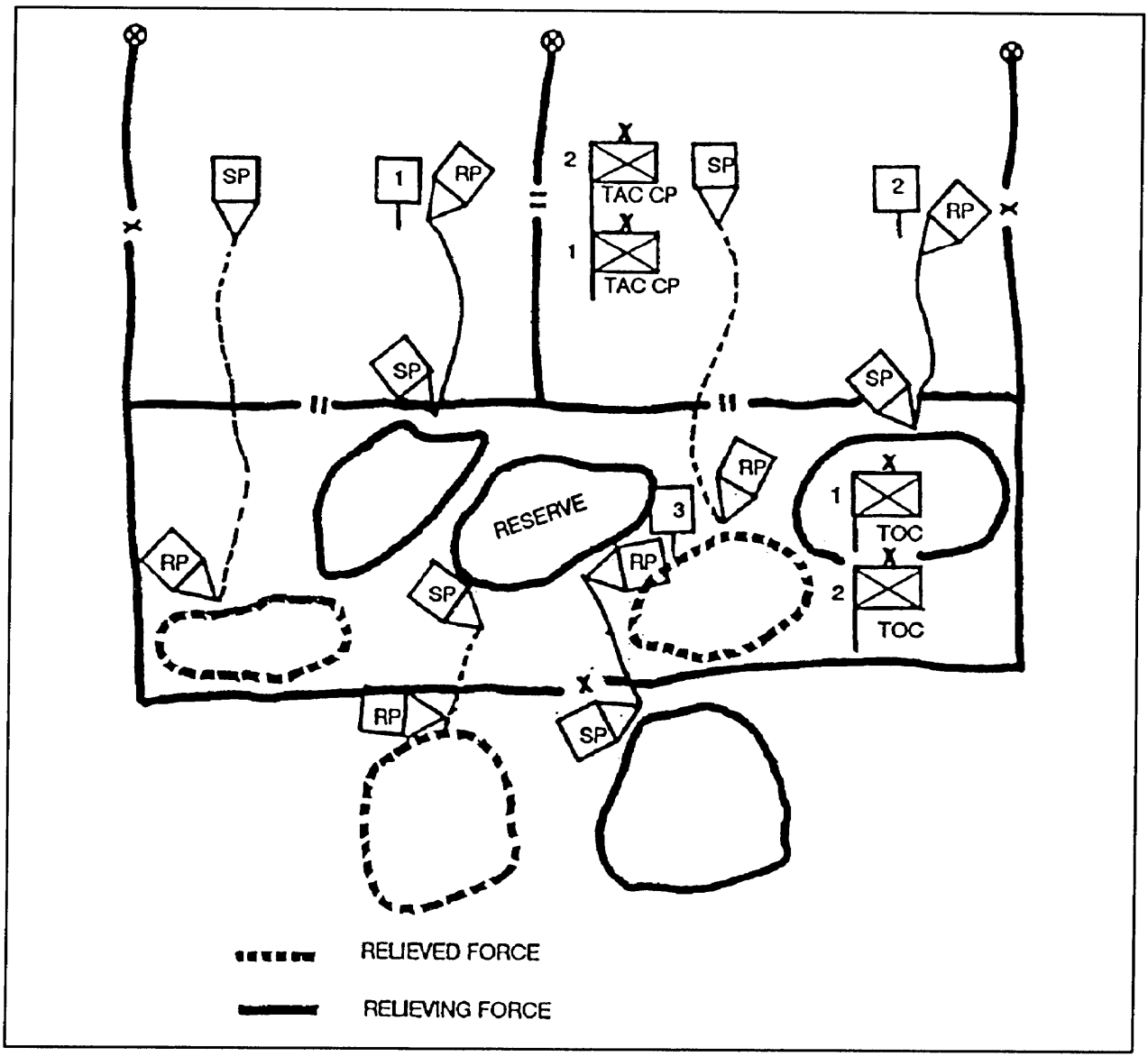


Figure 7-5. Brigade relief in place overlay.

relief of forward elements. The relief is conduct from front to rear when minimum forces are employed on the FLOT. When determining the sequence of relief, both commanders shouId consider the following:

- The subsequent mission of the brigade conducting the relief.
- The strength and combat efficiency of the brigade in the forward defensive area.
- The ability of the enemy to detect and react against the relief.
- The need to vary the pattern of the relief.
- The size and type of elements involved in the relief.

(3) ***Battle handover.*** The time or circumstances when the incoming commander assumes responsibility for the area must be clearly established. During the relief, the outgoing commander retains responsibility for the area and mission. He exercises operational control over all subordinate elements of the incoming brigade that have completed their portion of the relief. Responsibility passes to the incoming commander when all the battalions in the forward defense area have been relieved and adequate communications have been established.

(4) ***Reconnaissance.*** Leaders at the lowest level must reconnoiter potential assembly areas, routes, and positions. Reconnaissance should include an inspection of terrain to the front, defensive installations, relief routes, assembly areas, weapon positions, and CSS installations.

(5) ***Security.*** Both brigades must make every effort to prevent the enemy from learning that a relief is taking place. Some measures that assist in maintaining security of the operations are as follows:

- Conduct the relief at night or during reduced visibility.
- Enforce operations security.
- Conduct an aerial reconnaissance (incoming brigade) in outgoing brigade aircraft.
- Maintain normal patterns of activity.
- Conduct the relief on the command frequency of the outgoing brigade.
- Limit the size of reconnaissance and advance parties.
- Execute an integrated tactical cover and deception plan (both incoming and outgoing brigades), if assets are available.

(6) ***Movement control.*** The incoming and outgoing brigades make (arrangements for their control while moving into and out of the area. If terrain allows, relieving and relieved brigades are assigned separate routes and assembly are as to reduce congestion and concentration of forces. Assembly areas allow for quick coordination and preparation before executing subsequent missions. They should be vacated as soon as possible. Coordination should include the following:

- Routes and priorities for their use.
- Responsibility for traffic control.
- Location of assembly areas.
- Guides for incoming units.
- Common use of transportation.
- Control measures.

(7) ***Air defense artillery.*** Air defense protection must be planned for the forces during the phases of the relief in place. Normally, ADA units of the outgoing unit remain in position to provide ADA coverage until relieved. Relief operations most often occur during limited visibility, complicating the operation in terms of time and ease.

(8) ***Fire support.*** The method of relieving fire support units must be clearly established. Normally, fire support units of the outgoing brigade remain in position until the units in the forward defense have been relieved. Target lists and fire plans are exchanged at all echelons. Incoming brigade organic FSEs may elect not to take over the firing positions of outgoing units. In this case, the incoming FSEs move into position by platoons or sections. The FSEs may relieve or replace by squad or section to avoid congestion.

(9) ***Engineers.*** Engineer units exchange target folders, status of obstacles, emplacement of hasty and scatterable minefield, and reports of enemy minefield emplacements.

(10) ***Combat Service Support.*** The CSS relief is just as complicated as the tactical relief but usually occurs before. This allows the relieved brigade's FSB a chance to establish operations in preparation for the relieved brigade's recovery. The rear CPs and FSBs of each brigade collocate. Also, separate routes are planned for the relieving and relieved units to avoid two-way traffic. Some supplies are transferred to the relieving FSB such as Classes I, IV, and V.

(11) ***Intelligence.*** All information and intelligence are transferred from the outgoing brigade to the incoming brigade concerning the enemy and area of operations. When the incoming brigade requires more information it should be requested, collected, and issued by the outgoing brigade before the handover of responsibilities.

(12) ***Equipment.*** The outgoing and incoming brigades may sometimes transfer equipment or crew-served weapon systems.

7-4. ENCIRCLEMENT

Due to battlefield mobility and the nonlinear nature of the battlefield, forces could become encircled or bypassed. Brigades could be cut off from other friendly forces either by design or due to rapidly changing situations. Whether they are defending strongpoints, retaining key terrain, conducting attacks, or holding the shoulder of friendly or enemy penetrations, brigades face the possibility of encirclement.

Encirclement occurs when a brigade ground force has all of its ground routes of evacuation and reinforcement cut by the enemy. Brigade forces face encirclement most often when enemy forces bypass defending units or when advancing units are cut off by an enemy counterattack. As a method of defensive combat designed to tie down substantial enemy forces, the deliberate stand of an encircled force rarely achieves the desired result.

The most important consideration of encircled forces is the continuation of their mission. The encircled force commander must attempt to establish communications with his higher commander. If he cannot, he must act on his initiative within the intent of the higher commander to maintain the integrity of his fighting force. Encircled forces have several options that are described below.

a. ***Defend Until Relieved.*** Encircled forces may elect to stay in position and defend encircled. The senior maneuver commander within the encirclement assumes control of all forces. He informs his superior of the situation and immediately begins to accomplish the following tasks:

(1) ***Reestablish a chain of command.*** Fragmented units are reorganized, and a clear chain of command is established. Personnel not essential to CS and CSS are organized for combat operations or provided to battalions as replacements.

(2) ***Establish a viable defense.*** The command quickly establishes all-round defense; assigns sectors, battle positions, or strongpoints; and institutes an aggressive patrolling plan.

(3) ***Establish a reserve.*** A reserve must be constituted and positioned to take advantage of interior lines. Consider establishing more than one reserve.

(4) ***Establish security.*** Security elements are positioned as far forward as possible to provide early warning. Vigorous patrolling is initiated immediately. Local security is established throughout the force, and passive security measures must be enforced.

(5) ***Organize fire support.*** All indirect-fire assets in the encirclement are reorganized and brought under centralized control of the FSCOORD. Artillery and mortars are distributed throughout the pocket to limit their vulnerability to counterfire. The available fire support from outside the encirclement is coordinated by the FSCOORD. The FSCOORD plans fires for the defense and subsequent breakout.

(6) ***Reorganize logistics.*** An early assessment is made of the logistics posture of the encircled command. All CSS is put under the centralized control of the senior logistician or designated Individual. He rations key supplies, authorizes cannibalization, identifies equipment to be destroyed, and develops a casualty evacuation and stay-behind plan.

(7) ***Maintain morale.*** Commanders and leaders at all levels maintain the confidence of soldiers by resolute action and a positive attitude. They keep soldiers informed to suppress rumors.

(8) ***Improve mobility, countermobility, and survivability.*** Based on the commander's estimate of the situation, some assets may be tasked to create obstacles and lay minefield to deny enemy penetration. Other assets may continue to improve the survivability of the force. Survivability is important due to the units vulnerability to accurate artillery and air strikes.

(9) ***Organize air defense.*** The air defense assets must be organized to provide cover for the encircled area. The static nature and known perimeter makes the unit a lucrative air target. If possible, air defense units maintain contact with the main force to receive early warning reports.

b. **Break Out Toward Friendly Forces.** An attack in the direction of friendly forces is used when linkup is necessary and time is crucial. If a breakout attack is used, it is important that it take place as soon after encirclement as possible; the enemy force may not realize it has encircled a brigade. The longer the commander waits to conduct the attack, the more organized the enemy forces are likely to be. The attack to break out of an encirclement differs from other attacks only in that a defense in other areas of the perimeter is maintained at the same time. To achieve a breakout, the commander accomplishes the following tasks:

(1) ***Deceive the enemy as to time and place of attack.*** If it is not possible to break out immediately, the commander tries to deceive the enemy by concealing his preparations. He makes it appear as if the force is taking a resolute stand and waiting for relief. Dummy radio traffic that is intended for monitoring

by the enemy or the use of landlines that might be tapped are good means of conveying false information. The direction for the breakout should not be the obvious route toward friendly lines unless there is no other way.

(2) ***Identify and exploit gaps or weaknesses.*** Early in the encirclement, reconnaissance should locate gaps or weaknesses in the encircling force. Although a breakout attack through a gap or weakness may be a less direct route or may be over less favorable terrain it is often preferred because it would avoid enemy strength and increase the chance for surprise.

(3) ***Exploit darkness and limited visibility.*** The cover of darkness, fog, or severe weather conditions favors the breakout because the target acquisition capability of the enemy's weapons are normally less effective in these conditions. However, waiting for darkness or limited visibility may give the enemy time to consolidate his defense.

(4) ***Concentrate fire support.*** Supporting fires are concentrated at the breakout point. Risks are taken on other parts of the perimeter. Once the breakout is achieved, priority of fires maybe shifted to the rear guard.

(5) ***Protect air defense assets.*** Air defense assets are assigned elements to accompany and protect them throughout the operation. The switch from an area to the unit's defense occurs at the same time with the start of operations. If this requires repositioning, ADA assets should link up early with their assigned unit.

(6) ***Organize the forces.*** The forces for breakout are organized into five distinct tactical groups: the rupture force, the follow-and-support force, the main body with the CS and CSS elements, the rear guard, and the diversion force (Figure 7-6).

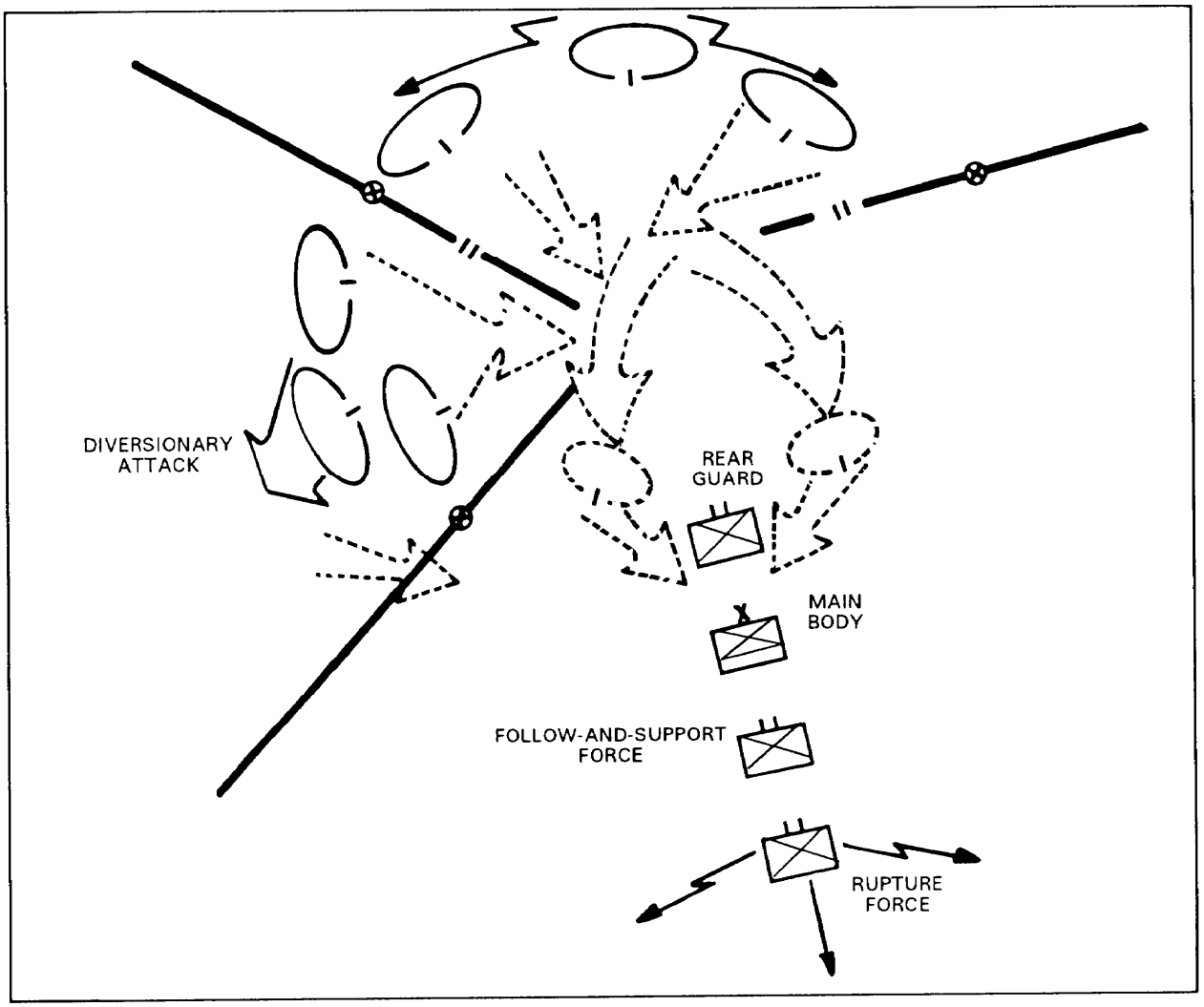


Figure 7-6. Organization for a breakout.

(a) If the commander has sufficient forces, he may launch a diversionary attack just before the real breakout attempt to draw off the enemy forces. This attack should be directed at a point where the enemy might expect a breakout. Success of the diversionary force is needed for a successful breakout. To achieve deception, the commander should—

- Use smoke-producing assets to deceive the enemy as to the size of the diversionary force.
- Increase radio traffic for size deception and as an indicator of can important operation.
- Use available fire support to indicate a false rupture point.

(b) The rupture force is assigned the mission of penetrating the enemy encircling positions, widening the gap, and holding the shoulders of the gap until all other encircled forces can move through. Engineers are task organized to the rupture force to assist in breaching and mobility operations. All available fire support is provided in direct support to the rupture force.

(c) The follow-and-support force assists the rupture force or assumes its mission and passes through the rupture force to maintain the momentum of the attack.

(d) The main body, which contains the remainder of combat forces, the CP elements, the casualties, the CS, and the CSS elements, moves as a single group. It usually follows the follow and support force through the gap created by the rupture force. One commander should be given command and control of this element to ensure rapid orderly movement. The CSS elements are integrated into the formations for the breakout.

(e) The rear guard acts as a security force to protect the main body from attack while it is moving from the area. It should be strong enough to delay or disrupt any enemy attempts to pursue the main body. As the brigade moves out of the perimeter, the rear guard forces spread over an extended area. This requires flexibility. The perimeter must withstand pressures from enemy forces that follow the breakout forces.

(7) ***Concentrate combat power at the breakout point.*** Every effort is made to produce overwhelming combat power and to generate momentum at the breakout point. The rear guard must be prepared to fight a vigorous delaying action on the perimeter so that no portion of the force is cut off. Supporting fires are concentrated at the breakout point. Once the breakout is achieved, priority of fires may be shifted to the rear guard action. However, the momentum of the breakout attack is maintained or the force is more vulnerable to destruction than it was before the breakout attempt.

(8) ***Coordinate with supporting attacks.*** The breakout attack may be assisted with a supporting attack by a relief force that diverts enemy attention and assets from the breakout effort. The breakout atempt should be timed to occur just after the enemy reacts to the relief force attack.

c. **Exfiltrate.** If success of a breakout attack appears questionable and a relief operation is not planned the least preferred option to preserve a portion of the forces is through organized exflltration. The use of adequate control measures and fire support coordinating measures is vital to the execution of this operation. An exfiltration effort is preferable to capture, and it can distract the enemy from his main effort and produce intelligence for the main force. The encircled forces are organized into small groups under small-unit leaders. During limited visibility, these small groups are exfiltrated through gaps in the encircling forces. (The infiltration considerations are described in Chapter 3; they apply when organizing and conducting exfiltrations.)

7-5. RIVER CROSSINGS

Brigades conduct river crossings as part of the division or corps scheme of maneuver. When the brigade commander receives the mission, he synchronizes the full range of his assets. His objectivc is to quickly project his combat power to the far side of the river so as to maintain the brigade's momentum. The brigade commander dots not surrender the initiative to the enemy by letting water obstacles affect his scheme of maneuver. (FM 90-13 contains a detailed discussion on river crossings.)

a. **Considerations.** During river crossings, the commander must consider—

(1) Using all available assets to cross the most soldiers and equipment in the least time.

(2) Using either a narrow or broad front based on the factors of METT-T. A narrow front allows for a massing of forces if a breakthrough is achieved. A broad front permits a rapid crossing for the entire force and reduces vulnerability.

(3) Using a deception plan that effectively supports the timing of the crossing.

(4) Using air defense units to protect the crossing sites from enemy air attack.

(5) Using extensive reconnaissance to collect information about the enemy and the water obstacle.

(6) Deploying engineer/crossing assets well forward to expedite the crossing.

(7) Using artillery to suppress enemy positions that have observation and fields of fire over the

crossing sites. Smoke missions should be fired to add to the obscuration of friendly forces. Additional fire support considerations incude the following:

- Make fires immcdiately available to the crossing forces.
- Assign priority of fires to assault forces.
- Use all available targeting assets to develop targets in the bridgehead area. Consider a direct link between tactical air assets and supporting artillery.

Offensive River Crossings. Offensive river crossings are either hasty or deliberate.

(1) ***Hasty.*** A hasty river crossing is part of an ongoing operation, normally an attack. The brigade uses existing bridges, and organic or available asscts to cross immediately. Although termed hasty, rehearsed SOPS and detailed coordination ensures that fire support and crossing means are available on arrival at the water obstacle. A hasty crossing is preferable over a deliberate crossing, because it does not stop the momentum. A hasty river crossing is characterized by the following:

- Speed, surprise, and minimum loss of momentum.
- Decentralized operations with organic, existing, or expedient resources.
- Weak (or no) enemy defenses on both banks.
- A river is not a severe obstacle and so crossing does not require expensive planning or preparation.
- Minimum concentration of forces.
- Quick continuation of the attack.

(2) ***Deliberate.*** A deliberate river crossing (Figure 7-7, page 7-12) involves loss of momentum. It usually occurs when a hasty crossing fails or is not feasible. Crossing of brigade assets will require bridging support assets from corps. A deliberate river crossing is characterized by the following:

- Detailed planning and centralized control.
- Deliberate pause to prepare, to acquire additional bridging and rafting equipment, and to concentrate combat power.
- A need to clear enemy forces from the exit bank.
- Detailed reconnaissance.

(3) ***Crossing phases.*** Offensive deliberate river crossings are diveded into four phases. The phases are established to facilitate planning, while in execution the phases overlap without pause. Planning should be conducted in reverse order to facilitate the continuation of the attack.

- The advance to the river.
- Assault across the river.
- Advance from the exit bank.
- Secure the bridgehead.

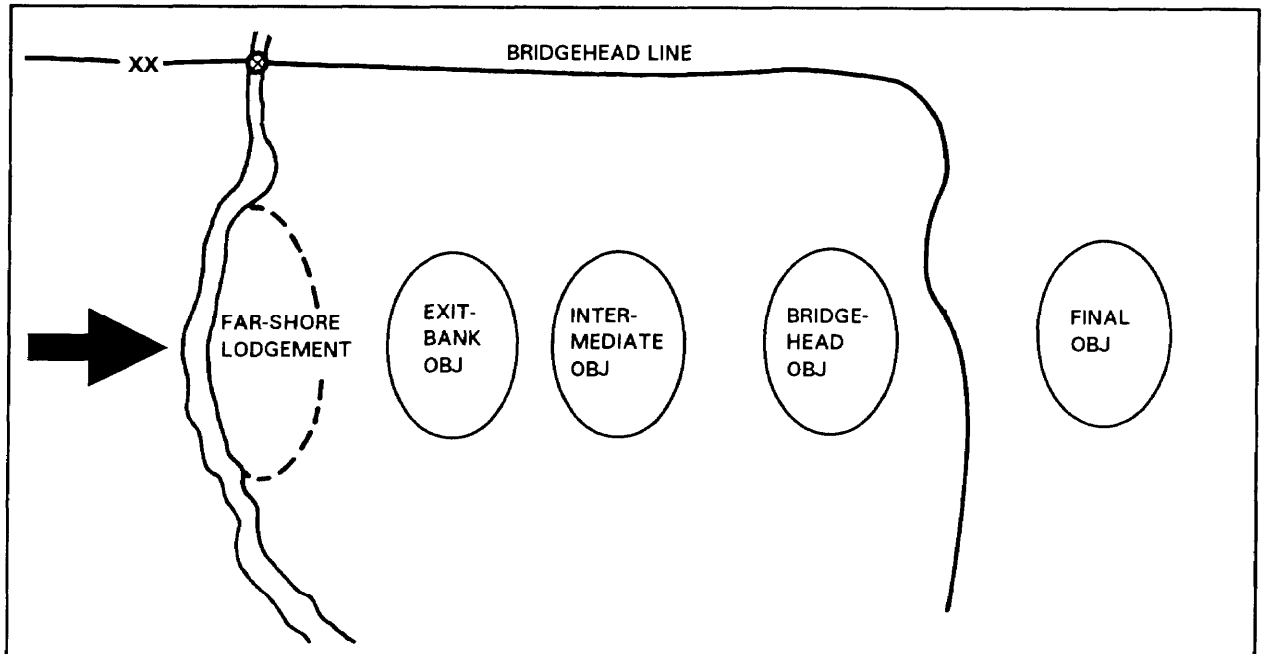
c. **Retrograde River Crossings.** A brigade may conduct a retrograde river crossing as part of a brigade or division retrograde operation. Retrograde river crossing combines two of the most difficult brigade operattions, retrograde and river crossing, in one high risk operation. If the retrograde river crossing fails the brigade risks the loss of the entire force.

(1) Retrograde river crossings are charaterized by detailed planning and centralized control. They have three phases—delay, crossing, and defense.

(a) *Delay.* A delay is conducted to allow the main body of the brigade force to retrograde rapidly across a water obstacle. Elements not assigned missions in the delay execute a planned retirement or withdrawal and rapidly cross the water obstacle. Unnecessary reserve and CS/CSS assets should cross as soon as possible to reduce congestion later. The delay continues until the battle is within communication and fire support range of the exit bank defense,

(b) *Crossing.* The crossing area commander ensures the continuous and orderly flow of the retrograde elements across the river. Operation of the crossing area must provide for—

- Rapid flow of traffic across the river.
- Concealment. To avoid congestion, arrival of units at the crossing site should not exceed the crossing ability. Concealed holding areas may be necessary.
- Dispersal.
- Coordinated crossing site selection consistent with subsequent operations.
- Coordination with the delay force commander for use of crossing sites by delaying forces.
- Control of all movement to, across, and exiting from the river line.
- Coordinated denial measures of crossing sites with defense commanders. When the situation dictates that crossing sites are no longer feasible, the sites are closed or destroyed. When this occurs, the decision is made by the defense commander in whose area the site is located.



RIVER CROSSING PHASES				
PHASE 1	PHASE 2	PHASE 3	PHASE 4	
ADVANCE TO THE RIVER	ASSAULT ACROSS THE RIVER	ADVANCE FROM THE EXIT BANK	SECURE THE BRIDGEHEAD LINE	CONTINUE OFFENSIVE COMBAT OPERATIONS
SEIZE AND SECURE NEAR SHORE	SECURE LODGEMENT ON FAR SHORE, ELIMINATING DIRECT FIRE ON CROSSING SITES	SEIZE AND SECURE EXIT-BANK AND INTERMEDIATE OBJECTIVES TO ELIMINATE DIRECT AND INDIRECT FIRES ON CROSSING AREA	SEIZE AND SECURE BRIDGEHEAD OBJECTIVES NUMBER TO PROTECT BRIDGEHEAD AGAINST COUNTERATTACK AND CREATE TIME AND SPACE FOR THE BUILDUP OF FORCES FOR ATTACK OUT OF BRIDGEHEAD	CONTINUE THE ATTACK ONTO DIVISION AND CORPS OBJECTIVES

Figure 7-7. Deliberate river crossing.

(c) *Defense.* The exit bank defense overmatches the crossing of those elements remaining on the entry bank. The forces required to conduct the defense depends on METT-T. Once the defense forces assume responsibility for the battle, the defense must contain the enemy, allowing successful completion of the retrograde crossing.

- Maneuver elements and CAS engage at the greatest ranges.
- Air defense coverage must be continuous over the defense force.
- Divisional engineers are allocated to delay because of their inherent mobility. As a result, the defending area must rely on nonorganic engineer elements to assist with the development of the exit bank. Obstacles on the entry bank must also be emplaced to support the crossing.
- At the point in the defense where forces are attempting to break contact and cross the river, CAS and attack helicopter support become critical.

(2) Retrograde crossings differ from offensive crossings in that both banks are under friendly control. Existing bridges or other crossing sites may be intact and available to speed the crossing of the retrograde force. Command and control is organized the same as for offensive crossings.

d. Command and Control. During a brigade river crossing, the brigade commander has overall command and control responsibility, and the battalion commanders command the assault forces. The brigade XO (DBC in a separate brigade) is usually the crossing force commander; he plans and controls the operation (Figure *7-8).* He may form a special staff element to assist him. When selecting more than one area for crossing, the XO of the battalion (within each area) is usually the crossing area commander. Crossing area commanders control the following:

- The assault forces while in the crossing area.
- Tactical elements that secure the crossing sites.
- Support forces that develop and maintain crossing sites and traffic.

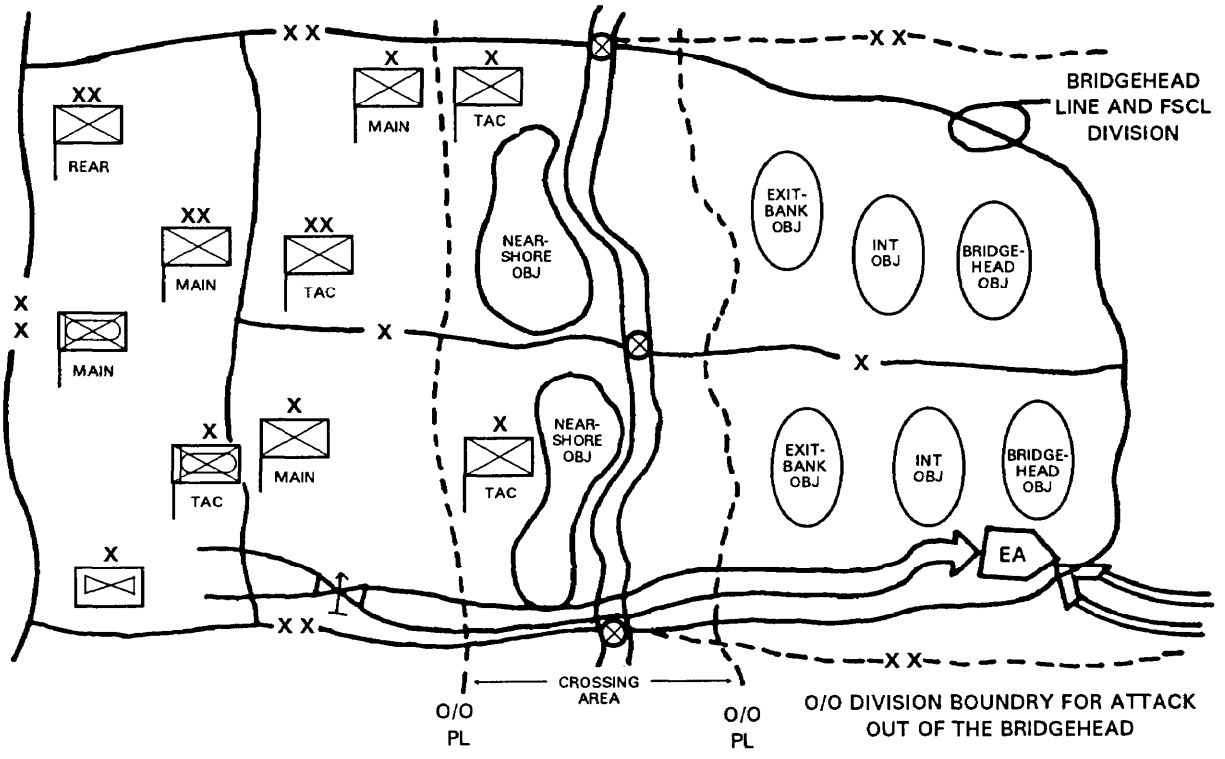


Figure 7-8. River crossing command and control, division and brigade command post functions.

7-6. REAR OPERATIONS

Rear operations ensure freedom of maneuver. Units receive continuous support from the support units of the brigade. They consist of actions taken by all combat CS, CCS, and host nation units singly or in a combined effort to secure the force, or to neutralize or defeat enemy operations in the rear area. Rear area operations represent a critical fight for the brigade commander. Brigade units may be designated as part of the tactical combat force (TCF) to defeat the rear threat.

a. Threat doctrine may emphasize the conduct of operations in the enemy's rear area as part of their

overall offensive effort. These operations disrupt CSS operations throughout all echelons of our rear area.

b. The brigade commander may make the FSB commander responsible for rear operations.

c. The objectives of rear operations are to accomplish the following:

- Secure the rear areas of the brigade and facilities.
- Prevent enemy interference with C3.
- Prevent disruption of CS and CSS.
- Provide unimpeded movement of friendly units throughout the rear area.
- Find, fix, and destroy enemy incursions in the rear area.
- Provide area damage control after attacks.

d. Three levels of threat activity are used to serve as a guide for planning rear operations. Rather than focusing on the size or type of threat, these levels focus on the nature of the friendly response required to defeat the threat.

(1) ***Level I.*** These are threats that can be defeated by base or base cluster self-defense measures. Examples of what a Level I threat may involve are:

- Enemy controlled agent activities.
- Sabotage by enemy sympathizers.
- Terrorism.

(2) ***Level II.*** These are threats that are beyond base or base cluster self-defense capabilities. They can be defeated by response forces, normally military police with supporting fires. Examples of what a Level II threat may involve are:

- Diversionary and sabotage operations conducted by unconventional forces.
- Raids, ambushes, and reconnaissance operations conducted by combat units.
- Special missions or unconventional warfare missions.

(3) ***Level III.*** These are threats that require the command decision to commit a combined arms tactical combat force. Examples of what a Level III threat may involve are:

- Heliborne operations.
- Airborne operations.
- Amphibious operations.
- Ground force operations.
- Infiltration operations.

e. Base and base cluster defensive operations include all active and passive actions taken by units that occupy a base to protect themselves from enemy threats. They must delineate a defense command and control system. Operations include the assistance of MP patrols, reconnaissance and security operations, hardening and dispersal actions, cover and concealment, deception, and immediate reaction to enemy threat or attack. Base defensive operations are enhanced by the extensive use of obstacles, sensors, surveillance and chemical detection devices, and OPs. Supporting units must be prepared to conduct small-unit security operations and to defend themselves against all levels of threat. Base or base cluster commanders coordinate with adjacent bases or base clusters to increase mutual support and to prevent fratricide.

7-7. CROSS-FLOT OPERATIONS

The intent of cross-FLOT operations is to insert combat forces forward of the FLOT for a decisive purpose while conducting tactical operations. These insertions are characterized by introducing combat power from an unexpected direction, but synchronized with the main effort for a decisive effect. The insertion usually will culmnate with either an extraction, a link-up, or the force breaking contact to exfiltrate to pre-planned locations. These operations give the brigade commander flexibility, agility, and the capability to seize and maintain the initiative.

a. Examples of cross-FLOT operations are as follows:

(1) A combat force conducts an airborne operation to seize and defend key terrain in support of the main attack (Figure 7-9, page 7-15).

(2) A combat force conducts an air assault operation to block a repositioning enemy or to counterattack while the main attack assaults its objective (Figure 7-10, page 7-15).

(3) A combat force conducts an air assault operation to conduct a spoiling attack (Figure 7-11, page 7-16).

(4) A combat force conducts an air assault to block an escaping enemy after a successful attack.

(5) A combat force infiltrates to attack a defending enemy from a different direction than the main attack (Figure 7-12, page 7-16).

(6) A combat force infiltrates to breach and mark an obstacle for the main attack.

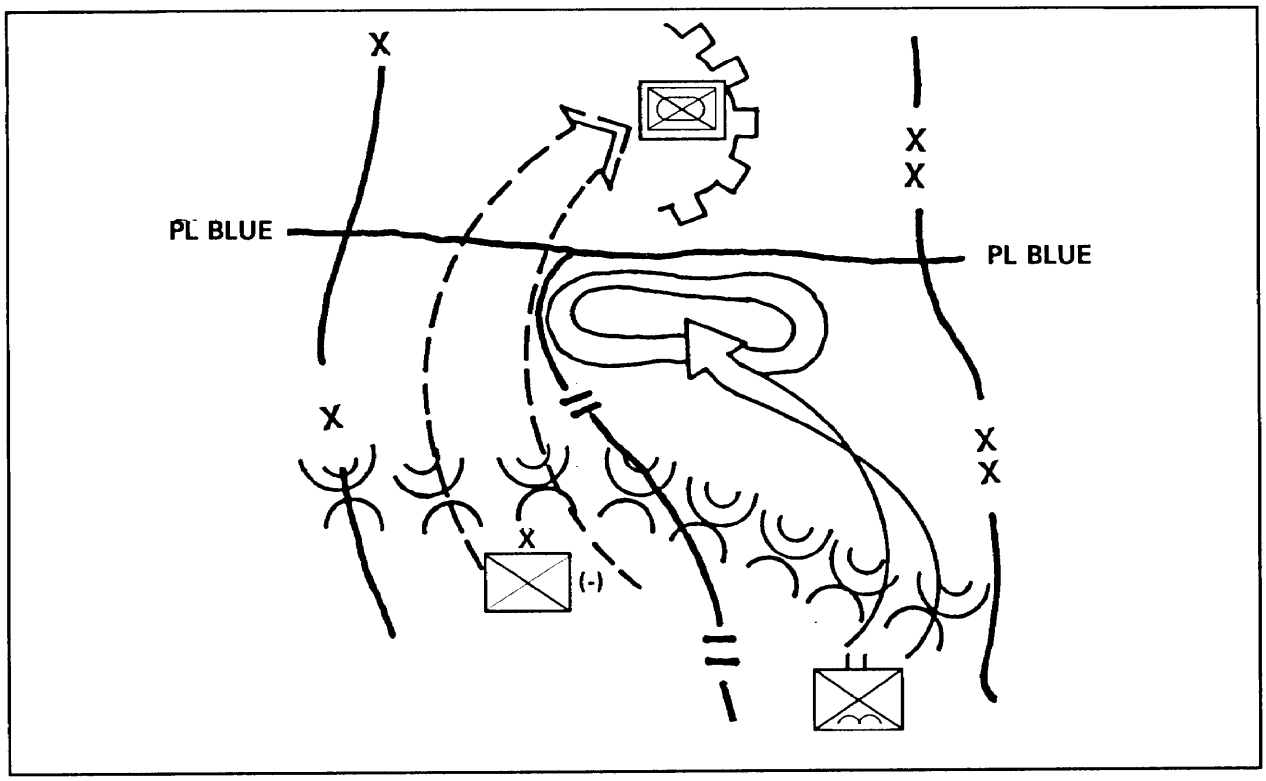


Figure 7-9. Airborne forces seize key terrain.

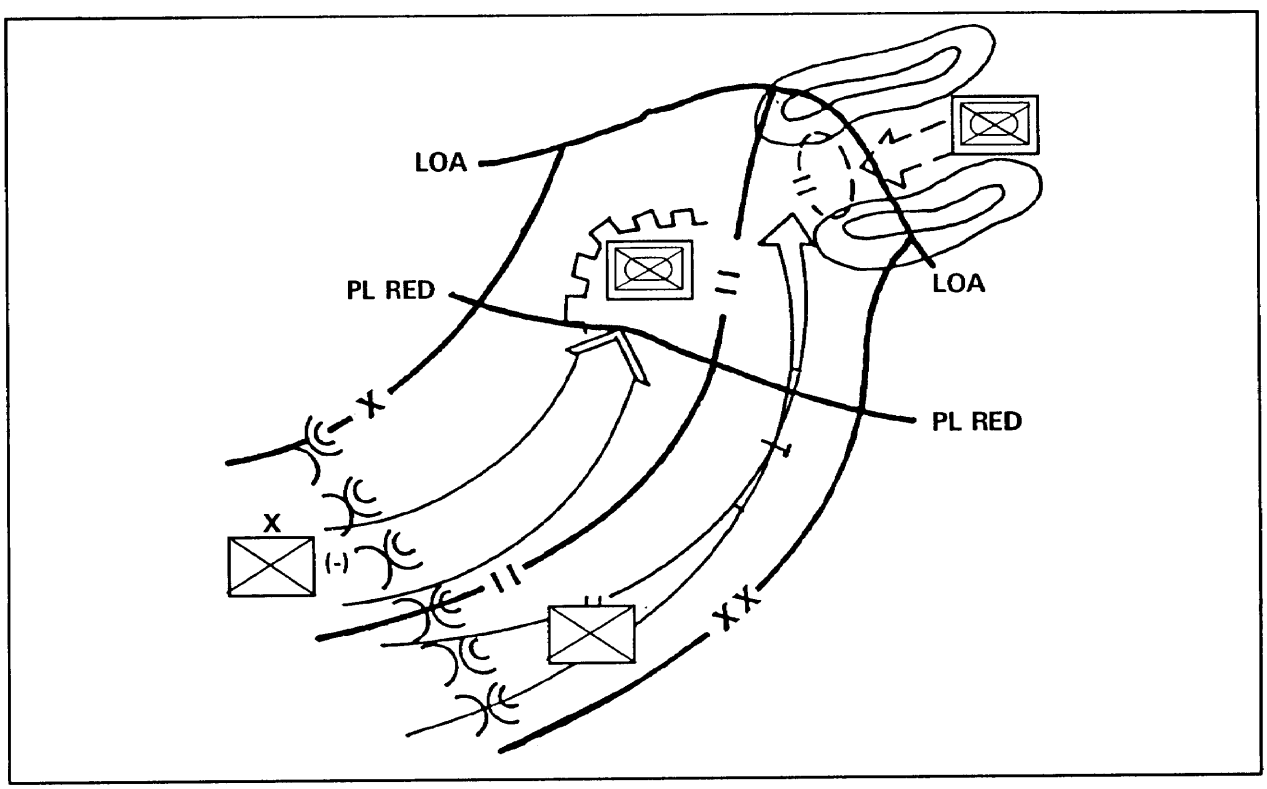


Figure 7-10. Air assault to block enemy counterattack.

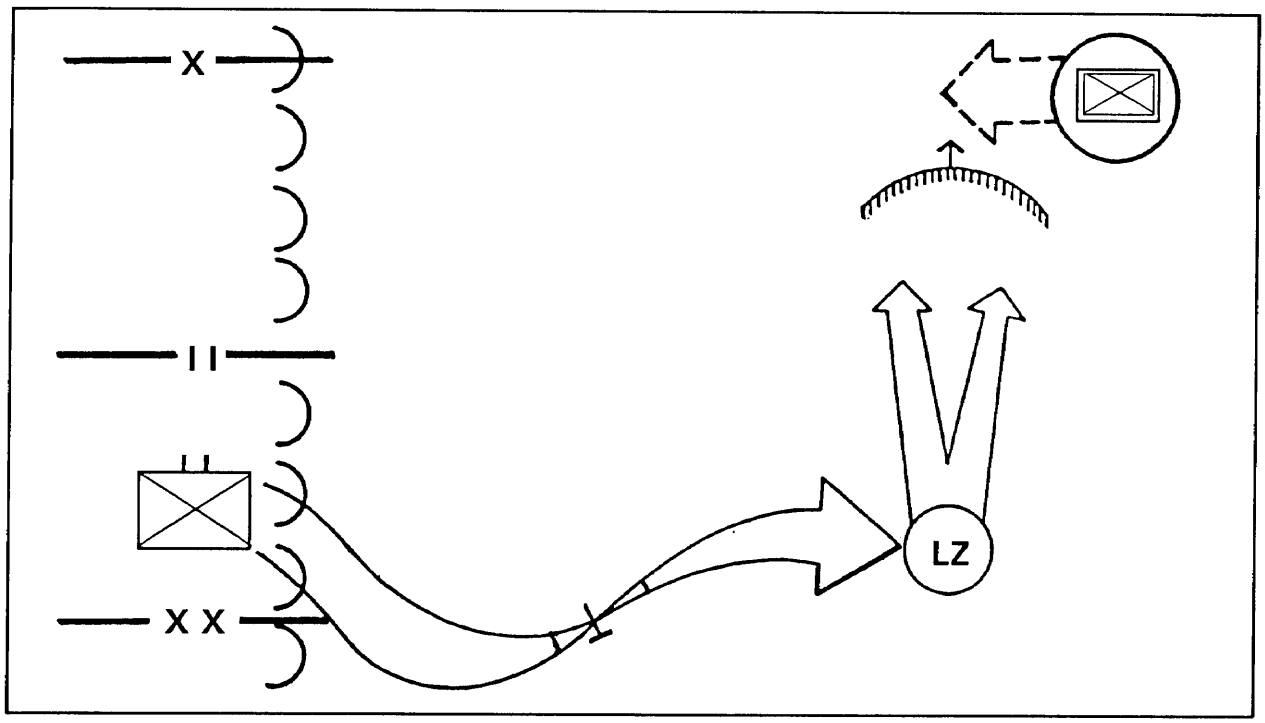


Figure 7-11. Air assault to conduct a spoiling attack.

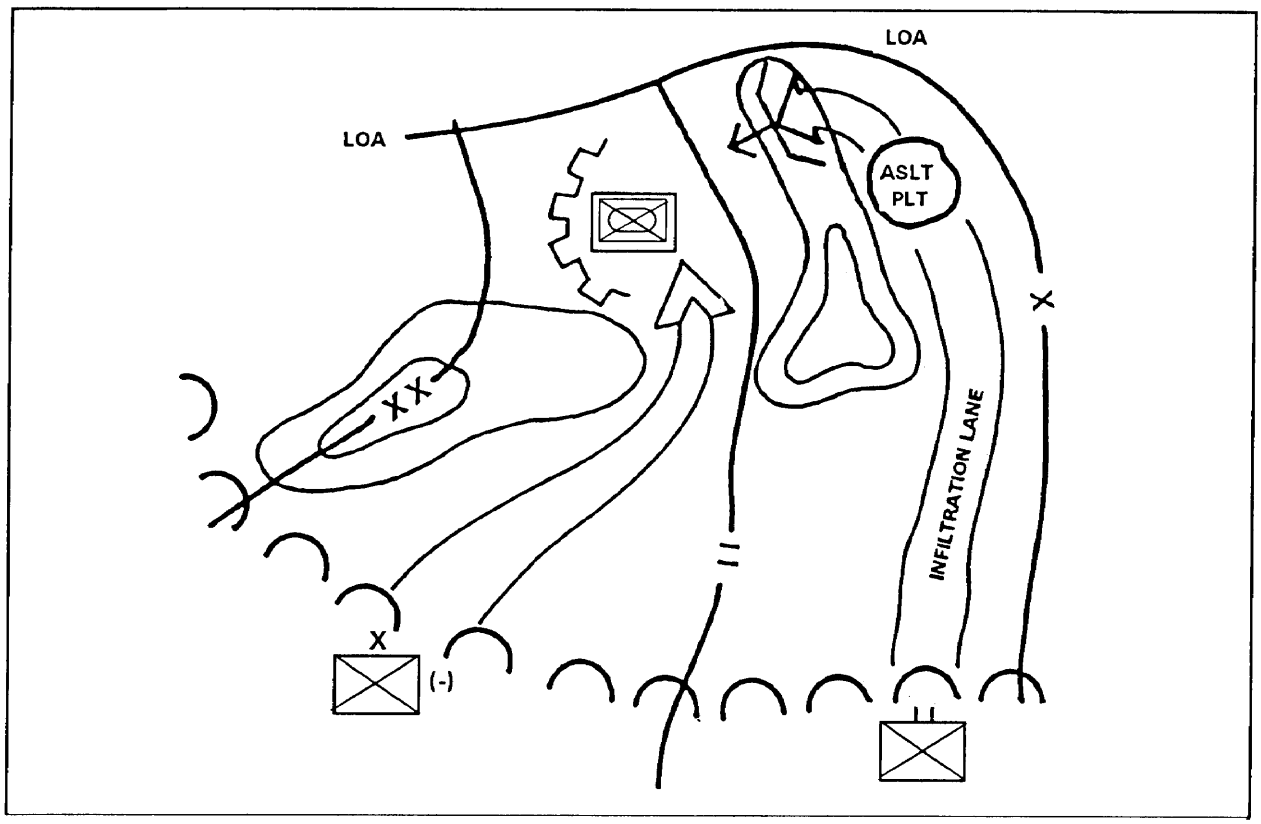


Figure 7-12. Infiltration to attack the enemy from an unexpected direction.

b. Some additional planning considerations for cross-FLOT operations using the BOS are as follows:

(1) ***Intelligence.*** Situation, event, and decision support templates must encompass the area of operations. While the S3 is overall responsible for the DST, the S2's input is critical. Terrain analysis, particularly cover and concealment, is critical to the survivability of the inserted force.

(2) ***Maneuver.*** The inserted force must be tailored to be light and flexible, yet lethal enough to accomplish the mission. The plan must identify the decisive purpose for the operation and have branches and sequels in case of unforeseen developments. Integration and synchronization of combat, CS, and CSS assets is critical to mission accomplishment and unit survival. The criteria for aborting the mission must be clear and understandable. Plans must be made for follow-on missions upon completion of the current operation, such as linkups with friendly forces, extractions to tactical assembly areas, breaking contact, and moving to an assault position. As a minimum, the plan must incorporate the following:

- Stealthful insertion of the force.
- Measures to prevent detection of the force.
- Surprise.
- Synchronized action with the main effort.
- Achievement of the decisive purpose IAW the commander's intent.
- Follow-on mission; linkup, air extraction, exfiltration, and so forth.

(3) ***Fires.*** Fires should be planned throughout the operation. Depending upon the distance and the factors of METT-T, mortars may be the only indirect fire support available to the force. The cross-FLOT force may have to rely on Army aviation naval gunfire, and tactical aircraft for fire support. Coordination measures should be used to control indirect and direct fires, and a SEAD program is necessary if insertion is by aircraft. Consider airdrop or air assault of artillery.

(4) ***Air defense.*** Stinger man-portable air defense system (MANPADS) should be used for insertion force air defense as well as passive air defense and combined arms air defense.

(5) ***Mobility/survivability.*** Plans should be made for breaching obstacles for an attack and preparing obstacles for defense (if applicable). Survivability depends on the availability and positioning of materils and equipment.

(6) ***Combat service support.*** There must be a resupply plan for a unit that must remain undetected before executing the mission and coordination of air movement and resupply, including MEDEVAC procedures.

(7) ***Battle command.*** Graphic control measures that illustrate the maneuver of the cross-FLOT force and main attack must be planned. Consideration must be given to the communication plan, fratricide prevention measures, battle tracking of both forces, and flexible C2 facilities (tactical CP).

7-8. AIRLAND OPERATIONS

Airland operations involve the movement of soldiers and equipment by air and their unloading after the aircraft has landed. Units can be deployed from one area of operations to another. Where great distances are involved, airland units can be transported to an area of operations in strategic or tactical aircraft and upon arrival reload into assault aircraft for further deployment to the objective area. Airland operations can be conducted independently or in conjunction with parachute and or air assault operations. The brigade normally conducts airland operations in support of a division or corps operation. The command and staff procedures, tactics, and techniques used in the planning and execution of airland operations are the same as those used for an airborne operations involving parachute forces. (FMs 90-26, 100-27 and 71-100 contain detailed discussions on planning and executing airborne operations that apply to airland operations.) When conducted independently of parachute operations, the entire operation is executed by aircraft landing in the objective area. Landing zones must be secure.

a. **Considerations.** Some considerations for airlanding a brigade include:

(1) Local air superiority is vital during airland operations, and enemy air defense must be suppressed or avoided.

(2) Deployment and initial resupply depend on availability and type of aircraft.

(3) In situations where the brigade is expected to engage in combat upon landing, the units should be task-organized and loaded accordingly.

b. **Command and Control.** Airland operations are joint Army-Air Force operations, normally conducted under a joint task force. Command is exercised through the appropriate component commander of forces comprising the joint force.

c. **Planning.** Planning for airland operations starts at the joint command level. Upon receipt of a warning order, subordinate commanders develop the ground tactical plan, the landing plan, the air movement plan, and the marshaling plan, using the reverse planning sequence. The operation is executed in sequence; marshaling, air movement, landing and ground tactical operations.

(1) ***Ground tactical plan.*** The ground tactical plan provides the scheme of maneuver and organization for units making the initial assault. This plan assigns missions and objectives, and it includes the airhead line and the assault objectives, which are selected concurrently; the security zone and the R&S forces; the boundaries; and the assault task organizations.

(2) ***Landing plan.*** This plan joins the air movement plan and the ground tactical plan. The landing plan sequences the time and place of delivery of troops and equipment into the objective area. The size and location of LZs and LAPES zones are basic considerations in preparing the landing plan.

(a) *Field-expedient landing zones.* Initially, if suitable air facilities are not available, assault aircraft can use unimproved areas as LZs, such as fields, gross strips, or roads. Once construction efforts have improved these areas, larger aircraft or more frequent sorties can air-land personnel and equipment.

(b) *Clearing of landing zones.* The airland force and airlift commanders should plan to cope with the problem of disabled aircraft, mines, and obstacles on LZs. The airland force should aid in moving disabled aircraft that may interfere with later operations. Normally, this requires the early arrival of equipment rigged to push or drag obstacles off airfields.

(c) *Command group.* The airland commander names an arrival airfield command group (AACG). Airland operations concentrate large quantities of men and equipment, creating a vulnerable and lucrative target. The AACG ensures the smooth, quick off-loading, assembly, and dispersal of arriving personnel and equipment.

(d) *Airfield commander.* The airland commander names an airfield commander, who establishes local security, marshaling areas, assembly areas, and emergency supply stocks.

(e) *Arrival airfield control group.* The following personnel are usually a part of the AACG; however, others may be included:

- Command element (brigade/battalion XO).
- AACG OIC.
- AACG assistant OIC.
- Vehicle guides.
- Off-load teams.
- Engineer support element.
- Security force.
- Medical support element.

(f) *Coordination with combat conttrol team.* The airfield commander must closely coordinate with the CCT on parking areas, off-load sites, airflow intervals, maximum number of aircraft allowed on the ground, sequences of landing, and emergency actions if aircraft break down on runways or taxiways. This coordination should be performed at least 48 hours before the operation, then confirmed again at the arrival airfield. Planning focuses on rapid reception, unloading, and takeoff of aircraft-confusion causes congestion.

(g) *Off-1oad teams.* These teams should be stationed near the off-load sites (but outside the propeller wash), and they should take orders only from the CCT or AACG supervisors.

(h) *Communications.* The airfield commander must have radio communication with the CCT, AACG, engineer support element, security force, and off-load teams. If the commander's vehicle is to air-land late in the airflow, it must have portable radios. Therefore, crews should lay wire to all control locations, security positions, unit AAs, and off-load sites. As soon as wire lines have been installed, they become the primary means of communication.

(i) *Engineer control.* Any engineers needed to upgrade, construct, or maintain the airfield remain under OPCON of the arrival airfield commander.

(j) *Vehicle guide briefings.* Leaders must brief vehicle guides on the number of vehicles, personnel, and equipment expected to airland and their sequence. Also, they must be briefed on routes to and locations of every unit assembly area; each driver needs strip maps.

(k) *Materiel-handling equipment.* The amount and type of materiel-handling equipment used during the operation depends on the situation. It is based on the size and type of airfield and the equipment available by USAF.

(3) ***Air movement plan.*** This plan covers the time from loading until the aircraft lands at the objective. The plan is the product of Army/Air Force coordination with the air lift commander responsible for execution of the air movement phase. The two key elements of the air movement plan are the air movement table and the flight route diagram. The unit should adhere to the principles of cross loading and tactical integrity.

(4) ***Marshaling plan.*** This plan includes the preparations required to load equipment and personnel aboard aircraft. Key elements of this plan are the movement to the marshaling area, mission briefings, administrative and logistic requirements, movement to the departure airfields, and aircraft loading.

d. **Sequence of Operation.** The following describes the sequence of an airland operation after the airhead has been secured, and the air-field commander, AACG, and CCT have arrived.

(1) ***Airfield layout.*** The exact layout of an airfield is situational. The best use must be made of existing facilities, such as roads and open areas, to reduce the time and construction effort. Consideration should be given to layouts thalt facilitate future expansion and provide the best deployment and flexibility. While the air facility is being improved, it becomes vulnerable to enemy destruction. Therefore, airlanding facilities must be highly dispersed and less complex so they do not present high-value targets to the enemy.

(2) ***Airfield operations.*** The airfield commander constructs (if required) and establishes the assault airfield, marks routes and assembly areas, positions his AACG personnel, and opens communications.

(3) ***Traffic control.*** As aircraft arrive and off-load, the CCT directs vehicles and personnel to a traffic control point.

(4) ***Arrival airfield control group.*** The AACG personnel at the traffic control point receive a copy of the manifest, verify loads, and provide guides for vehicles and personnel. The guides personally lead vehicles and personnel to assembly/dispersal/holding areas.

(5) ***Cover and concealment.*** All personnel cover and conceal their positions and wait for the arrival of their unit guides.

(6) ***Convoys.*** As other elements arrive, convoys of vehicles are formed and sent forward under the control of a unit representative.

(7) ***Helicopter assembly points.*** Helicopters and aviation personnel are moved to separate helicopter assembly points; reassembly begins immediately.

e. **Long-Range Airland Operations.** Where great distances are involved, airland units can be transported in heavy transport aircraft and required upon arrival to reload into assault aircraft for deployment to the objective area. If the speed of air movement is to be exploited, plans must affect rapid transloading. Units should be formed into assault aircraft loading packets before the initial air movement and be loaded into heavy aircraft by these packets.

f. **Responsibilities.** The airlift commander is responsible for delivering troops, equipment, and supplies to the designated place at the designated time IAW the air movement table. The Army commander and airlift commander are both responsible for the selection of the LZs.

(1) The ground force commander is responsible for the construction repair, and maintenance of airland facilities in the airhead. The airlift commander furnishes the ground force commander with requirements in order of priority. The ground force commander determines priorities after joint consideration of the ground force and airlift requirements. After engineer effort is committed for support of airlift facilities, these facilities must adhere to established priorities insofar as personnel and resources permit. Any deviation should be coordinated with the airlift commander for the respective airlanding zone.

(2) The control of all air traffic (letdown, traffic pattern, landing, taxi, and takeoff of aircraft) at Air Force-operated airhead airfields is a responsibility of the Air Force commander. The movement of ground vehicles at these locations is closely regulated by their air traffic controllers.

(3) The ground force commander is responsible for the unloading, reloading, and tying down of Army cargo with technical assistance from the Air Force. The ground force commander is also responsible for the documenting and manifesting of Army cargo, which is reloaded in the airhead.

g. **Combat Service Support.** The brigade can enhance its immediately available supply stockage by having the soldiers carry bulk supplies (cases of MREs, full ammunition cans, office supplies, and so forth) on the plane and then having them turn the supplies over to the S4 upon airlanding. It should also plan for the backhauling of casualties and consider the use of LAPES, heavy drop, and CSS for resupply and insertion of heavy equipment.

7-9. MILITARY OPERATIONS ON URBANIZED TERRAIN

The general characteristics of urban warfare make applying basic tactical fundamentals and maintaining control more difficult. A hostile population may impose a serious security problem.

a. Military operations on urbanized terrain require detailed planning that provides for decentralized execution. The decision to attack or defend an urban complex can result in massive damage and destruction Constraints on firepower designed to ensure minimum collateral damage within the built-up areas can be expected.

b. Careful consideration during the IPB process should be given to the type of structures in the urban area and the effects of friendly weapons. Restrictions on the types of weapons munitions and procedures may be necessary. If the structures do not provide friendly forces or noncombatants sufficient protection from blast and penetration of weapons designed for open terrain, the commander can impose restrictions.

c. Combat operations may be hampered by the presence of civilians in the battle area. Concern for the

safety of civilians can restrict the combat options open to the commander. The need to provide life support and other essential services to civilians can deplete military resources and manpower.

d. Fighting within a built-up area is characterized by a three-dimensional battle. In addition to fighting at street level, fighting may be conducted on roofs; in the upper stories of buildings; and below street level in sewer systems, subways, and other underground structures. Assets and resources may be required to deny, retain secure, or monitor each dimension.

e. Weapons employment and target acquisition ranges are reduced by urban features. Targets are exposed only for brief periods and often at ranges of less than 100 meters. These limitations will generate close, violent combat between opposing forces that place great reliance on automatic weapons, rocket launchers, hand grenades, and hand-emplaced high explosives.

f. Urban features increase the difficulty of maintaining effective communications. The ranges of tactical radios are limited.

g. Operating from, within, or through urban areas isolates and separates units. Operations are often reduced to a series of small-unit battles. Greater dependence is placed on individual soldiers and small-unit leaders' initiative, skill, and fortitude.

h. Urban combat produces intense pressures of battle. Continuous close combat high casualties, the fleeting nature of targets, and fires from an unseen enemy produce severe psychological strain and physical fatigue. This is certainly true among small-unit leaders and soldiers.

i. Urbanization affects on military operations by adding the elements of urban sprawl to the existing terrain complex. It does not change basic tactical doctrine, but it does require that commanders understand how these elements may affect the capabilities of their units and weapons. (Military operations on urbanized terrain are discussed in detail in FM 90-10 and FM 90-10-1.)

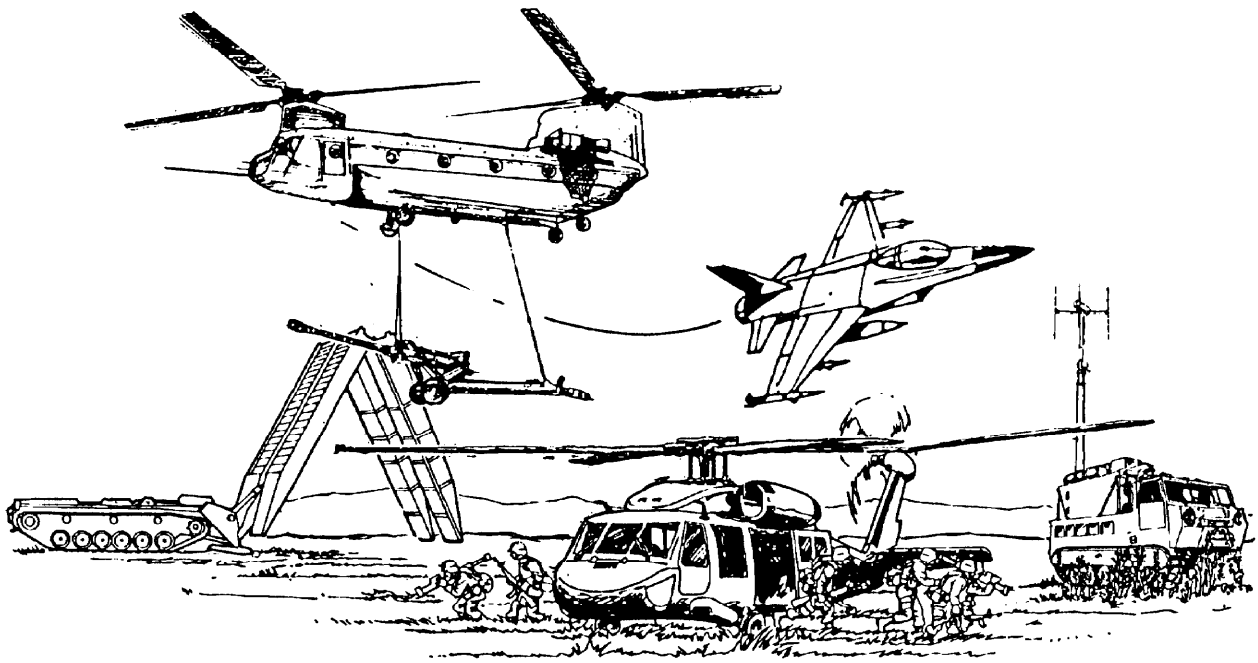
j. Special fire support considerations in MOUT are as follows:

- Use variable time with care to avoid premature arming.
- Recognize indirect fires, since they may create unwanted rubble.
- Use caution with white phosphorus, since it may create unwanted fires and smoke.
- Consider using FASCAM to impede enemy movement.

THIS CHAPTER COMPLIES WITH STANAG 2067.

Chapter 8

COMBAT SUPPORT



The application of superior combat power at the decisive time and place determines the outcome of the battle. The brigade commander uses his CS assets to enhance the abilities of his maneuver battalions and to weight the main effort within the brigade. The effects of CS assets in support of the maneuver plan are increased by integrating CS in the maneuver plan from the beginning of the planning process or course of action development. This prevents CS assets from becoming additives attached to a completed plan. This allows the CS to act as true combat multipliers. Based on guidance and changing priorities, the brigade requests additional assets from division when necessary, and coordinates and integrates CS assets. The CS assets provide support to the brigade according to standard command or support relationships.

8-1. COMMAND AND SUPPORT RELATIONSHIPS

Specific applications of the command and support relationships are in the discussion of combat support elements throughout this chapter. Table 8-1 illustrates the relationship between the brigade and combat support elements.

a. The leader of a CS element that is attached, OPCON, or DS to the brigade also serves as a special staff officer to the brigade commander.

b. During planning, preparation, and execution of the brigade mission, the CS element leader provides assistance, advice, and recommendations on employment of his unit to the brigade commander and staff. He employs his unit as directed by the brigade commander.

8-2. FIRE SUPPORT

Fire support is the collective and coordinated use of indirect-fire weapons, armed aircraft, and other lethal and nonlethal means in support of a battle plan to include mortars, field artillery, naval gunfire, and air-delivered weapons. Nonlethal means include illumination, smoke, and electronic warfare platforms. The brigade commander employs these means to support his scheme of maneuver; to mass firepower; and to delay, disrupt, or destroy enemy forces in depth. Fire support destroys, neutralizes, and suppresses enemy weapons, enemy formations, and enemy facilities. Fire support planning and coordination exist at all echelons of maneuver.

a. **Fire Support Planning.** The commander and staff plan the targets necessary to support the scheme of maneuver. This planning process is based on the friendly scheme of maneuver and enemy situation and requires close interaction among the brigade commander, S3, S2, FSCOORD and his staff, and the various combat support units. It includes an assessment of the terrain and enemy, and and identification of those enemy formations, equipment, facilities, and terrain that must be attacked to ensure success. The fire plan is refined from the bottom up (battalion/company) to ensure accuracy of target grids and responsibility for execution. The plan must reflect the commander's schemes for maneuver and fire support and guidance from higher headquarters.

(1) The brigade commander's guidance determines the specific role that fire support plays in the brigade

UNIT	ATTACHED	OPCON	DS	GS
Under Command/ Control of...	BRIGADE CDR	BRIGADE CDR	PARENT UNIT	PARENT UNIT
Task-Organized by...	BRIGADE	BRIGADE CDR****	PARENT UNIT	PARENT UNIT
Receives Mission, Tasks, and Priorities from...	BRIGADE UNIT	BRIGADE UNIT	BRIGADE UNIT	PARENT UNIT
Positioned by...	BRIGADE UNIT	BRIGADE UNIT*	PARENT UNIT*	PARENT UNIT*
Maintains Communications and Liaison with...	BRIGADE UNIT	BDE and PARENT UNIT	BDE and PARENT UNIT	PARENT UNIT
Receives CSS from...	BRIGADE UNIT***	PARENT UNIT**	PARENT UNIT**	PARENT UNIT

* *With specific approval of the brigade commander if within the brigade area of operations. (Any unit in the brigade area requires positioning approval.)*

** *CSS requirements beyond the capability of the parent unit are provided by the brigade after a specific request for coordination between the parent unit and brigade headquarters has been made.*

*** *Attached element brings an appropriate slice of CSS equipment and personnel to supplement the brigade's assets.*

**** *In NATO, OPCON does not include authority to assign separate employment of components of the units concerned.*

Table 8-1. Brigade command and support relationships.

scheme of maneuver. The FSCOORD plans fires and allocates fire support assets and priorities as the brigade commander outlines the scheme of maneuver. The FSCOORD must know when and where the commander wants fire support. In addition, he must understand what the commander wants in the way of effects, duration, and timing. He must understand the commander's target priorities. The FSCOORD must understand how all fire support assets (FA, mortars, CAS, NGF, and AHs) are integrated.

(2) The depth and complexity of the fire support plan depend upon the time available to produce it. At brigade level, it could be the result of both the formal and informal fire planning processes. However, the key to a successful fire support plan is simplicity.

b. **System.** The fire support planning and coordination process gives the brigade commander the ability to employ all available fire support as a system, and to integrate and synchronize fire support with his battle plan. Fire support coordination entails the planning and execution of fires so that targets are adequately attacked by a suitable weapon or group of weapons. Because of the diversity of the individual fire support means, the total fire support system does not function through a common chain of command as does a maneuver organization. The FSCOORD is the driving force behind fire support coordination. The brigade commander exercises C2 over his supporting fire support assets, but he has limited control over available external fire support resources. Cooperation among the various fire support agencies is necessary for the effective delivery of fires.

(1) ***Fire support coordination.*** The brigade FSCOORD is the commander of the DS FA battalion that supports the brigade. He is the brigade commander's primary adviser on fire support matters. He maintains a working relationship with the brigade commander and the brigade S3 through the planning and execution phases of an operation. The FSCOORD must know the maneuver operation so he can anticipate missions and changes to the tactical situation. He ensures the fire support system—

- Is synchronized with maneuver.
- Supports the brigade commander's battle plan.
- Can sustain fire support.

(a) The FSCOORD's primary responsibilities include establishing and supervising the FSE, planning and coordinating fire support on surface targets, supervising the preparation of the fire support plan, and integrating it into the brigade's operation plans and orders.

(b) The FSCOORD participates with the commander, S3, and S2 in the planning and execution of the battle. The brigade fire support element assists the FSCOORD in preparing the plans and controlling the fires. The FSCOORD must also plan for the displacement of his firing batteries to ensure continuous, responsive fire support. He also coordinates with the brigade S3 to manage terrain for his batteries, including those of supporting artillery battalions.

(2) ***Maneuver commander.*** The maneuver commander and his FSCOORD plan the battle together. They examine the contribution of fire support to the battle plan concurrently with maneuver considerations, which increases the chances of using all available fires. This planning follows the decide, detect, deliver, and assess targeting method. Decisions made during the target methodology process include—

- Attack guidance.
- Target selection standards.
- High-payoff targets.
- Intelligence collection means.
- Fire support execution responsibilities.

In some cases, fire support considerations influence the scheme of maneuver. If there are insufficient maneuver assets to make the mission viable, fire support can accomplish a portion of the mission without commitment of large troop concentrations. The brigade commander and his FSCOORD plan tire support as follows:

(a) Determine through the tactical decision-making process where the enemy must be slowed or where enemy posit ions must be breached for the best total firepower effects. TAI and NAI developed through the IPB process are integrated into the scheme of fire support.

(b) Prioritize the expected enemy target array. High-payoff targets are identified using IPB products with the guidance provided by target value analysis. Target acquisition assets are directed to locate those high-payoff targets.

(c) Consider the weapons and combat multipliers that are available to the brigade: direct fires, CAS, Army aviation, FA, mortars, NGF, and possible munitions combinations and ordnance mixes. The FSCOORD, through the FSO, plays a significant role in the integration of the battle staff to ensure that all assets are integrated in the maneuver commander's plan.

(d) Execute concurrent planning upon receipt of a mission, continue development of the course of action,

refine the operational concept, and execute the plan to develop combat power.

(3) ***Fire support plan execution.*** Execution of the fire support plan is a combined arms responsibility. The success of the fire support plan depends on how well it is understood by subordinate commanders and FSOs. The brigade fire support execution matrix provides subordinate commanders and FSOs a summary of the plan, which connects the execution of fire support to specific events and assigns specific responsibility for that execution. Detailed fire support rehearsals, in conjunction with maneuver rehearsals, are critical for successful execution. The fire support execution matrix (Table 8-2, page 8-5) is a stand-alone document, which permits the fire support team to execute the commander's plan.

8-3. FIELD ARTILLERY SUPPORT

A divisional light cannon battalion usually fires in DS of a divisional brigade. Light cannon battalions are organic to the separate infantry brigade.

a. As a fire support asset to the brigade, field artillery units can—

- Provide fires under all weather conditions and types of terrain.
- Shift and mass fires rapidly without displacing.
- Add depth to combat.
- Fire a variety of conventional shell/fuse combinations.
- Provide continuous support by displacing by battalion, echelon, or battery.
- Be as mobile as the supported unit.
- Provide counterfire to destroy, neutralize, or suppress the enemy's indirect fire weapons and ensure freedom of maneuver to forces in contact with the enemy.

b. Field artillery missions describe the fire support responsibilities of an FA unit in detail and establish the fire support relationship with the brigade. The fire support relationship does not affect the organizational structure and the command relationships. Tactical FA missions are direct support, reinforcing, general support reinforcing, and general support.

8-4. NAVAL GUNFIRE SUPPORT

Naval gunfire can provide large volumes of responsive fire support when the brigade operates near coastal waters or in support of amphibious operations. An air and naval gun fire liaison company (ANGLICO) may provide the brigade personnel and communications to plan request, coordinate, and control naval air and gunfire at the brigade and maneuver battalion levels. (See Chapter 1 for more information.)

8-5. COMBAT AIR SUPPORT

Combat air operations can be independent or in coordination with other forces. They inhibit enemy movement, locate and destroy enemy forces and their supporting installations, and help ground or naval forces to achieve their operational objectives. (See Chapter 1 for more information.)

a. **Mission Areas.** Combat air missions are divided into the following areas:

(1) ***Counterair operations.*** The CA operations are to gain control of the airspace environment. The following are specific CA operations:

(a) Offensive CA operations are conducted to seek out and neutralize or destroy enemy air forces at a time and place of our choosing.

(b) Defensive CA operations are conducted to detect, identify, intercept, and destroy enemy air forces that are attempting to attack friendly forces or to penetrate friendly airspace.

(c) Suppression of enemy air defenses are operations that suppress, neutralize, or destroy enemy air defense systems in a specific area by physical and or electronic attack.

(2) ***Close air support.*** CAS is air action against hostile targets that are close to friendly forces. Therefore, CAS requires detailed integration of each air mission with the fire and movement of those forces.

(3) ***Air interdiction.*** Air interdiction missions are designed to delay, neutralize, or destroy an enemy's military potential before it can be brought to bear effectively against friendly forces. Air interdictions are attacks against land force targets that have a near-term effect on the scheme of maneuver of friendly forces, but they are not in close proximity to friendly forces. Therefore, detailed integration of each air mission with the fire and movement of those forces is not required.

(4) ***Reconnaissance.*** Air reconnaissance provides air and ground commanders with responsive photographic and electronic information on the enemy locations and actions. It also assesses the effectiveness of friendly air and ground activities. The brigade S2 requests air reconnaissance in support of his intelligence collection process.

(5) ***Airlift.*** Airlift moves personnel, equipment, and supplies by air within a theater of operation.

ANNEX F, (FIRE SUPPORT) TO
OPORD, CAT, 1BDE, 53 ID

PHASE OR EVENT	PHASE I MVMT	PHASE II BIRD	PHASE III ATTACK	PHASE IV DEFENSE		
BDE			O/O SEAD PREP FIRES 10 SORTIES	6 SORTIES		
1F 2-3	FA POF →	1 PT →	BIC KM 1000 (SMK) 6 SORTIES CAS	BTRY FPF		
TF 2-77		1 PT →	K2M KM 1001 (SMK) 4 SORTIES CAS	FA POF BTRY FPF		
2-66 IN		1 PT →	K3M 6 SORTIES CAS			
CAS	6 SORTIES	26 SORTIES →		10 SORTIES		
COLT 1	ATTCH TF 2-3 →					
COLT 2	ATTCH TF 2-77 →					
FSCM	DIV CFL: PL BLUE	DIV CFL: PL YELLOW BDE CFL: PL ARM, O/O PL GUTS	DIV CFL: PL YELLOW BDE CFL: PL GUTS, O/O PL BLOOD	DIV CFL: PL BLACK BDE CFL: PL BLOOD		

FA ORG FOR CBT	TARGET BLOCKS	AMMO AVAILABLE	FSO LOC
2-40 FA(1C5,T): DS 1 BDE 2-42 FA(105,T): R 2-40FA	TF 2-3: KM2000-KM2995 2-66 IN: KM3000-KM3595 TF 2-77: KM4000-KM4955 2-40 FA: KM7000-KM7999 2-42 FA: KR3000-KR3999	ICM:15 BN 3s CH8: 10 BN 3s HE: 30 BN 3s SMK: 40 mins	BDE MAIN CP **SUCCESS OF COMMAND** FSO 2-3, 2-77 2-66

FSCMS	HIGH PAYOFF TGTS	ATTACK GUIDANCE	REFINEMENT CUT-OFF TIME
DIV CFL: PL BLUE, O/O PL YELLOW , O/O PL BLACK BDE CFL: PL ARM O/O PL GUTS, O/O PL BLOOD	PH I & PH II: RECON, ADA PH III: ADA, MNVR PH IV: CATK FORCE, ENG, RECON	SUPP: RECON, ADA NEUT: MNVR DEST: ENG	080800NOV9X **FS REHEARSAL TIME** 081300NOV9X

AMMO RESTRICTIONS	CAS	COORDINATING INSTRUCTIONS
LONG DURATION FASCAM: DIV CDR. SHORT DURATION FASCAM: BDE CDR.	D-DAY: 6 SORTIES D+1: 26 SORTIES D+2: 10 SORTIES (A-10 AND F-16 POSSIBLE)	TGT ALLOCATION: 10 TGTs PER TF NFAs (300M radius): ON ALL AIRFIELDS AND HOSPITIALS

Table 8-2. Fire support execution matrix.

b. **Close Air Support Mission Requests.** The two types of CAS mission requests are preplanned and immediate.

(1) Preplanned CAS missions are those that can be anticipated sufficiently in advance to permit detailed mission planning, coordinating, and munition tailoring tasked in the air tasking order. The brigade S3 air, FSO, and ALO determine target suitability and potential airspace conflicts, and they incorporate the CAS mission into the brigade's fire support plan. The brigade S3 air combines the requests with those from maneuver battalions. He eliminates duplication, assigns priorities, and forwards the consolidated request to the division G3 air. Preplanned air requests go through Army channels.

(2) Immediate CAS missions are provided to meet specific requests that arise during the course of battle and that, by their nature, cannot be preplanned. Also, fighter/attack aircraft performing other air missions could be diverted to CAS missions to meet the immediate demands of battle. The brigade FSE monitors all immediate air support requests from subordinates on the ALO's radios (Air Force air request net). The brigade can cancel or amend a request or a fire support means. Immediate air requests go through Air Force channels.

c. **Joint Air Attack Team.** The JAAT is a combination of CAS aircraft, attack helicopters, and indirect fire assets working as a team to locate and attack high priority targets. The JAAT is formed when attack helicopters and CAS aircraft enter the fight against the same target array on the same part of the battlefield.

(1) The JAAT can operate with FA, ADA, Army aviation, and ground maneuver units of brigade or battalion size. It can also operate independently in an area some distance from the ground maneuver units. Because of their mobility differential over ground maneuver units, attack helicopters are often the first to join the battle. During offensive operations, when the brigade commander determines that his maneuver forces need increased combat assets to attack a lucrative target array, he requests attack helicopters and CAS aircraft. During defensive operations, the JAAT is most often used to reinforce committed ground maneuver units. The ground maneuver commander has overall responsibility for planning, coordinating, and employing the JAAT. The brigade commander, S3, FSCOORD, ALO, ADO, air battle captain, aviation brigade liaison officer, and FAC must coordinate the scheme of maneuver, CAS, air defense, and fire support plan to the greatest extent possible. The S3 should dcsignate an officer under his control as the coordinator for JAAT, either the assistant S3 or the FSO preferably.

(2) The ground commander must plan for the joint suppression of enemy air defense through the use of direct and indirect tires. The JAAT assets can be used to degrade and suppress enemy ADA, but this is the least desirable method.

(3) Designation of specific engagement areas, coordination of supporting fires, designation of enemy and friendly locations, and the other specifics of directing the JAAT are performed by the commander through the aviation brigade liaison officer.

(4) The FSE of the ground maneuver unit controlling the overall operation usually plans artillery fire support for the JAAT. Planning a JAAT requires detailed coordination among the brigade commander with the S3, FSCOORD, ALO, and ATKHB commander working together to ensure that adequate supporting fires are planned. Fire support plans should be kept simple so that the air battle captain and FAC can be rapidly briefed. Since the briefing is normally by radio, the interpretation of data can be difficult.

(5) The controlling of fires into the engagement area is conducted by the air battle captain from the ATKHB. The two basic methods for employing a JAAT are sectored and combined attacks.

(a) In a sectored attack, separate sectors are assigned to the CAS and ATKHB to facilitate target acquisition and engagement.

(b) In a combined attack, all attack forces use the same sector and avenue of approach into the target; however, they are allocated specific time periods in which to engage targets.

(6) Some key considerations in the employment of the JAAT are as follows:

(a) The SEAD support for JAAT operations should include the planning of a program of targets.

(b) Attack helicopter, CAS, and indirect fire systems complement and reinforce each other when used together Attack helicopters and CAS operate well below the trajectories of indirect fire systems. However, aircraft should not overfly firing positions of indirect fire systems and should stay at least 500 meters from impacting rounds.

(c) Brigade FSOs and AHLOs can advise the TACP and flight leader on the best routes into and out of the battle area to avoid overflying FA positions.

d. **Suppression of Enemy Air Defenses.** The SEAD consists of actions that neutralize, destroy, or temporarily degrade enemy air defense systems in a specific area to enable air operations to succeed. The JSEAD is the portion of SEAD that requires joint interaction.

(1) Air defense suppression sorties and EW missions may be flown to enhance the survivability of tactical aircraft. It is essential that brigade units give priority to the suppression of enemy surface-to-air defense systems when supported by tactical aircraft.

(2) The maneuver commander's area of responsibility extends from the FLOT to the limits of observed fire. The weapons control status should be "weapons tight" at a minimum for fixed-wing aircraft during SEAD/JSEAD operations to reduce the possibility of loss due to friendly ADA fire.

8-6. ARMY AVIATION SUPPORT

The aviation brigade provides divisional Army aviation support and can conduct attack, air movement, air assault, reconnaissance, intelligence, security, and logistics operations. During the decision-making process, the brigade commander must determine the likely locations and times that aviation support can be employed. These plans must be consistent with the division commander's concept and planning guidance.

a. Army aircraft include attack, observation, utility, and cargo helicopters.

(1) ***Attack helicopters.*** Regardless of the overall operation being conducted by the brigade, the ATKHB conducts its portion of that operation through offensive task. Because there are no single solutions for attack helicopter operations in the offense or defense, the brigade commander assesses the factors of METT-T. The assessment influences the mission that are assigned to the ATKHB. With the ATKHB commander's assistance, the brigade commander determines where the ATKHB is to be used. From the brigade commander's mission and intent, the ATKHB commander determines how the battalion is to be employed.

(a) The ATKHB commander employs the battalion through the coordination of the ATKHCs, CS, and CSS. To do this, the commander applies one of the following methods of attack:

- *Continuous attack.* To exert continuous pressure on the enemy at least one company will be in the battle. The other two remain in holding areas or the FARP or will move between the FARP and the battle.
- *Phased attack.* The phase attack is a modification of the continuous attack method and is used to increase the initial firepower of the battalion. Eventually the phased attack reverts to the contiguous attack method.
- *Maximum destruction.* To overwhelm the enemy with massed fires, the battalion deploys with all three companies in contact from different battle positions. The supported commander must realize that the ATKHB will be out of the fight 60 to 90 minutes, depending on the distance to the FARP.

Timing is critical in the employment of the ATKHB. Employed too early, the battalion may have to be disengaged before mission completion because of low fuel or ammunition. Employed too late, the battalion may miss part or all of the targeted unit.

(b) The ATKHBs are controlled by the same maneuver graphics as infantry and armor units. The ground commander must study the area of operation to ensure graphic control measures optimize the employment of the ATKHB to mass fires and allow freedom of movement. Exchange of information, such as SOI and other planning and coordination, are conducted face-to-face among the brigade commander, his staff, and the ATKHB commander. A key aspect is the determination of the amount of time needed for attack helicopters to move to battle positions. This allows the brigade commander to establish decision points for timely requests. When the ATKHB is not OPCON to the brigade, planning and coordination are normally conducted between the brigade staff and an ATKHB liaison officer.

(c) The ATKHB can be used in the deep attack role with augmentation to provide suppression of enemy air defense. They are ideally suited for deep operations because of their speed, mobility, flexibility, and firepower.

(d) Although primarily associated with cavalry units, reconnaissance and security operations are implied requirements of attack helicopter battalions. Because of where and how they operate on the battlefield and their aircraft capabilities, attack helicopter battalions may be tasked to conduct reconnaissance.

(2) ***Observation helicopters.*** The OHs participate in a multitude of missions such as field artillery observation, armed reconnaissance, and target designation for attack helicopters and CAS aircraft.

(3) ***Utility helicoptcrs.*** The UHs have a variety of roles to perform. Air assault, air movement, and equipment transportation are the primary missions of the UHs. The UHs may also be used for command and control, emergency aeromedical evacuation, and search and rescue.

(4) ***Cargo helicopters.*** The cargo helicopters provide rapid movement of equipment and materiel. They are available in the aviation brigade of the air assault division or at corps level.

(5) ***Special electronic mission aircraft (quick fix).*** The SEMA performs EW and aerial surveillance missions; they are habitually placed under OPCON of the division MI battalion.

b. Aviation operations may include the following actions:

- Reinforce ground maneuver forces.
- Control and participate in JAAT operations.
- Conduct observation and surveillance.
- Provide a responsive counterattack force.
- Conduct air movement and air assault operations.
- Provide aerial resupply.
- Conduct aeromedical evacuation.
- Conduct search and rescue operations.
- Conduct aerial radio relay.

c. A reconnaissance squadron with ground and air reconnaissance assets is in the aviation brigade in the light, airborne, and infantry divisions. The air assault division has an air reconnaissance squadron that has no ground reconnaissance assets. Reconnaissance squadrons can be in support of the brigade to perform reconnaissance, security, and surveillance. They provide timely intelligence concerning the enemy, terrain, and weather throughout the battle area and provide early warning against enemy observation or attack.

8-7. AIR DEFENSE SUPPORT

The primary air defense objective is to protect the force and allow freedom of maneuver by destroying enemy aerial platforms. The maneuver brigades who conduct close operations must be protected from the primary threat of attack helicopters as well as unmanned aerial vehicles and high-performance aircraft. At the same time, high-priority assets in the rear must also be protected from enemy air strikes. To achieve this objective, ADA and other elements must provide integrated air defense coverage for the maneuver force. The brigade commander, with the recommendation of the brigade ADO, determines the priorities for coverage, allocation of available assets, and command and support relationships that best support his maneuver plan. As priorities of coverage are established, the brigade commander must consider how the ADA systems will be sustained and how to provide security for them. The brigade air defense system consists of passive and active air defense measures.

a. **Passive Air Defense.** The employment of all possible passive measures and self-protection is the basis for brigade air defense operations. These measures include the use of cover, concealment, camouflage, dispersion, signature reduction, deception, and early warning. At all levels, air attack warning reaction plans and battle drills must be developed, trained, and implemented for early warning to be effective.

b. **Active Air Defense.** Light infantry, airborne, and air assault divisions contain a FAAD battalion with Avengers, MANPADS (Stinger), and AD sensors (LSDIS/GBS) as organic FAAD weapons systems. These systems are also organic to the air defense battery of the separate infantry brigade. The air defense officer must anticipate the enemy's COA through the development of the aerial portion of the IPB. A confirmed IPB combined with a sensor plan that observes critical NAIs allows the ADO to predict his fires at the right place and time. In addition to the ADA and other supporting elements, the brigade weapons systems have a collective firepower effectiveness that is a key element in the integrated air defense plan. Direct fire massed against an attacking aircraft can be a formidable part of the air defense system. Two categories of ADA weapons systems are:

(1) ***Forward area air defense.*** Light infantry, airborne, and air assault divisions contain a FAAD battery with Avengers, MANPADS (Stingers), and AD sensors (LSDIS/GBS) as organic FAAD weapons systems. Due to the limited number of these systems, they are often employed to specific locations to provide area air defense cover. A thorough air IPB must be conducted to determine the most likely enemy air avenues of approach. Once determines, FAAD assets may be positioned on these air corridors. Operations at night or during limited visibility are restricted by the gunner's ability to identify the target. Avengers and Stingers can also be used in point defense of a critical asset. Battalions normally receive a mix of Avenger and MANPADS units (based on METT-T) to support their operations. Avengers are the only night, all weather capable FAAD system.

(2) ***High-to-medium-altitude air defense.*** The HIMAD category includes the Patriot and Hawk. These systems are usually deployed throughout the theater to defend theater/corps high-priority assets against hostile aircraft. They provide incidental ADA protection to the brigade if it is located within the effective range of the weapons system. (See FMs 44-16 and 44-100 for more information on ADA employment.)

8-8. ENGINEER SUPPORT

A divisional engineer company usually supports the brigade. An engineer company is organic to the separate infantry brigade. Because of austere assets

within the divisional engineer company, it is limited to supporting the brigade primarily in mobility, countermobility, and survivability tasks. Sustainmnent engineering support is furnished from corps engineers or combat heavy (construction) engineer units that are task-organized to support the brigade. Topographic engineering support is requested from division terrain analysis teams. Engineer support to contingency operations is based on METT-T analysis. Corps or combat heavy engineers add to divisional engineers in contingency operations when sustainment engineering tasks are above the capabilities of divisional engineers. (See FM 5-100.)

a. **Command and Control.** The brigade engineer advises the brigade commander on all engineer operations. He informs the S3 and assists in preparing engineer estimates, plans, and orders. The assistant brigade engineer assists the brigade engineer and assumes all duties in his absence.

b. **Engineer Estimate.** The brigade engineer plays an integral part in the brigade battle staff by concurrently conducting the engineer estimate with other staff estimates. The engineer estimate has the specific purpose of early integration of mobility, countermobility, survivability, and sustainment into brigade plans and focuses coordination with other staff members. The engineer battlefield assessment provides terrain analysis input to the IPB, enemy engineer capabilities and their effect on the battle, and friendly engineer capabilities and their effect on accomplishing the mission. Task organization of engineers within the brigade focuses on providing sufficient engineer assets to support the main effort or the areas critical to mission accomplishment. Broad distribution of engineer assets throughout the area of operations should be avoided.

c. **Operations.** Engineers support the infantry brigade through five primary engineer battlefield functions: mobility, countermobility, survivability, sustainment engineering, and topographic engineering. Combat engineers enhance the mobility and survivability of brigade forces and degrade the mobility of enemy forces. Sustainment engineering focuses on maintaining LOCs and constructing or improving logistics facilities. Topographic support includes terrain products to assist faster planning.

(1) ***Mobility.*** Engineer support to offensive operations includes obstacle breaching, such as in-stride, deliberate, assault, and covert breaching. (See FM 90-13-1 for more details on breaching operations.) In some situations, support will include construction of combat trails through areas where routes do not exist. Mobility in defensive operations includes counterattack routes cleared of obstacles; construction of combat trails, lanes, and gaps through obstacles for supply and passage of security elements; and reduction of enemy fires and sabotage.

(2) ***Countermobility.*** The intent of countermobility operations is to decrease the enemy's ability to maneuver, mass, and reinforce and to increase his vulnerability to fires. Tactical obstacles are used to disrupt, turn, fix, or block the enemy.

(a) Disrupting the enemy includes disrupting their march formations, breaking up their operation timing, wearing down their breaching assets, and separating their forces.

(b) Turning uses fires and subtle orientation of obstacles to manipulate the enemy's maneuver in a desired direction. An easily detected bypass in the desired direction increases the likelihood of success.

(c) Fixing slows the enemy within a specified area so he can be killed with fires. Causing the enemy to breach repeatedly is a technique used to cause him to slow down.

(d) Blocking includes denying the enemy passage along a certain avenue of approach by using a combination of intense fires and complex obstacles. These must be tied into terrain with no bypass.

(3) ***Survivability.*** Survivability includes all the aspects of protecting personnel, weapons, and supplies. It includes construction of fortifications, protective obstacles, and strongpoints; and camouflage and deception measures. Engineers construct fighting positions for crew-served weapon systems and combat vehicles. They also construct survivability positions for artillery, mortars, air defense, command and control elements, aviation, and critical logistics assets. Engineer assets and time are seldom sufficient to complete all requirements; therefore, they work on high priority survivability requirements established by the commander. Soldiers and crews must prepare their own positions whenever possible. Protective obstacles are a critical part of survivability. They prevent the enemy from attacking or assaulting from areas close to or within a static defensive position. In restrictive terrain protective obstacles may act like tactical obstacles and attack the enemy's ability to maneuver. Protective obstacles are emplaced by the maneuver force, with or without the assistance of engineers.

(a) The entire force must carefully employ camouflage measures for success in both offensive and defensive operations.

(b) Deception measures mislead the enemy to expend his strike against a false target. Deception

includes preparation of dummy positions, dummy obstacles, and with proper authority phony minefields.

(c) Survivability in relation to directed-energy warfare is addressed in Appendix F.

(4) ***Sustainment engineering.*** Sustaining combat operations requires extensive engineer support, Critical tasks, which are beyond the abilities of divisional engineers and require augmentation from corps, include the following:

- Maintaining and improving LOCs.
- Constructing and repairing support facilities.
- Erecting tactical bridges.

(5) ***Topographic engineering.*** Terrain teams at division can provide terrain visualization and analysis products so the commander can develop plans to make the best use of the terrain.

d. **Family of Scatterable Mines.** A wide range of FASCAM assets is available to the brigade commander. Artillery-delivered FASCAM, Army aviation- and Air Force-delivered FASCAM, and engineer-emplaced FASCAM must be integrated into the commander's scheme of maneuver in offensive and defensive operations.

(1) The FASCAM can provide a rapid and responsive obstacle emplacement capability to the brigade. The brigade S3 and brigade engineer plan and coordinate use of FASCAM assets regardless of the means of delivery. Each system has different characteristics in terms of patterns, self-destruct times, and responsiveness that must be considered in the planning process. Long self-destruct mines are those that self-destruct in more than 24 hours. Short self-destruct mines are those that self-destruct in less than 24 hours. All scatterable mines have a similar life cycle, though specific times vary based on SD time and dispensing system.

(a) Dispensed mines are initially dormant (unarmed) for a predetermined period called the arming or activation time. This period allows the mines to come to rest before arming. The following is a list of the arming or activation times:

GEMSS	45 minutes
MOPMS	2 minutes
ADAM/RAAMS (PIP)*	45 seconds
ALL OTHERS	2 minutes

*RAAM (PIP) refers to a product improved RAAM. Most RAAM mines have a 2-minute arming time.

(b) When the arming time ends, the mines conduct a self-check. All mines that fail the self-test, SD immediately.

(c) After the self-check, the times are active until a set period. The times provided in Table 8-3 below are the self-destruct times for the different types of mines. However, dud mines may be left that remain active after the indicated time.

(d) Scatterable mines pass the bullet impact test. The test involves firing a caliber. 50 round into the mine from each of three axes without detonating the mine.

(2) Accurate, timely, uniform reporting and disseminating of scatterable minefield emplacement information are imperative. Fluid, fast-moving tactical situations require that complete information on

MINES	4 HOURS	48 HOURS	5 DAYS	15 DAYS
ADAMS/RAAMS (M731/M741)	X			
ADAM/RAAMS (M692/M714)		X		
GEMSS (M74/M75)			X	X
MOPMS (M76/M77)	X			
GATOR/VOLCANO (M89/M90)	X	X		X

Table 8-3. Self-destruct times for scatterable mines.

scatterable mine employment be disseminated rapidly to all units that could be affected.

(3) The corps commander is the approving authority for the employment of all scatterable mines in the corps area. He usually delegates this authority to the division commander. The division commander often retains the authority for emplacement of long self-destruct mines at his level but often delegates approval authority for short self-destruct mines to the brigade commander. When the division commander does delegate approval for long self-destruct mines to the brigade commander, it is for a specfic period or for a certain operation The brigade commander can further delegate short self-destruct mine employment authority down to battalion commanders with the concurrence of the division commander. Any delegation of authority to employ scatterable mines must be specifically stated in the applicable OPORD; otherwise, the authority is automtically withheld.

(4) During planning, consider the affect of large safety zones around all scatterable minefield, particularly to artillery-delivered (ADAM/RAAM). The safety zone sizes shown for the ADAM/RAAM in Table 8-4 are worst case examples. The FSO provides the actual sizes required around each aiming point based on the artillery data. After the mission is fired, a scatterable mine warning message is disseminated. The actual location of the scatterable mines will be based on the location of the artillery tubes from the impact zone and whether the angle of fire was high or low. The actual location of mines from a mission to fire a 400 by 400 meters minefield with one aim point is shown in Figure 8-1, page 8-12.

TYPE	DELIVERY	MINEFIELD SIZE (meters)	SAFETY ZONE
ADAM/RAAM	155-mm HOWITZER	200 × 200 400 × 400	1400 × 1400* 1500 × 1500
GEMSS	TOWED DISPENSER	125 × 60 500 × 210	235 ALL SIDES
AIR VOL	UH-60	1,110 × 120 557 × 320	235 ALL SIDES
GND VOL	VEHICLE	1,110 × 120 557 × 320	235 ALL SIDES
MOPMS	HAND	35 METERS-180°	235 ALL SIDES
GATOR	USAF AIRCRAFT	650 × 200	275 ALL SIDES

* MAXIMUM SIZE AROUND EACH AIM POINT BASED ON MAXIMUM ERROR.

Table 8-4. Safety zone size requirements.

e. **Logistics.** Engineer operations in the brigade area require close coordination among the brigade engineer, brigade staff, and FSB commander for logistics support. Because of limited haul assets within the divisional engineer company and the infantry battalions, pan for on-site delivery of preconfigured Class IV and V pallets for defensive preparations. Consider early delivery of Class IV and V pallets in the airflow for contingency operations to provide material for tactical and protective obstacles for lodgement and airhead defense. (See FM 20-32 for more information on the use of mine supply points and mine dumps.)

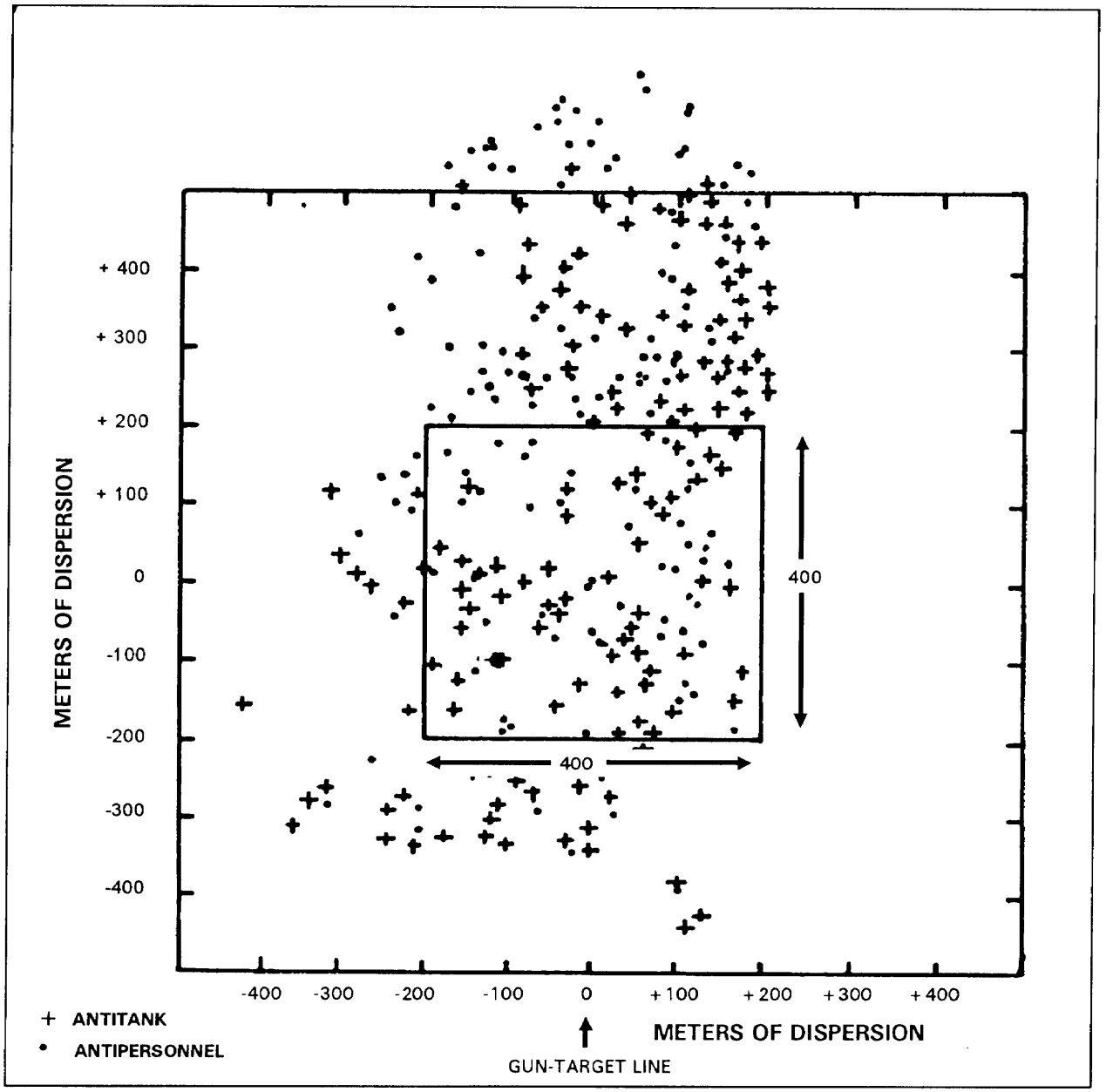


Figure 8-1. Scatterable mines (ADAM/RAAM) dispersion pattern.

8-9. INTELLIGENCE AND ELECTRONIC WARFARE

The brigade is the lowest echelon that normally receives a DS MI company from the division's MI battalion. These companies form a habitual relationship with their respective brigades and provide a potent C4I multiplier. The DS company's organic collection systems and the ability to pull intelligence from division, corps, and echelon above corps assets geometrically increases the brigade commander's ability to visualize the battlefield, identify and locate precision targets, and reduce uncertainty. The DS company is functionally organized to provide the brigade commander intelligence on time, every time throughout the depth of the battlefield.

To provide the optimum IEW support to meet diverse force projection requirements, the brigade commander,

S3, S2, and DS company commander tactically tailor the company's configuration. Based on information gained during mission analysis and METT-T, the DS company is task-organized and if necessary, the S3 requests additional MI assets to reinforce the company. Because of versatility, the DS company can provide support to each of the intelligence tasks, depending on mission and configuration

a. **Direct Support Company's Organic Assets.** The DS company's organic assets can be reinforced from the division's MI battalion and, if necessary, with corps or higher assets. (See Figure 8-2.)

(1) The brigade can be reinforced with SIGINT/EN assets, additional KUMINT assets, an enhanced communication package, and a deployable intelligence support element. Each asset provides the brigade commander a unique capability to answer the PIRs. The assets allow the commander to quickly and accurately identify and target the enemy, close, deep and rear.

(2) The DS company commander employs the assets based on the brigade commander's intent, the brigade concept of operation and BOS synchronization matrix. When tasked, the DS company commander ensures that the maneuver main effort is weighted with IEW support at the critical time and place on the battlefield. The DS company commander ensures the assets are effectively employed to provide the brigade commander the intelligence needed to plan and execute operations.

b. **Direct Support Company's Responsibilities and Capabilities.** The DS company commander, when not involved in command planning functions and TDP, places himself where he can best influence the IEW effort.

(1) ***Command and control.*** The DS company commander receives the mission from the brigade OPORD and the collection plan. He is the principle advisor to the brigade commander on IEW asset capability. When available, the DS company

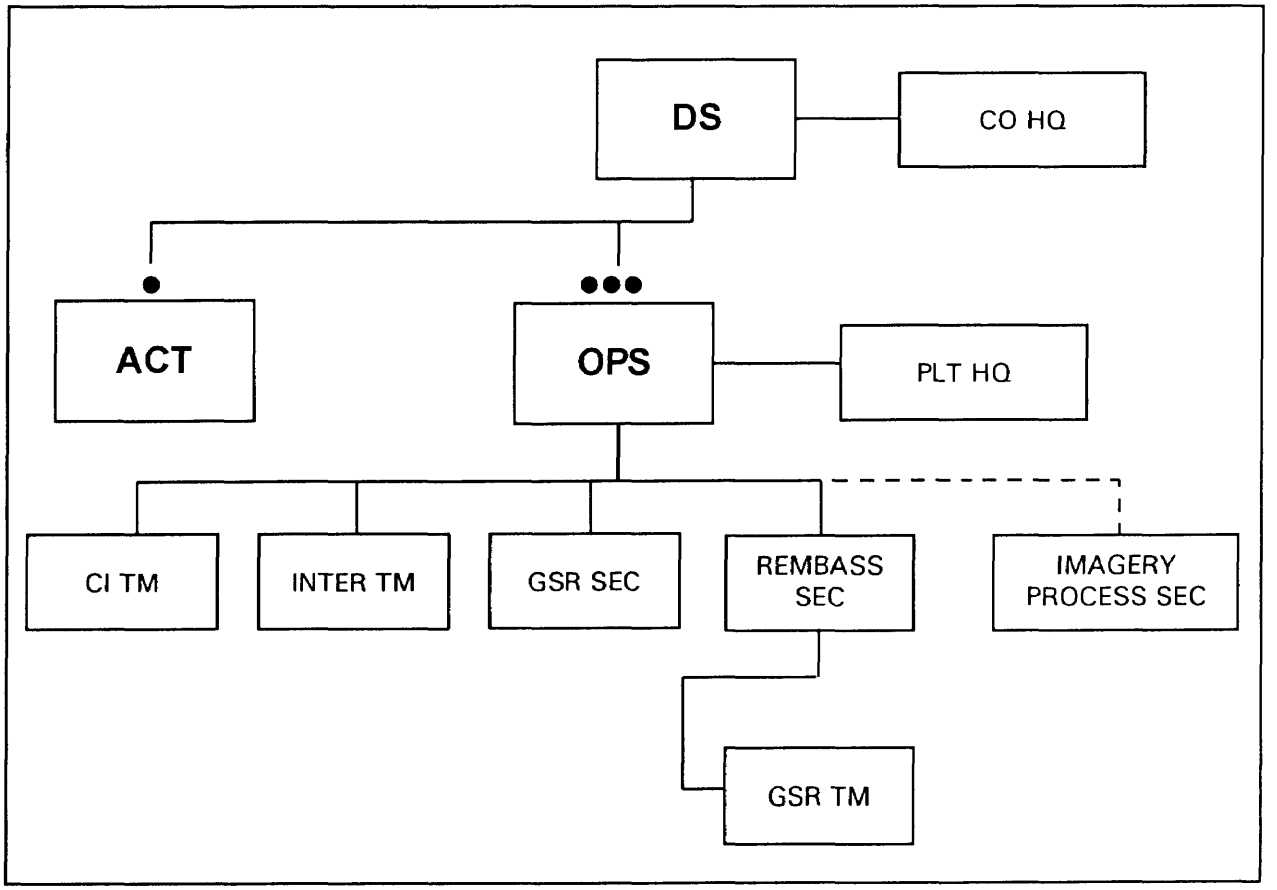


Figure 8-2. Direct support company in support of dismounted brigade.

commander participates in the brigade's tactical decision-making process. He is the asset manager for all IEW assets in DS to the brigade and deconflicts terrain issues with the brigade S3 for GS or other reinforcing MI assets operating in the brigade AO. The DS company CP is normally collocated with the brigade TOC.

(2) ***Analytical control team.*** The analytical control team provides the brigade commander with an automated window to the "big picture." The team is the link between the brigade S2 and the division's ACE. Using all source analysis system workstation, the team can push and pull intelligence between the databases of the brigade and the ACE. The analytical control team provides the brigade and division commanders with a common understanding of the battlefield. The team receives templates and other intelligence products by way of data link with the ACE. The analytical control team supports the technical and intelligence reporting of reinforcing EW assets. During OOTW, when reinforced with a communications package, normally TROJAN SPIRIT, the team allows split-based operations.

(3) ***Remotely monitorcd battlcfield sensor system.*** The REMBASS is a measurement and signature intelligence collector and is ideally suited to OOTW and force protection missions. In conventional conflicts, REMBASS's role is normally one of economy of force. By providing remote surveillance out to 15 km, REMBASS allows soldiers and other assets to concentrate at more critical areas. The REMBASS can classify a target, provide location, number, direction, and rate of movement and time of activation. Found only in light, airborne, and air assault infantry units, REMBASS can be used throughout the depth of the battlefield. The brigade's one REMBASS team normally operates in DS and reports to and is tasked by the S2.

(4) ***Signals intelligence and electronic warfare.*** The DS company has no organic SIGINT/EW collection, DF, or electronic attack assets. On a conventional battlefield where the brigade is fighting as part of a division, the MI battalion deploys its GS MI company in the division's area of operations. The GS MI company sends collected intelligence down to each of the brigades.

(a) In OOTW, the brigade can operate independently, and the DS company can be reinforced with SIGINT/EW assets to provide an enhanced capability. Normally, augmentation is truck-mounted AN/TRQ-32(V)2 or the manpackable AN/PRD-l2s. These assets are normally used well forward. However in OOTW, these assets may be employed in the rear in conjunction with other force protection assets. Ground-based SIGINT/EW assets intercept, locate, and jam threat emitters up to about 30 km beyond the FLOT.

(b) Signal intelligence/EW assets in DS of the brigade are positioned by the DS company commander and receive technical tasks through the analytical control team. The team must also maintain connectivity with the division's ACE to receive technical data.

(5) ***Human intelligence.*** The DS company's HUMINT assets consist of interrogators and counterintelligence agents. These assets are best employed as a HUMINT team of at least one interrogator and one CI agent. Each brigade can form two to three teams. During the early stages of conventional battles, these teams are deployed well forward with the lead battalions. The teams provide on-site screening and combat interrogation of EPWs and other detainees. As the battle progresses, the teams move back to the brigade EPW cage. In OOTW, HUMINT teams are ideally suited to providing force protection. They can identify rear area threats/targets and recommend countermeasures. The teams are also an excellent collector of intelligence provided through liaison with host nation police or security agencies. Interrogators provide limited translation support to the brigade. The HUMINT teams are most often kept in DS and report to the analytical control team. The analytical control team performs initial analysis and reports the results to the S2 and ACE.

(6) ***Ground surveillance radar.*** The GSR is part of the DS company and normally attached to the brigade. The company's GSR section has three teams. When attached, the teams respond directly to the tasking and report to the S2. The GSR teams can be further attached to battalions and report to the battalion S2. If necessary, a GSR team can be attached to the lead company and report to the company commander. In light brigades, GSA teams use the PPS-15. The PPS-15 can detect and locate personnel out to 1,500 meters and vehicles out to 3,000 meters.

(7) ***Unmanned aerial vehicle remote video terminal downlink.*** The unmanned aerial vehicle (UAV) remote video terminal downlink is manned by the imagery processing section and allows the command to "see" over the next hill. The UAV missions are tasked and prioritized at division. Brigades do not normally control the UAV, but they do receive the UAV imagery near-real-time with the remote video terminal. In unique circumstances where a UAV is in DS of a brigade, the brigade S3, S2, and DS company commander must be actively involved in A2C2.

8-10. SIGNAL SUPPORT

Signal support for a division maneuver brigade is provided by two distinct elements: The brigade signal

section, which is internal to the HHC, and the division signal battalion's small extension node (SEN) and line-of-sight (LOS) radio team, which is attached or OPCON to the maneuver brigade headquarters by the division signal battalion's S3 section. This external support is based on doctrinal mandate. However, the maneuver brigade signal officer should coordinate requests for this support through the assistant division signal officer (ADSO) or directly with the S3 section of the division signal battalion. (See FMs 11-32, 11-37, 11-43 (TBP), 11-50, 24-1, and 24-18 for more information.)

a. **Internal Support.** The brigade signal section does not normally consist of a distinct signal platoon with a lieutenant as a platoon leader. The exception occurs only in the case of separate brigades that are enhanced to operate directly under a corps headquarters. A standard divisional brigade signal section can be organized as follows:

JOB TITLE	GRADE	MOS
Brigade Signal Staff Officer	04	25C6B
Signal Support System Chief	E8	31U50
Team Chief	E6	31U30
Radio Retransmission Operator	E4	31U10
Signal Support System Maintenance	E4	31U10
Signal Information Services Specialist	E3	31U10
Radio Retransmission Operator	E3	31U10
Signal Support System Specialist	E3	31U10

Recent doctrinal and force structure changes have resulted in more communications equipment and missions being assigned out to the end users (nonsignal MOS personnel in their respective sections). This user-owned and operated concept has reduced the number of specified signal-MOS personnel tasks that involve installing, operating, and maintaining commonly fielded communications equipment such as single-channel ground and airborne radio systems, mobile subscriber radiotelephone terminals, digital nonsecure voice terminals (DNVTs), and improved high-frequency radios. For example, mobile subscriber equipment (MSE) wireline phone (DNVT) users are now required to run their own WF-16 field wire to the SEN switchboard junction box collocated with the CP. Also, the users are required to affiliate, operate, and disaffiliate the phones. The communications-oriented tasks that are now requirements of noncommunications MOS "users" are referred to as general-purpose users or shared tasks. These task numbers can be found in the Catalog of Enlisted Shared Tasks, published November 1994 by the ATSC at Fort Eustis, Virginia. To reference the actual task, conditions, standards, and task steps, the soldier must refer to the individual piece of equipment's TM or request a TSP for a specific task from the United States Army Signal Center at Fort Gordon. This doctrinal shift has resulted in a decrease in the size and mission focus of the signal section, particularly with respect to combat net radio and MSE, which are user owned and operated. The primary missions of a typical brigade signal section are always METT-T dependent but often include the following:

(1) ***Retransmission operations.*** In fast-paced linear offensive operations, providing secure FM retransmission operations for the brigade command net is an important function of the retransmission teams. For example, C Company of the division signal battalion provides retransmission capability for the division command net. The signal officer determines the optimal location of the team and ensures the location is reported to the S2, S3, FSO, and other appropriate staff officers to ensure force protection and prevent fratricide.

(2) ***Wire operations.*** The section provides installation, operation, maintenance, and retrieval of any wirelines (MSE or WD-1) to adjacent or external elements requiring point-to-point wire communications with the brigade CP or MSE wireline access into the SEN switchboard located with the brigade CP. This support is required if the adjacent element does not possess its own wire and wireline installers (3IU or 3IL) to run their own lines. Wire support from within the signal section could also include running WD-1 wire to a local commercial terminal such as a magneto drop. The 3IUs installers in the signal section run the hot loop for perimeter security communications for the brigade CP site.

(3) ***Maintenance.*** The 3l-series MOS soldiers' training and responsibility in the area of maintenance are limited. Communications maintenance has shifted to the 29-series CMF whose personnel are only found in the forward support battalion or main support battalion. If the MTOE designates a 3lU soldier's position as repair or maintenance slot, because of the soldier's limited maintenance training, his duties will be limited to basic multimeter PSM-45 and PRM-34 troubleshooting. This troubleshooting isolates faults and determines what equipment should be sent to the support battalion for internal repair or replacement.

(4) ***Communications security, cryptovariable, and signal operation instructions support.*** Depending on whether the maneuver brigade has its own COMSEC

account or is a hand-receipt holder under the division COMSEC office of record, the signal section assumes all COMSEC/SOI duties for the brigade. These duties include receipt of record keeping, and initial safeguarding and issuance of all communications security, electronic cryptovariables, and SOIs. The fill devices for COMSEC cryptovariables and for non-COMSEC frequency hopsets, which are controlled cryptovariable items (MX 18290, KYK-13, KYK-15), are normally owned by the respective users' sections. However, the signal section must control the receipt, issuance, and destruction of the electronic variables stored by the users who own the fill devices.

(5) ***Advanced troubleshooting/user training support.*** The subject matter expert level troubleshooting of all communications systems is a critical support mission that requires the signal leader's time and attention, particularly during tactical operations. Periodic or on-going training of nonsignal MOS personnel by instructor-quality signal soldiers is another key support mission provided by the signal section.

b. **External Support.** The brigade main CP and the BSA are supported by a signal team from the division signal battalion. Each of the teams consist of an SEN, which is a large programmable, generator-powered switchboard mounted in a S-250 shelter on a HMMWV, and an LOS multichannel MSE network in a similar mount, which provides connectivity into the backbone of the MSE network by "shooting" the LOS radio shot back to a node center. The LOS-radio van can be cable-remoted up to one-quarter of a mile away or super-high frequency radio-remoted up to 5 km away from the SEN. This location allows the CP, which is collocated with the SEN, to have greater flexibility to locate with concealment and terrain masking independent of LOS radio high-ground requirements. The SEN/LOS team is assigned (attached or OPCON) to the brigade headquarters by the signal battalion's system control center.

(1) The brigade signal officer coordinates through the signal battalion S3 at the system control center (SCC) with the signal company commander whose unit is tasked to support their maneuver brigade. This unit could be any of the two or three area signal companies (usually A, B or D company) in the division signal battalion. The unit tasked may change from one operation to another, or a habitual relationship with one signal company or one SEN/LOS team may develop. The SEN/LOS team provides local wireline (DNVT) switchboard capability (through the SEN) and network-wide wireline (DNVT) access through the SEN and LOS transmission link back to a node center.

(2) The MSE cellular (radio) access is provided to AN/VRC-97 (MSRT) users through radio access units that are geographically placed throughout the corps and division areas by the SCC. This placement provides overlapping continuous cellular coverage to all MSRT users independent of their location or unit of assignment. The only action required by the maneuver brigade signal officer with respect to MSRT support is to have the proper "M" and "U" key loaded into the storage device for issue to users and have a written copy of the division's frequency plan if manual loading of that plan becomes necessary. The maneuver brigade signal officer must also advise the ADSO or signal battalion S3 of any changes in the CP location at least two to four hours before breakdown of the equipment for displacement. This ensures the system control center has time to plan for connectivity from the LOS into the node center.

8-11. NUCLEAR, BIOLOGICAL, AND CHEMICAL OPERATIONS

Commanders must prepare for enemy usc of NBC weapons. Every tactical plan should atempt to lessen vulnerability to NBC weapons. The brigade can also conduct chemical and nuclear operations. Brigade chemical personnel assist in planning the employment of nuclear and chemical weapons. Also, they recommend, plan, supervise, and coordinate mission assignments for smoke and flame field-expedient assets as a combat multiplier for all combat operations. (Detailed procedures for operations in an active NBC environment are outlined in FMs 3-3, 3-4, and 3-5.)

a. The NBC reconnaissance is part of conventional reconnaissance. In addition to looking for enemy activity, reconnaissance elements check for contaminated areas and clean areas. Reconnaissance elements confirm or deny contamination in the air or on the ground. When a contamination area is marked, it is marked and reported so other units do not enter into the hazard area.

b. The NBC warning and reporting system is a rapid means of sending reports of an NBC attack. These reports warn other units of possible contamination, and they report contaminated areas through the chain of command and to adjacent units. Each report has a specific purpose and uses standard codes to shorten and simplify the reporting process.

c. The emergency alarm and the warning signals are given for the imminent arrival or presence of NBC hazards. The alarm must be simple and unmistakable. When an NBC hazard is located, the contaminated area is marked with standard NATO markers to prevent units from entering into the

hazardous area. The type of alarms used are vocal, automatic, and nonvocal. For example, a masked soldier yelling GAS/GAS/GAS, M8A1 chemical agent alarm sounding metal on metal, a succession of short blasts on a vehicle horn, and an intermittent siren.

d. The units affected by a friendly nuclear or chemical strike is warned by using a NUCWARN or a CHEMWARN by the parent headquarters. Warnings are delivered swiftly so strikes are delivered on time. They are encoded or delivered by secure means so as not to warn the enemy. If not enough time remains for the enemy to react before the attack, the warning is sent in the clear.

e. Mission-oriented protective posture (MOPP) is the flexible use of protective clothing and equipment that balances protection with performance degradation and risk. A MOPP analysis is conducted to determine the appropriate MOPP level to support the mission The MOPP analysis will provide the commander with the necessary information to find a balance between protection, risk of casualties, and accomplishing the mission. Wearing MOPP gear causes individuals to experience extreme heat, mental stress, and reduced work efficiency. The higher the MOPP level, the more protection it provides, but the more it degrades performance. The leader must weigh the needs of individual protection against unit efficiency. (Table 8-5.)

f. Decontamination operations attempt to allow units—

- To decontaminate as soon as possible.
- To decontaminate only what is necessary based on mission (tempo of the battle), time available, degree of contamination length of time you have been at MOPP4, availability of decontamination assets.
- To decontaminate as far forward as possible.
- To decontaminate by priority.

These factors should be consistent with the unit's mission and the nature of the contaminant. Protective clothing and equipment provide only a temporary solution. Units may have to fight contaminated or partly decontaminated for several hours.

g. Smoke operations, when properly planned and executed, become a combat multiplier by increasing survivability of friendly forces and degrading enemy C3 and intelligence capabilities.

(1) The brigade employs two categories of smoke: hasty and deliberate. Hasty smoke is employed for short-term requirements with a minimum of planning. It can be delivered by all smoke assets, but it is normally delivered by artillery, mortars, and smoke pots. Deliberate smoke is characterized by integrated

TYPE OF UNIT	MAJOR FUNCTION	DESCRIPTION	WORK-LOAD	TIMES REQUIRED TO ACCOMPLISH FUNCTIONS			
				WITHOUT PROTECTIVE CLOTHING	WHILE IN MOPP4		
					@20°F (-7°C)	@50°F (10°C)	@85°F (29°C)
Squad, Nine-member	Maintenance	Clean weapon	Light	15 min	20 min	20 min	20 min
	Position preparation two-person	Hasty, minimum protection—					
		• In sand	Heavy	10 min	20 min	30 min	1 hr
		• In clay	Heavy	2 hrs	4 hrs	6 hrs	12 hrs
		• In plowed, loose dirt	Heavy	30 min	1 hr	1 1/2 hrs	3 hrs
		Deliberate, improved protection—					
		• In sand	Heavy	20 min	40 min	1 hr	2 hrs
		• In clay	Heavy	4 hrs	8 hrs	12 hrs	24 hrs
		• In plowed, loose dirt	Heavy	1 hr	2 hrs	3 hrs	6 hrs
	Road march (normal)	4 km	Heavy	1 hr	2 hrs	3 hrs	6 hrs
	Assault, 500 meters against moderate opposition	Fast walk	Heavy	20 min	40 min	1 hr	2 hrs
	Rest, relief, mess	Protected	Light	Variable	Variable	Variable	Variable

Table 8-5. Performance degradation of infantry squad.

planning. It is used over extended periods to cover friendly activities throughout an entire operation. Although it is normally employed to conceal friendly units, it can also be used to blind enemy units. Deliberate smoke is normally produced by mechanical generators and smoke pots. Either type of smoke can be used to deceive the enemy.

(2) Smoke has the following general applications on the battlefield:

(a) Obscuration smoke is employed on or against the enemy to degrade its vision both within and beyond its location.

(b) Screening smoke is employed in friendly areas of operations or in areas between friendly and enemy forces to degrade enemy ground and aerial observation and to defeat or degrade enemy electro-optical systems. Screening smoke is employed to conceal ground maneuver, breaching and recovery operations, key avenues of approach, and supply routes.

(c) Deception smoke is used to deceive the enemy regarding intentions of friendly forces. For example, smoke can be employed on several avenues of approach to deceive the enemy as to the avenue of the main attack.

(d) Identification or signaling smoke is employed to identify targets, supply and evacuation points, and friendly unit positions. It also provides for prearranged battlefield communications.

(3) Smoke planning is a part of the overall tactical plan. Each echelon of command plans for employment of smoke to support its operations. The brigade S3 has primary staff responsibility, but he has the advice and support of the FSO, S2, S4, chemical officer, and staff weather personnel. (Smoke operations are described in FM 3-50.)

8-12. MILITARY POLICE SUPPORT

Divisional brigades receive support from a divisional MP platoon to accomplish the following MP battlefield missions:

- Battlefield circulation control operations.
- Area security operations.
- EPW operations.
- Law and order operations.

An MP platoon and provost marshal are assigned to each separate brigade.

a. **Battlefield Circulation Control.** The BCC is a major MP battlefield mission It expedites the forward and lateral movement of combat resources and helps the commander obtain needed personnel, supplies, and equipment. The BCC operations include the following:

(1) Conduct route reconnaissance operations to and within the brigade area. Continually monitor the condition of MSRs; and identify restricting terrain effects of weather on routes, damage to routes, NBC contamination and the presence of the enemy. Identify alternate MSRs, when required. Report all observations, maintain surveillance, and develop the enemy situation.

(2) Enforce the command's highway regulation plan and traffic circulation plan to keep MSRs free for resupply operations. To expedite traffic on MSRs, use the following measures: TCPs, roadblocks, checkpoints, holding areas, defiles at critical points, and temporary route signs. Gather information on friendly and enemy activity by use of mobile teams.

(3) Operate straggler control points and coordinate return of stragglers to parent units.

(4) Control the movement of refugees whose actions could hinder the commander's operations.

(5) Collect, report, and disseminate information and intelligence during the normal course of all MP missions. Provide soldiers, units, and other road users locations of supply points and medical facilities; information about MSRs, critical points, contaminated areas, holding areas; and the locations of units and facilities.

b. **Area Security.** MPs perform area security to help the brigade commander provide security and protection. These tasks include the following:

(1) Conduct area reconnaissance and surveillance operations to gain information to guard against unexpected enemy attacks in the rear area.

(2) Provide security for designated personnel, unit convoys, critical facilities such as conventional/special ammunition pipelines, railways, deep water ports, and MSR critical points.

(3) Respond to bases/base clusters under attack when the rear area threat exceeds their ability to defend themselves.

(4) Conduct area damage control operations to reduce the level of damage or lessen effects of hostile actions or natural and man-made disasters. This helps restore combat operations and support.

(5) A platoon DS relationship is seldom interrupted, but sometimes (as in a division-size river-crossiilg operation) an operation requires all platoons in an MP company to function as a unit. Sometimes the PM must place the platoons in a GS role.

(6) Conduct other rear operations.

c. **Enemy Prisoner of War.** The MPs in DS of brigade units and those assigned to separate brigades

establish an EPW collection point. The MPs accept custody and accountability of EPWs from brigade units at the collection point (vicinity BSA) and coordinate evacuation of EPWs as soon as possible.

d. **Law and Order.** The MPs perform law and order operations to investigate criminal offenses against US forces or property, or unlawful acts committed by US forces. A platoon DS relationship is seldom interrupted. Sometimes (for example, a division-size river crossing operation) an operation requires all platoons in an MP company to function as a unit. Sometimes the PM must place all platoons in a GS role.

8-13. TACTICAL PSYCHOLOGICAL SUPPORT

The brigade may receive close, continuous, and priority support from the PSYOP company supporting a division.

a. A DS PSYOP company consists of command and control, command assessment, supply and maintenance, a propaganda development center, current intelligence, light printing, platoon headquarters, audio and visual, loudspeakers, and audiovisual sections.

b. The PSYOP objectives are integrated into the overall tactical pkan. They are normally tied in to the division/corps PSYOP objectives. The PSYOP units have the ability to:

- Induce enemy units and individuals to surrender.
- Reduce enemy ability to fight through propaganda appeals.
- Discourage and disrupt enemy operations by spreading doubt, discontent, and distrust among its personnel.
- Support deception operations.
- Publicize civilian control measures by using broadcasts and printed information.
- Arouse public opinion through radio and loudspeaker broadcasts, printed matter, and face-to-face communication techniques.
- Counter hostile propaganda by initiating a well-planned, aggressive, and effective PSYOP counterpropaganda campaign.

Chapter 9

COMBAT SERVICE SUPPORT OPERATIONS



The objective of CSS is to maintain combat power and momentum by sustaining combat forces. The brigade commander plans his tactical and CSS operations concurrently. He ensures that his scheme of maneuver and fire support plan are logistically supportable. If CSS planners identify limitations, the commander must evaluate the risks and prioritize resources. If necessary, the commander rnodifies his tactical plan to eliminate or reduce the effect of the constraints. The CSS leaders must move forward to coordinate with supported units, to gain needed information, and to push forward standard logistics packages. The personal involvement and on-the-scene appraisal of the situation by CSS personnel are as important

to mission accomplishment as the personal involvement of combat leaders. The CSS planners must—

- *Understand the commander's intent, scheme of maneuver, timing of events, and priorities.*
- *Track and monitor the battle.*
- *Anticipae requirements and take appropriate action.*
- *Actively push support forward.*
- *Use established routines during lulls in battle to rearm, refuel, and repair.*
- *Detect, fix, and destroy rear area threats, within capabilities.*
- *Perform detailed logistics and personnel estimates and be present during the entire staff planning process to ensure logistical feasibility of COAs.*
- *Be prepared to assume battle tracking and control of the fight, if required.*

9-1. FORWARD SUPPORT BATTALION

The brigade receives CSS from an FSB and elements of DISCOM and COSCOM. This support includes DS-level maintenance, health services, field services, and materiel collection and classification. The FSB provides dedicated division-level CSS for a specified maneuver brigade. In heavy units, the FSB is comprised of a headquarters company, a supply company, a maintenance company, and a medical company. In light and specialized division, they are organized into an HHD/A Company supply, maintenance company, and medical company. These companies are tailored to fulfill the needs of the brigade and of other divisional units who operate in the brigade area. The FSB provides the following support:

a. Division-level logistics support of Classes I, II, III, IV, V, VII, VIII, and IX supplies.

b. Direct support maintenance to attached and supported units of the brigade.

c. Field services, when augmented by the main support battalion or the corps (for example, water and mortuary affairs).

d. Materiel collection and classification functions.

e. Combat service support information and advice to the brigade commander and his staff on support abilities of the FSB.

f. Coordination of division-level health services support for the brigade.

g. Plan, coordinate, and execute the rear operation base cluster defense plan for the BSA.

h. Coordination of all CSS assets located in the BSA that are organic, in direct support, or attached to the brigade.

9-2. BRIGADE COMBAT SERVICE SUPPORT SYSTEM

The brigade CSS participants are the battalion trains, the forward support battalion, and the division and corps support units. Unit-level CSS for the divisional brigade is organic to its headquarters company and its attached maneuver battalions.

a. The brigade support area is the personnel and logistics center of the maneuver brigade; it includes the brigade rear CP, FSB, and selected DISCOM and COSCOM support units. Also, the BSA usually includes the field trains of subordinate maneuver battalions, DS artillery battalions, DS engineer company /battalion DS MPs, MI batalion elements, and part of the division extension signal platoon that supports the brigade (Figure 9-1).

b. A BSA should include the following characteristics:

- Be convenient to units served.
- Be situated away from the main enemy avenue of approach.
- Be beyond the range of threat artillery.
- Have sufficient space for dispersion.
- Offer concealment from hostile ground and air observation.

- Be on firm ground for ammunition and fuel vehicles.
- Be near a water source.
- Have access to a network of good roads.
- Possess suitable helicopter landing sites.
- Be situated in built-up areas to harden command posts, to improve work areas, and to reduce visual and IR signatures.
- Be located to enhance defense capability.
- Be located where good communications can be maintained with the brigade main CP.

c. The brigade S3 selects the general location of the BSA based on recommendations of the brigade S4, support battalion S2/S3, and FSB commander.

d. An FSB is designated as being in DS of an infantry brigade and is positioned in the BSA. The FSB commander is responsible for unit positioning within the BSA and for the BSA defensive plan. Normally, the FSB CP and the brigade rear CP are collocated in the BSA. (See FM 63-20 for more information on the FSB organization and functions.)

e. The BSA rarely displaces as an entity; rather, its elements are normally echeloned to maintain continuous support. The exact composition of each echelon depends on the criticality of each type support required. Echelons include elements of the brigade rear CP, the FSB headquarters, and limited Classes III, V, VIII, and IX supply assets as well as medical and maintenance personnel.

f. The lifelines that connect the BSA and supported units are the brigade supply routes. Supply routes, based on the tactical plan, are selected by the brigade S4 and approved by the brigade S3. An MSR and at least one alternate supply route are normally established to facilitate continual security, upkeep, movement control of brigade CSS assets.

g. The DS MP platoon regulates traffic along the supply routes. Engineers repair route damage to facilitate delivery of supplies forward. Host-nation support can be used to repair roadways when engineers are not available. Alternate routes are planned and reconnoitered to reduce details. Contaminated routes are also included.

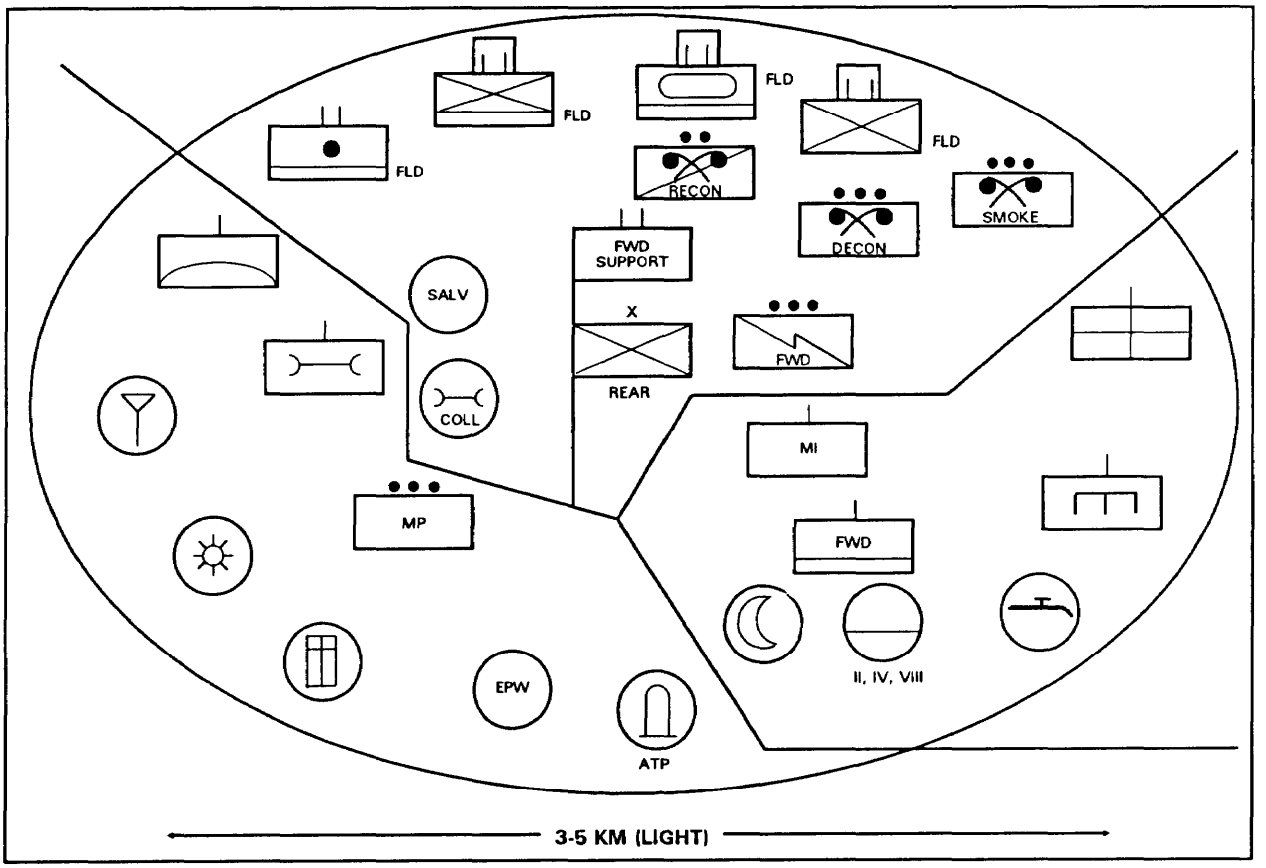


Figure 9-1. Possible brigade support area organization.

9-3. BRIGADE TRAINS OPERATIONS

The battalions use a system of combat and field trains to provide unit-level CSS for their maneuver units. Trains are organic to the maneuver batallions and are organized and equipped to provide support well forward. Routine resupply techniques for the light infantry are in-position, out-of-position, and pre-position.

a. The battalion field trains are supervised by the HHC commander. The battalion field trains normally operate from the BSA. The FSB commander is responsible for their positioning and defense. At times, the fieid trains may operate separately from the BSA, or it can be combined with a battalion combat trains to form a unit trains.

b. Other units, operating in a DS, GS, or OPCON role to the brigade, can be provided CSS assistance if it is coordinated by the brigade rear CP. The brigade can also task a subordinate unit to provide support. The subordinate battalion's trains can require additional augmentation (vehicle/personnel) to accomplish the added support requirements.

9-4. BRIGADE COMMANDER AND STAFF CONSIDERATIONS

The brigade commander is responsible for overall planning and integration of all aspects of brigade operations to include CSS in the brigade area of operations. The FSB commander is the brigade commander's main CSS adviser. He is also a key member in the planning process. The brigade S1 and S4 prepare estimates that identify logistics strengths and weaknesses of tactical COAs and identify the personnel and logistics requirements of the tactical plan. The brigade S4 coordinates with the FSB commandcr who synchronizes the logistics and medical assets needed to support the brigade plan. The FSB commander should always be included in the planning process and order briefing.

a. **Unit-Level Maintenance and Food Service Support.** The HHC of the light infantry brigade provides unit-level maintenance and food service support for the maneuver battalions.

b. **Combat Service Support Planning.** Combat service support planners must analyze the requirements of the brigade before, during, and after all phases of an operation. The staff planning process must consider the supportability of proposed COAs. Once the brigade concept of the operation is determincd, CSS planning focuses on supporting it. The brigade rear CP should continuously monitor and track the on-going battle to anticipate CSS requirements. To ensure that CSS is synchronized with all other battlefield functions, the S1. the S4, and the FSB liaison officer/support operations officer should participate in the development and war-gaming of the COAs.

C. **Casualty Evacuation.** Casualties can be extensive on today's battlefields. Internal brigade treatment/evacuation plans must be coordinated/synchronized with the medical company commander, the brigade surgeon, and the brigade S1. Based on casualty estimates provided by the battalion and brigade S1s, as well as the distance between the battalion aid stations and the medical company, the medical company may designate ambulance exchange points between the BSA and the supported units. The brigade S1 will have a member collocate with the medical company to track casualties as they are brought in. The brigade S1 also tracks KIAs at the mortuary affairs point. When required, additional evacuation resources and treatment teams can be requested by the battalions from the FSB and or to the FSB from the MSB. The keys to managing casualties are the use of on-site triage, combat lifesavers, and medical treatment teams. Other important areas include the following:

(1) Effective communication and far forward positioning of evacuation assets (litters, ground and air) in order to minimize evacuation time.

(2) Casualty collection points designated at both company and battalion level.

(3) Casualty evacuation procedures should be rehearsed from the point of injury to the battalion aid station.

(4) Appropriate use of ground and air evacuation techniques based on patient categories of precedence (urgent, priority, and routine) and METT-T.

(5) Having DA Form 1156 filled out and placed in a standardized location before an operation.

d. **Reporting.** It is essential that user units report what they have on-hand or their daily logistics report. There are few conceivable scenarios where US forces will have all of the supplies that they need for an operation. Combat service support planners try to standardize push packages as much as possible, but they must know the commander's guidance for the issuance of scarce but heavily requested supplies. Accurate reporting allows CSS planners to quickly forecast supply constraints and to order more. Inaccurate or no reporting means that some units will go into combat without enough supplies to accomplish their mission while other units have excess supplies.

e. **Support of the Offense.** The availability of adequate supplies and transportation to sustain the operation becomes more critical as the operation progresses. Supply lines and communications are

strained, and requirements mount for repair and replacement of weapon systems. The NBC contamination on the battlefield compounds these problems and degrades the performance of CSS units. The CSS commanders and planners must anticipate these issues and ensure considerations are included in their planning. During offensive planning, CSS considerations include the following:

(1) Positioning forward essential CSS, such as ammunition, POL, and maintenance (at night when possible).

(2) Increasing consumption of water and POL (terrain being a major factor).

(3) Using preplanned and preconfigured push packages of essential items to include water, Classes III, V, and VIII supplies, and decontamination and MOPP gear. Develop emergency resupply packages based on anticipated unit requirements.

(4) Using throughput distribution.

(5) Task-organizing CSS elements to supported maneuver units.

(6) Echeloning support forward and initiating operations at the new site before ceasing operations at the old site.

(7) Using captured enemy supplies and equipment mainly vehicles and POL.

(8) Planning for adequate communications between tactical and CSS units.

(9) Preparing for increased casualties and associated requirements.

(10) Establishing ambulance exchange points for efficient use of ambulances.

(11) Uploading as much material as possible. Vehicles should not be moved empty. Backhaul the material whenever possible.

(12) Ensuring that CSS preparations for the attack do not disclose tactical plans.

(13) Coordinating terrain management to preclude attempted occupation by more than one unit.

(14) Reconnoitering and clearing MSRs through previously occupied territory.

(15) Planning for transition to the defense.

(16) Planning for maintenance contact teams in unit maintenance collection points and combat trains for repairs of critical items (for example, weapon systems and radios).

f. **Support of the Defense.** The aim of CSS activities in the defense are to support defensive battles and facilitate rapid transition to the offense. Defensive operations take many forms. They range from absolutely static, relying on firepower from fixed positions, to dynamic, based on maneuver to disrupt and destroy the attacking force. The CSS commanders must be involved early in defensive planning. This allows them to plan support for the defense and to anticipate changing priorities. To support defense, the brigade S4 and FSB commander should-

(1) Consider stockpiling limited amounts of ammunition and POL in centrally located battle positions in the forward MBA that are likely to be occupied.

(2) Institute a C2 plan for CSS vehicles in the brigade area.

(3) Send LOGPACs forward that contain critical supplies on a Scheduled basis. The battalion S4 or his representative should be at all active LRPs to facilitate face-to-face coordination with the battalions. These regular shipments of ammunition, POL, and repair parts help eliminatete the need to repeatedly call for supplies. Shipments reduce the chance of a lapse in communications interrupting supply. Resupply continues until the receiving unit issues instructions to the contrary.

(4) Resupply during limited visibility to reduce the chances of enemy interference.

(5) Air deliver supplies routinely to take advantage of the helicopter's lift capabilities and flexibility.

(6) Plan for increased demand of decontaminants and MOPP gear.

(7) Plan for higher expenditures of ammunition.

(8) Plan for decreased vehicle maintenance.

(9) Plan for increased demand for obstacle and fortification materiels. These materiels should be pushed forward early based on preliminary estimates. The use of preconfigured unit loads should be maximized. Close coordination with the brigade engineer is essential.

(10) Establish ambulance exchange points for efficient use of ambulances.

(11) Coordinate with civil affairs personnel concerning refugee control and CSS requirements.

(12) Plan for the resumption of offensive operations.

g. **Support of Retrograde Operations.** The CSS for retrograde operations is complex because many activities can be taking place concurrently. Maneuver units at any given time can be defending, delaying, attacking, or withdrawing. All must be supported under the overall retrograde operation. Since the retrograde is a movement away from the enemy, CSS elements must be prepared—

- To echelon in depth and rearward.
- To limit the flow of supplies forward to only the most essential positions. All other supplies and equipment are evacuated early.

- To evacuate supplies and equipment to planned fallback points along the withdrawal routes.
- To keep supply and evacuation routes open and decontaminated.
- To withdraw forward medical treatment units as early as possible.
- To evacuate patients early, to develop alternate means of evacuation and to augment field ambulance capabilities.
- To recover or evacuate equipment rather than risk being overrun while repairing at forward sites. Self- and like-vehicle-recovery must be increased.
- To move all nonessential CSS units and facilities to the rear as early as possible.
- To supply and evacuate at night and during limited visibility.
- To implement the division commander's policy of controlled exchange.
- To keep abreast of the tactical situation.

9-5. RECONSTITUTION

Reconstitution tasks include reestablishing or reinforcing C2; cross-leveling or replacing personnel, supplies, and equipment using command priorities to allocate resources; conducting essential training; and reestablishing unit cohesion.

a. Reconstitution could be required for any unit and must be anticipated at all levels of command. Commanders have two reconstitution options—reorganization and regeneration—for returning units to a specified level of combat capability.

(1) Reorganization shifts internal resources within a degraded unit. This option can be immediate battlefield or deliberate reorganization. Both forms include cross-leveling of equipment and personnel, matching of operational weapon systems with crews, or formation of composite units by the unit commander. Reorganization is the most expedient means of maintaining combat power for the brigade; however, it is limited to the resources on hand.

(2) Regeneration is either incremental or whole-unit. It involves the rebuilding of a unit through huge-scale replacement of personnel, equipment, and supplies; replacement or reestablishment of C2; and mission-essential training for the rebuilt unit.

b. The brigade commander evaluates his units during the course of the battle and decides whether a unit needs reconstitution. Authority for reorganization is maintained by the commander one echelon above; for regeneration, authority comes from two levels above.

9-6. AERIAL RESUPPLY

Aviation from corps or division can provide transportation of supplies, materiel, and personnel in support of brigade operations. However, weather and other limitations make it unwise to have air as the sole planned means of resupply.

a. Higher headquarters decides whether to use aviation in resupply operations based on the urgency of the requirement and the availability of aviation assets. Requests for aerial resupply are processed through supply channels to the division G4.

b. If aerial resupply is used, the agency at the point of origin of the airlift is responsible for obtaining the required packing, shipping, and sling-loading equipment; preparing the load for transportation by air; preparing the pickup zone; and conducting air-loading operations.

c. The unit at the destination of the airlift is responsible for preparing the LZ to accommodate aerial resupply and for receiving the load. This includes providing a drop-zone safety team (DZST) with a qualified DZST leader and recovering the containers used in the USAF container delivery system.

d. The light infantry has limited transportation assets. Therefore, loads should be configured in bundles that are within the receiving unit's capability to recover and move.

9-7. LOGISTICS SUPPORT OF THE SEPARATE BRIGADE

The logistics support structure of the separate brigade is designed to link into a COSCOM.

a. The separate brigade support battalion resembles a small DISCOM. The direct link between the separate brigade support battalion and the COSCOM is not cut, even when the separate brigade is attached to a division. Corps augmentation to the separate brigade support battalion remains in place since the division does not have the resources to support another brigade.

b. When the brigade is attached to a division, the DISCOM coordinates the logistics effort for the entire division. The DISCOM ensures the separate brigade is neither specially favored nor penalized because of its distinctive characteristics. Because the attachment of the separate brigade to a division is not permanent, logistics arrangements should facilitate the eventual decoupling of the brigade from the DISCOM.

9-8. SOLDIER'S LOAD

The capability of an infantry soldier to fight is directly related to his load. Excessive loads cause fatigue and lack of agility, which places soldiers at a disadvantage when reaction to enemy contact is required. The brigade commander must ensure his subordinate commanders tailor the loads of their soldiers to fit the mission requirements. Commanders must take appropriate risks and delete items from the soldier's load, as necessary. The commander can best assist in this function by providing haul assets to subordinate commanders, allowing them to echelon their loads. (For detailed information, see FM 21-18.)

Appendix A

BRIGADE TACTICAL STANDING OPERATING PROCEDURE

(Classification)

HEADQUARTERS
_____ Brigade

(Location)
(Date)

_____ BRIGADE TACTICAL STANDING OPERATING PROCEDURE

SECTION I. GENERAL.

A. Purpose. This TSOP prescribes guidance for the conduct of sustained tactical operations. Specifically, it standardizes those recurring operational routines, procedures, and responsibilities executed by both organic and supporting organizational elements throughout the brigade.

B. Application/Scope. This TSOP covers only wartime operations after deployment. This TSOP does not repeat doctrine, tactics, or techniques that are provided in FMs, TMs, and MTPs. Information contained in FM 71-100-2, Appendix 1, Example Tactical Standing Operating Procedure, applies to this TSOP and is not repeated here. It applies to all supporting units operating in or occupying areas within the brigade area. All TSOP provisions apply except as modified by operations orders and plans. No provision sha11 replace good judgment and common sense.

C. Directed Supporting Documents.

1. This TSOP and all subordinate TSOPs incorporate all current provisions of FMs, TMs, Army and division regulations, STANAGs, joint agreements, and status-of-forces agreements.

2. Each brigade staff section develops and implements standard tactical SOPs. These SOPs govern the procedures for the brigade's functional area. Staff section tactical SOPs conform to the procedures contained in this SOP.

D. Proponency. The brigade XO is the proponent for this TSOP. Ensuring compliance of established TSOPs throughout the brigade is a command responsibility, which is monitored by commanders and staffs at all levels.

E. Changes.

1. Changes are submitted through the appropriate staff officers or battalion commanders to the brigade XO.

2. The brigade XO coordinates the changes.

3. The brigade commander is the approval authority.

SECTION II. PROCEDURES.

ANNEX A. COMMAND AND CONTROL

APPENDIX 1. Orders
Warning Orders
Operation Orders
Fragmentary Orders

APPENDIX 2. Communications
APPENDIX 3. Brigade CP Organization (see Appendix G of this manual).

ANNEX B. OPERATIONS

APPENDIX 1. Defense Plans
APPENDIX 2. Aviation
APPENDIX 3. Engineer
APPENDIX 4. Air Defense
APPENDIX 5. NBC Defense
APPENDIX 6. Relief in Place
APPENDIX 7. Linkup
APPENDIX 8. Passage of Lines
APPENDIX 9. Assembly Areas

ANNEX C. FIRE SUPPORT

APPENDIX 1. Field Artillery Support
APPENDIX 2. Offensive Air Support
APPENDIX 3. Target Numbering System
APPENDIX 4. Coordinated Surface and Air-Delivered Fire Support

ANNEX D. INTELLIGENCE

APPENDIX 1. Intelligence Annex OPORD Format

ANNEX E. OPERATIONS SECURITY

ANNEX F. LOGISTICS

ANNEX G. PERSONNEL AND ADMINISTRATION

ANNEX H. REPORTS AND REQUESTS

APPENDIX 1. Personnel Reports
PERSTATREP
Casualty Feeder Report
Witness Statement
Serious Incident Report
APPENDIX 2. Intelligence Reports
Patrol Report
EPW/Captured Materiel Report
SALUTE Report
Intelligence Summary
Air Reconnaissance Request
MIJI Feeder
Weather Forecast
RFI Format
APPENDIX 3. Operations Reports
Results of Contact Report
Commander's SITREP
Minefield Report
Naval Gunfire Request
TACAIR Request
Air Request Support
SHELREP, MORTREP, BOMREP
Order Message
OPLAN/OPORD Change
Air Defense Alert Message
Fire Support SITREP
Deployment/Redeployment Report
Closure Report
APPENDIX 4. Logistics Reports
LOGSTAT
Battle Loss
Resupply Insertion Request
APPENDIX 5. NBC Reports
NBC 1 Report
NBC 2 Report
NBC 3 Report
NBC 4 Report
NBC 5 Report
NBC 6 Report
NUCWARN/CHEMWARN
Effective Downwind Message
Chemical Downwind Message

ANNEX I. OPSKEDs

TASK		CODE NAME
APPENDIX 1.	Movement to Contact	Gold
APPENDIX 2.	Ambush	Black
APPENDIX 3.	Road March	Silver
APPENDIX 4.	Patrol	Khaki
APPENDIX 5.	Raid	White
APPENDIX 6.	Air Assault	Gray
APPENDIX 7.	Relief in Place	Green
APPENDIX 8.	Defense	Pink
APPENDIX 9.	Passage of Lines	Orange
APPENDIX 10.	Linkup	Yellow
APPENDIX 11.	River Crossing	Purple
APPENDIX 12.	MOUT	Brown
APPENDIX 13.	Attack	Violet

ANNEX A (COMMAND AND CONTROL)
TO BRIGADE TSOP

1. ORGANIZATION FOR TACTICAL COMMAND AND CONTROL. (See Chapter 2 of this manual.)

2. BRIGADE COMMAND SUCCESSION. Brigade commander, battalion commanders (in order of seniority), brigade XO, brigade S3.

APPENDIXES:

1 - Orders

2 - Communications

3 - Brigade CP Organization (See Appendix G of this manual.)

APPENDIX 1 (ORDERS)
TO ANNEX A (COMMAND AND CONTROL)
TO BRIGADE TSOP

1. ORDERS DISSEMINATION. Orders are delivered from commander to commander. When not possible, the following priorities are established:

a. Brigade commander to battalion commanders.

b. S3 to battalion commanders.

c. FRAGO (TOC to battalion CP).

2. COMMANDER'S INTENT. State intent of next two higher commanders (for example, division and corps) and brigade commander.

3. GRAPHICS. Graphics are as nonrestrictive as possible.

a. Unless specified otherwise, unit boundaries are on all maneuver graphics. The purpose of the boundaries is to delineate areas of tactical responsibility for subordinate units. This control measure is applicable for all tactical situations. Boundaries are not to be interpreted as intent graphics. Boundaries define on the ground where the commander controls with relation to security, fires, and positioning of his combat, CS, and CSS assets.

b. The use of intent graphics (such as battle positions, axis of attack, and so forth) remains at the discretion of the unit commanders. Intent graphics are not a substitute for unit boundaries; rather, they further delineate to the subordinate commander what his higher commander wants him to do.

4. ORDERS GROUPS. The three brigade orders groups are as follows:

a. Orders Group A. Orders group A is for dissemination of brigade orders when the tactical situation allows most personnel to participate. The following personnel attend:

- Brigade commander.
- Brigade CSM.
- Brigade XO.
- S1.
- S2.
- S3.
- S4.
- All special staff.
- FSO.
- Signal officer.
- ALO.
- All battalion commanders.
- Attachments OIC/NCOIC.

b. Orders Group B. Orders group is for dissemination of brigade orders when the tactical situation restricts personnel from attending. The following personnel attend:

- Brigade commander
- S2
- S3
- S1 or S4
- FSO
- Signal officer
- All battalion commanders

c. Orders Group C. Orders group C is for planning brigade orders. The following personnel attend:

- Brigade commander
- Brigade XO
- S1 representative
- S2
- S3
- S4 representative
- F SO
- Signal officer
- Special staff (as directed by the brigade XO)

TABS:
A - Warning Orders
B - Operation Orders
C - Fragmentary Orders

TAB A (WARNING ORDERS)
TO APPENDIX 1 (ORDERS)
TO ANNEX A (COMMAND AND CONTROL)
TO BRIGADE TSOP

The warning order format should generally follow the five-paragraph field order. The following is an example warning order:

1. SITUATION.

This is a brief description of the enemy and friendly situations. It also lists attachments and detachments to the brigade.

2. MISSION.

The restated mission from the mission analysis is used.

3. EXECUTION.

a. Special teams or task organization within the brigade are included.

b. The tentative time schedule is formed on the basis of mission analysis. It includes the following, at least:

(1) Earliest time of move.

(2) Time and place of OPORD.

(3) Probable execution time.

(4) Inspection times and items to be inspected different from SOP.

(5) Rehearsal times and actions to be rehearsed. (For example, actions at the objective, fire support, counterattack, or other actions as time allows.)

c. Special instructions.

d. Additional general instruction as needed or by SOP.

4. SERVICE SUPPORT. Any logistical information other than brigade SOP

5. COMMAND AND SIGNAL.

The following should be considered during the preparation of a time schedule. Some require brigade-level action. For others, time must be allowed for subordinates to accomplish—

- Staff estimates briefing.
- Time of early personnel attachments (FIST, FACs, and so on).
- OPORD.
- Air mission briefing/TACAIR briefing.
- Battalion commanders' briefback to brigade commander.

- Strength figures to S1/S3 Air for planning.
- Issue of equipment, SOIs, and so on.
- COMMEX times.
- Test fires and zeros (including NVDs).
- Vehicle TI/test run.
- Rehearsals (company/battalion/brigade).
- Distribute ammunition.
- Initial/final inspections.
- Refit schedule.
- Reverse cycle requirements.
- Religious services.
- Staff/commander meetings/final briefback.
- JM briefings/initial manifest call/SAT/final manifest call/load time/TOT (airborne units only).
- Brigade commander final premission talk to troops.
- Final sterilization of troops.
- Security sweep by S2/counterintelligence.

TAB B (OPERATION ORDERS)
TO APPENDIX 1 (ORDERS)
TO ANNEX A (COMMAND AND CONTROL)
TO BRIGADE TSoP

(CLASSIFICATION)

Copy no. _____ of ____ copies
Issuing headquarters
Place of issue
DTG of signature
Message reference number

OPERATION ORDER NO. _____
References: Maps, charts, other relevant documents.
Time Zone Used Throughout the Order:
Task Organization: Explain how the unit is organized for the operation. If there is no change to the previous task organization, indicate "no change. "

1. SITUATION. This paragraph contains information on the overall situation essential to the subordinate commander's understanding of the current situation. Sketches may be incorporated in paragraphs a and b to portray both enemy and friendly situations.

a. Enemy Forces, Terrain and Weather. This subparagraph refers to the overlays and written products from the IPB process and terrain analysis.

(1) Terrain and weather. A discussion of each of the factors of OAKOC supported graphically by the MCOO.

(2) Disposition, composition, and strength. This includes information about known enemy locations, current activities, the type of unit the friendly force is facing (for example, light infantry, mechanized or armored forces, T-64 or BMP 2-equipped), and strength estimates with respect to major combat systems and personnel.

(3) Capabilities. This highlights what courses of action the enemy is capable of executing and how much time it would take the enemy to execute a given COA. Each possible COA should be depicted by a sketch. The most dangerous COA is included in this paragraph.

(4) Most probable COA. This concisely states the enemy's most probable COA. It is graphically depicted on the situation template.

b. Friendly Forces. This subparagraph provides only the information that subordinate commanders need to accomplish their assigned mission.

(1) Higher unit. This states the higher unit commander's mission statement (from paragraph 2); the concept of the operation (from paragraph 3a); and, if it is used,

the statement of intent that precedes subparagraph 3a (such as division and higher level orders). Each of these is incorporated verbatim.

(2) Left unit's mission.

(3) Right unit's mission.

(4) Forward unit's mission.

(5) Unit in reserve or unit following.

(6) Units in support of or reinforcing the higher unit.

c. Attachments and Detachments. This subparagraph lists units attached or detached from the issuing headquarters and effective times, unless this information is shown under "Task Organization" or provided in an annex.

2. MISSION. This paragraph clearly and concisely states the task and purpose to be accomplished by the command. This paragraph follows the format of WHO (for example, 2d Bde 521D); WHAT (the mission-essential task); WHEN (for example, NLT 190500 Dec 91); WHERE (for example, vicinity GL123456); and WHY (the purpose of the mission).

3. EXECUTION. The commander's intent is included just before subparagraph 3a. Intent defines the purpose of an operation and the desired end state.

a. Concept of the Operation. This is where the commander explains, in general terms, how his unit as a whole accomplishes the purpose assigned to it. The written concept is accompanied by a concept sketch. This general concept statement contains the following items:

- A statement by the commander expanding on his purpose as stated in paragraph 2.
- Designation of the decisive point.
- A statement of the array of forces. This should be a form of maneuver (for offensive actions) or a defensive pattern or technique (for defensive actions). (This element is required.)
- A brief statement of the most critical of the significant factors, unifying concepts, or principles underlying the plan, and why it is important. (This element is optional. If used, it should be precise and should not exceed six sentences.)

(1) Maneuver. This addresses all major subordinate maneuver units by name. It includes, as a minimum, the mission-essential task and purpose for each maneuver unit to achieve, and designates the main effort.

(2) Fires. This describes how the tasks and purposes of fire support synchronize and complement the maneuver plan. All available fire support assets are addressed. The commander's guidance for fire support must be clearly stated (Annex C). The fires paragraph should also address the following:

(a) Priority of fires (to include shifting of priorities).

(b) Allocation of targets (such as priority targets). Identify control of priority targets (FASCAM, FPF, and so on).

(c) Restrictive fire control measures and any restrictions on the use of fires.

(3) Counterair operations. This describes the overall concept of ADA employment in support of the maneuver plan as well as specific tasks and purposes assigned to an ADA unit. It also describes employment of passive and active air defense measures (if other than SOP). It establishes the priority of air defense and provides weapons control and warning status.

(4) Intelligence. This describes how the overall information collection plan supports and complements the maneuver plan. It establishes priorities and coordinates responsibility for collection between organic and supporting units. This paragraph is graphically depicted by the event template and R&S matrix.

(5) Electronic warfare. This describes how EW supports and complements the commander's maneuver plan as well as specific tasks and purposes assigned to the EW unit. It also covers employment of passive and active measures (if different from SOPs).

(6) Engineer. This refers to the obstacle/barrier overlay (if appropriate). It describes how the integration of mobility, countermobility, and survivability assets and activities support the maneuver plan. It should also address the following issues:

(a) Purpose to be achieved through the employment of engineer assets, obstacles, mines, and fortifications. Describe the scheme for accomplishing the engineer mission.

(b) Priority of effort (mobility, countermobility, or survivability), both for engineer personnel and engineer equipment. Identify the specific missions that have priority rather than generalities.

(c) Priority of support, both for engineer personnel and engineer equipment. Refer to the operations overlay for the current plan.

(d) Employment of FASCAM (if applicable). Authority level for each type of scatterable mine system and self-destruct time.

(e) Restrictions on obstacle emplacement.

(f) Lane markings.

(7) Other. This includes additional subparagraphs as required for combat support assets such as deception, PSYOP, civil affairs.

b. Tasks to Maneuver Units. This subparagraph specifies tasks to be accomplished by each subordinate unit. They are included as they appear in the task organization: in separate, numbered paragraphs. It includes the purpose for "on-order" missions and, if necessary, for "be prepared" mission statements. An execution matrix may be used to depict this information.

c. Tasks to Combat Support Units. This subparagraph lists tasks given to combat support units in the following subparagraphs in the same order they appear in the task organization. An execution matrix may be used to depict this information.

d. Coordinating Instructions. This subparagraph contains details of coordination and control applicable to two or more units in the command. Items that may be addressed in coordinating instructions include the following:

(1) Timing paragraph.

(2) Movement paragraph.

(3) PIR/IR reporting tasks.

(4) MOPP level.

(5) Troop safety and OEG.

(6) Engagement and disengagement criteria and instructions.

(7) Fire distribution and control measures.

(8) Consolidation and reorganization instructions.

(9) Report requirements (such as crossing phase lines, checkpoints).

(10) Terrorism/counterterrorism instructions.

(11) Rules of engagement.

(12) Specified tasks that pertain to more than one subordinate unit.

4. SERVICE SUPPORT. This paragraph contains a statement of the CSS instructions and arrangements supporting the operation that are of primary interest to the unit being supported.

a. General. This subparagraph should explain, in general terms, how the combat service support assets support the overall concept of operations. It provides current and proposed trains locations. It also identifies a service support or operations overlay, which must show at a minimum the following information: supply routes, location of BSA and LRPs.

b. Material and Services.

(1) Supply. This may be followed by a list of the classes of supply, maps, water, special supplies, and captured enemy materiel.

(2) Transportation. This provides route limitations and contains traffic priorities by unit.

(3) Services. This includes the types of service available, the designation and location of the unit(s) or installation(s) providing the services, assignments to support units, and schedules for services.

(a) Mortuary affairs.

(b) Field services.

- Laundry.
- Bath.
- Decontamination.

(c) Health services.

(4) Labor. This includes instructions and restrictions on the use of civilian and EPW labor.

(5) Maintenance. This includes maintenance priorities by unit, vehicle type, or both; recovery priorities; location of facilities and collection points; and authority for controlled substitution.

c. Medical Evacuation and Hospitalization. This includes procedures for the evacuation of wounded:locations for casualty collection points, aid station, and ambulance transfer points.

d. Personnel. This includes the procedure for evacuating PWs, the location of a PW collection point, and unit replacement activities.

e. Civil-Military Cooperation. This subparagraph includes instructions affecting the civilian population, restrictions on civilian actions, and psychological operations.

f. Miscellaneous. This subparagraph includes the procedure for destroying supplies if omitted from the SOP and any CSS information omitted from the SOP.

5. COMMAND AND SIGNAL.

a. Command.

(1) Location of higher commander and CP.

(2) Location of the unit commander and of the CP (if the unit commander's location changes during the operation, this indicates his location throughout the mission).

(3) Location of 21C (if the 21C's location changes during the course of the operation, it indicates his location throughout the mission).

(4) Succession of command (if not SOP).

b. Signal. This contains as a minimum the index of the current SOI and all signal-type information.

(1) SOI index in effect.

(2) State of listening silence.

(3) Methods of communications in priority.

(4) Code words and signals.

Acknowledge:

Brigade commander's signature
Name
Rank

OFFICIAL:
(Signature)
Last Name
Position

Annexes: A-( )
B-( )
C-( )
D-( )

ANNEXES. Not all annexes listed below are required for every OPORD. When they are used, they are labeled and those included are sequenced as follows:

Title	Responsibility
A. TASK ORGANIZATION	S3
B. INTELLIGENCE	S2
Appendix 1 - Light Data	
Appendix 2 - Counterintelligence	
Appendix 3 - Targeting	
Appendix 4 - Reconnaissance	
Appendix 5 - Antiterrorism	
C. OPERATIONS	S3
Appendix 1 - Operations Overlay	S3
Appendix 2 - Chemical Warfare and NBC Defense Operations	Chemical Officer
Appendix 3 - Electronic Warfare	Signal Officer
Appendix 4 - Psychological Warfare	S3
Appendix 5 - Search and Rescfue Operations	S3 Air
Appendix 6 - Cover and Deception	S3
Appendix 7 - Rules of Engagement	S3
Appendix 8 - Air Movement	S3 Air
Appendix 9 - Boat Movement	S3
Appendix 10 - Road Movement	S3
Appendix 11 - Escape and Evasion	S3
Appendix 12 - Contingency Plans	S3
Appendix 13 - Rehearsals	S3
Appendix 14 - Air Defense	ADO
Appendix 15 - Linkup	S3
Appendix 16 - Passage of Lines	S3
Appendix 17 - Relief in Place	S3
Appendix 18 - Stream/River Crossing	S3
Appendix 19 - Counteratack Plan	S3
D. ENGINEER	Brigade Engineer
E. ARMY AVIATION	S3 Air
F. FIRE SUPPORT	FSCOORD
G. AIR DEFENSE	ADO
H. A2C2	S3 Air
I. ELECTRONIC WARFARE	Signal Officer
J. SIGNAL OPERATIONS	Signal Officer

	Title	Responsibility
K.	OPERATIONS SECURITY	S3/S2
L.	DECEPTION	S3/S2
M.	PSYCHOLOGICAL OPERATIONS	BPSE Leader
N.	NBC DEFENSE/SMOKE OPERATIONS	Chemical Officer
O.	MILITARY POLICE	MP
P.	REAR OPERATIONS	XO
Q.	SERVICE SUPPORT	S3/S4
R.	MOVEMENT	S4
S.	CIVIL AFFAIRS	S1

TAB B (FRAGMENTARY ORDERS)
TO APPENDIX 1 (ORDERS)
TO ANNEX A (COMMAND AND CONTROL)
TO BRIGADE TSOP

1. USE. FRAGOs are used to change specific missions or to provide timely changes to existing orders.

2. BREVITY. Only those items that are changed from the original OPORD are included in the FRAGO.

3. FORMAT. FRAGOs follow the standard five-paragraph order. Items not required are deleted.

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1. SITUATION.
2. MISSION.
3. EXECUTION.
   (a) Commander's intent.
   (b) Maneuver.
   (c) Fires.
   (d) Intelligence and electronic warfare.
   (e) Air defense.
   (f) Engineering.
   (g) Unit tasks.
   (h) Coordinating instructions.
4. SERVICE SUPPORT.
5. COMMAND AND SIGNAL.

ANNEX B (OPERATIONS)
TO BRIGADE TSOP

PURPOSE. To standardize selected routine operational procedures within the brigade.

APPENDIXES:

1 - Defense Plans
2 - Aviation
3 - Engineer
4 - Air Defense
5 - NBC Defense
6 - Relief-in-Place Operations
7 - Linkup Operations
8 - Passages of Lines
9 - Assembly Area Operations

APPENDIX 1 (DEFENSE PLANS)
TO ANNEX B (OPERATIONS)
TO BRIGADE TSOP

1. GENERAL. All tactical situations are unique, dependent upon METT-T. In every situation, however, you must establish security, and you must be prepared to protect the force and engage the enemy.

2. STAND-TO. A stand-to is held both morning and evening to ensure that each soldier adjusts to the changing light and noise conditions; and to ensure that each is dressed, equipped, and ready for action. The morning stand-to starts before first light and continues for about 30 minutes after first light. The evening stand-to starts before dark and continues for about 30 minutes after dark. Although the starting and ending times should vary to prevent the enemy from detecting a pattern, the stand-to must last long enough to accomplish its purpose.

3. DEFENSE PLANS.

a. Battalion sector sketches (to include positioning of key; fire, obstacles, and AT defense plans) are submitted to brigade NLT four hours after battalions have occupied the front line trace. Battalion sector sketches are updated at occupation + 8 hours, and they include all crew-served weapon and obstacle locations.

b. The brigade provides battalions with the brigade counterattack plan and brigade AT/ADA defense plan, as appropriate.

c. One copy of each of the following is submitted to regiment/brigade as soon as completed:

- Battalion sector sketch.
- Patrol plan.
- Counterattack plan.
- AT/ADA defense plan.

APPENDIX 2 (AVIATION)
TO ANNEX B (OPERATIONS)
TO BRIGADE TSOP

TABS:

A - Air Assault Operations Checklist (See Appendix C, FM 90-4)

B - Helicopter Landing Zones (See Appendix E, FM 90-4)

C - Singload Operations (See FM 55-450-3)

D - Rotary-Wing Specifications (See Appendix D, FM 90-4)

E - Rotary-Wing Safety (See Section VI, Appendix E, FM 90-4)

F - Air Mission Briefing Checklist (See Section VIII, Chapter 3, FM 90-4)

APPENDIX 3 (ENGINEER)
TO ANNEX B (OPERATIONS)
TO BRIGADE TSOP

1. GENERAL. This annex prescribes considerations for employment of combat engineer assets to enhance capabilities.

2. EMPLOYMENT.

a. During battalion operations, engineers may be used to increase sustained combat capability for brigade units through mobility, countermobility, and survivability. Planning considerations include:

(1) Mobility - Obstacle reduction to improve movement. Tasks areas follows:

- Countermine (detect, bypass, breach, mark).
- Counterobstacle (detect, bypass, breach, reduce).
- Gap crossing (prepare assault sites, secure far shore, construct/emplace bridges).

(2) Countermobility - Obstacle construction tasks to disrupt, turn, fix, and block the enemy are as follows:

- Mine warfare (conventional or scatterable).
- Demolition-type obstacles.
- Conventional obstacles (craters, abatis, wire, ditches).

(3) Survivability - Development of fighting or protective position. Priorities for engineers are as follows:

- Crew-served weapon/antitank positions.
- C2 facilities.
- Vital logistics positions.

b. Engineer units addressed in OPORDs are given the following as a minimum:

(1) Mission and enemy situation.

(2) Concept of the operation and the commander's intent.

(3) Initial location.

(4) Displacement instructions.

(5) On-order/be-prepared missions/tasks.

(6) Priorities of effort/support.

c. Also included in this appendix are—

(1) Obstacle belts (both the belts and their intents should be depicted on the engineer overlay).

(2) Obstacle intent.

(3) Scatterable mines.

(4) Class IV throughput.

APPENDIX 4 (AIR DEFENSE)
TO ANNEX B (OPERATIONS)
TO BRIGADE TSOP

1. GENERAL.

a. Passive air defense measures are vital to operations (cover, concealment, camouflage, dispersion, fire discipline, protective construction) when the enemy has a significant capability to conduct tactical air or attack helicopter operations over the brigade area.

b. Active air defense measures by other than ADA fire units are used only in extreme circumstances (generally when under direct enemy attack).

2. AIR DEFENSE ARTILLERY CONTROL AND COORDINATION.

a. The commander of any forward area ADA battery attached to or supporting the brigade acts as the brigade special staff officer (ADO). A Stinger platoon leader may be designated to help the S3 in air defense planning and operation if subordinate Stinger sections are placed under centralized brigade control. The FSCOORD is responsible for air defense and airspace management when qualified air defense personnel are absent. This is planned centrally in close cooperation with the S3 Air.

b. Air defense warnings must be disseminated immediately by any available means and require immediate acknowledgement. All other air defense coordination is passed on the ADC net.

3. AIR DEFENSE WARNINGS.

a. Red: Attack imminent or in progress.

b. Yellow: Attack probable.

c. White: Attack not immediately probable or imminent.

4. CONTROL OF AIR DEFENSE FIRES. (Weapons-tight status applies until specifically directed otherwise.)

a. Weapon Control Status.

(1) Weapons hold: Fire only in self-defense.

(2) Weapons tight: Fire only at aircraft positively identified as hostile (refer to b below).

(3) Weapons free: Fire at any aircraft not positively identified as friendly.

b. Hostile Criteria.

(1) Aircraft are attacking friendly elements.

(2) Aircraft bear the military insignia or have the configuration of an aircraft employed by a known enemy nation.

(3) Aircraft spray or smoke friendly units before coordination.

(4) Aircraft drop flares or ECM devices over friendly territory before coordination.

(5) Aircraft discharge parachutists or unload troops, in numbers that exceed the size of a normal crew, before coordination.

(6) Aircraft lay mines before coordination.

(7) Aircraft conduct improper or unauthorized entry into an area designated as restricted.

c. Local Air Defense Warnings (LADW).

(1) Dynamite. Aerial targets are inbound or are now attacking locally. Response is immediate.

(2) Lookout. Aerial targets may be in the area of interest, but are threatening or are inbound. There is time to react.

(3) Snowman. No threatening targets are in the area.

d. Rules of Engagement.

(1) Individual gunners and unit commanders have no authority to deviate from the established weapon control status or hostile identification criteria during individual operation, except that the rule of self-defense applies. Changes to the weapon control status and hostile identification criteria are made only—

(a) On order of higher headquarters. Verbal authentication is mandatory.

(b) By subordinate commanders imposing a more restrictive status or criteria.

(2) Soldiers under direct attack use individual and crew-served weapons (M60, M249, M16) to engage low-flying, positively identified hostile aircraft only after fire is authorized by a platoon leader or higher. Company commanders may delegate this authority to squad leader level under special operational circumstances.

5. COMMUNICATION. Air defense weapons control status (WCS), air defense warnings (ADW), and rules of engagement (ROE) updated "data" information are furnished from the ADA A2C2 and ABMOC/ADTOC, accompanied with friendly flight information that is verified by the brigade TOC using OP/intelligence/command nets before being retransmitted to subordinate units.

a. Directed Early Warning. The ADO must coordinate the dissemination of the directed early warning over the brigade command net, and ensure it is rebroadcasted over the battery net and maneuver battalion command nets (by TF level ADOs).

(1) Directed early warning is designed to alert a specific unit or area of the battlefield of an immediate aerial threat. Directed early warning is passed over the supported unit command net or a net designed by the supported unit commander. Directed early

warning defines the local air defense warning and states whether the aerial platform is unknown or friendly, location of the aerial platform, provides a cardinal direction of approach for the aerial platoon, and, if known, the element most likely affected within the force.

(2) Directed early warning is quick, simple, redundant in nature, and is given in clear text. The unit's SOP specifies the exact procedures to be used and determines the elements of the directed early warning.

- Preface.
- Identification.
- Local air defense warning.
- Direction.
- Size.
- Affected asset.

b. Example of a Directed Early Warning. The following is an example of a broadcast directed early warning:

"DYNAMITE DYNAMITE, 2 RW AT KN123456 AT 1345 HRS HEADING EAST, AT PL GOAT."

A breakdown of the information is listed below:

PREFACE	Optional, determined by local SOP. Used to differential between tracks.
IDENTIFICATION	Type aerial platform, location, and time.
LOCAL AIR DEFENSE WARNING . .	Self-explanatory.
DIRECTION	Self-explanatory.
SIZE	Few, Many, or Actual Number Known.
AFFECTED ASSET	Graphic control measure nearest the target. Not sent on unsecured nets.

APPENDIX 5 (NBC DEFENSE)
TO ANNEX B (OPERATIONS)
TO BRIGADE TSOP

1. GENERAL. This annex provides guidance for the effective implementation of NBC defense procedures in tactical situations.

2. EARLY WARNING AND ALARMS.

a. NBC Reconnaissance. The M8A1 chemical alarm, the M256 chemical detection kit, and chemical detection paper (M8/M9 paper) is used, based on a METT-T analysis, to detect chemical agents. The AN/VDR-2 radiacmeter is used to detect radiological contamination.

b. Alarms. This includes vocal and arm-and-hand signals.

(1) The vocal alarm for any chemical or biological hazard: the word "GAS."

(2) Standard arm-and-hand signal: (See STP 21-1 -SMCT.)

(3) Improvised audio alarm: Metal on metal, or three long blasts on vehicle horn or siren.

(4) Automatic alarm system: Two automatic (M8A1) alarm systems employed, based on METT-T analysis, at the brigade TOC. (The number of alarm systems depends on the TOE.)

3. MASKING.

a. Automatic Masking. Individuals should mask automatically—

(1) When an automatic alarm sounds.

(2) When a positive reading is obtained on detector paper, chemical agent detection kits, or chemical agent monitors.

(3) When individuals show symptoms of chemical agent poisoning.

(4) When a spray or artillery attack occurs in an NBC threat environment.

b. Unmasking. Units should unmask—

(1) As soon as possible after checking for contamination with M256 kit or CAM, except when a biological or toxin attack is suspected. The senior soldier in charge directs the unmasking procedures.

(2) In accordance with the procedure outlined in FM 3-4, NBC Protection.

4. NBC WARNING REPORTS. (See Appendix 5, Annex H, for NBC report formats.)

a. All NBC defense personnel maintain a copy of GTA 3-6-3, based on METT-T analysis.

b. For specific instructions for preparing and interpreting NBC messages, see FM 3-3. Companies and battalions should establish a notification system to quickly let command

elements know that a chemical attack has occurred. The battalion S3 section formulates the NBC 1 report to send to higher headquarters.

5. DECONTAMINATION. Units conduct decontamination operations IAW the procedures outlined in FM 3-5. Decontamination sites are planned from FLOT to the objective in the offense, and FLOT to the brigade/battalion rear boundary in defense.

6. MISSION-ORIENTED PROTECTIVE POSTURE.

a. Mask Only. The protective mask with hood worn along with fatigues, leather work gloves, and jungle or combat boots, provides adequate protection against vapor hazards, except blister agents. Overgarments and rubber gloves and boots are required only when liquid or blister agents (persistent agents) are present.

b. MOPP Levels 0 through 4.

(1) Chemical protective overgarments, rubber gloves and boots, and decontamination kits are palletized for immediate deployment or are issued at home station before deployment, depending on the METT-T analysis. The MOPP gear is put into individual equipment bags for deployment.

(2) The actions listed as follows are implemented as required based on designated MOPP levels:

MOPP LEVEL	OVERGARMENTS	OVERBOOTS	MASK/HOOD	GLOVES
0	carried	carried	Carried	Carried
1	Worn open or closed	carried	Carried	Carried
2	Worn open or closed	Worn	Carried	Carried
3	Worn open or closed	Worn	Worn	Carried
4	Worn closed	Worn	Worn	Worn

APPENDIX 6 (RELIEF IN PLACE)
TO ANNEX B (OPERATIONS)
TO BRIGADE TSOP

1. GENERAL. The S3/2 of the relieving brigade contacts the relieved brigade as soon as the order to conduct a relief in place is received.

2. PREPARATION FOR THE RELIEF IN PLACE. The following is coordinated:

a. Exchange of enemy information.

b. Reconnaissance of the area.

c. Exchange of communications information.

d. Use of guides and liaison personnel.

e. Security measures to be used. Includes deception plans.

f. Control measures to be used.

g. Fire support.

h. Method and sequence of relief.

i. Traffic control.

j. Transfer of responsibility.

k. Transfer or exchange of equipment, supplies, ammunition, and minefields.

l. Exchange obstacle overlays, locations, configurations, and compositions.

m. Detailed plan for turnover of reserve targets.

3. RECONNAISSANCE OF AREA. Commanders and leaders of both brigades conduct reconnaissance of the area to determine—

a. The disposition of the relieved brigade in its defensive positions. Each commander should obtain a copy of the sector sketch.

b. Locations of separate areas for each unit.

c. Locations of the release points.

d. Locations of the contact points.

e. Separate routes to be used for each unit.

f. Locations of any obstacles.

g. Locations of the CS and CSS elements such as CPs, trains, aid stations, mortars, and antitank weapons.

4. CONDUCT OF THE RELIEF.

a. The brigades collocate their command and control for ease of control and coordination. After linkup, brigade and battalion CPs collocate and operate under OPCON to the brigade being relieved. The relieving brigade assumes listening silence and moves from designated assembly areas only under the control of the brigade being relieved.

b. Responsibility is transferred face-to-face once the entire relieving brigade is in position. The doctrinal rule for two-thirds turnover of sector responsibility should be applied only up through company echelon. Fire support, in-progress ground operations, and other associated joint operations dictate that sector responsibility be relinquished at the time relief is complete at battalion and higher echelons.

c. Fire support elements (mortars) of the relieving brigade collocate with the brigade being relieved.

d. Physical contact is made at the contact point(s) for each coordination meeting and OPORD.

e. The units in position become OPCON to the relieved brigade commander if the enemy attacks before the responsibility is actually transferred. If contact is made after the responsibility is transferred, all units are OPCON to the relieving commander.

f. The relieving brigade assumes the exact defensive positions of the relieved brigade until the relief is complete.

g. Relief must be event-driven; time lines are productive in facilitating the planning for follow-on operations, but should not drive execution of the relief.

h. Subordinating one battalion to another during the relief and switching their roles after the relief in place enhances control, reduces signature, and facilitates transition to follow-on operations.

APPENDIX 7 (LINKUP)
TO ANNEX B (OPERATIONS)
TO BRIGADE TSOP

1. GENERAL. Upon receipt of a warning order to execute a linkup operation, the commander, S3/2, or liaison officer contacts the other unit concerned. Contact is always made from moving units to stationary units. If both are moving, higher headquarters determines which unit makes contact.

2. PREPARATION FOR LINKUP OPERATIONS.

a. Coordination is established to provide for the following:
- Command relationship of units upon linkup and effective time.
- Mutual recognition system.
- Communications plan.
- Schemes of maneuver (to include control measures).
- Fire support (to include control measures).
- Actions to be taken after linkup.
- Assistance.
- Alternate plans.

b. The stationary unit can normally provide the following assistance:
- Guides.
- Lanes through obstacles or airhead.
- Traffic control.
- Limited logistical and maintenance support.
- Limited medical support.
- Information on recent enemy activity.

c. The moving unit can normally provide the following assistance:
- Logistical support.
- Maintenance support.
- Medical support.
- Fire support.

3. CONDUCT OF THE LINKUP.

a. Moving Units. The linkup units must adjust their movements to each other and continuously coordinate on a predesignated secure radio net. If possible, one or both units should halt briefly before the linkup.

b. Moving and Stationary Units. The moving unit must orient on the stationary unit and keep the stationary unit advised of its location. The stationary unit guides the moving unit to

the linkup point by radio. The stationary unit must be ready to accept and position the moving unit as smoothly and quickly as possible. The moving element controls the overall operation.

c. Actions Following Linkup. The units maintain security by expediting movement and by continuing the mission as quickly as possible.

4. LINKUP SIGNALS. Standard red filter flashlight signals are used.

a. The stationary unit initiates the signal after radio contact with the moving unit or at a predesignated time. They initiate it by flashing the red filter light once in the expected direction of the moving unit.

b. The moving unit answers the stationary unit by flashing the red filter light twice toward the linkup point. After positive linkup has been made, units continue the mission as quickly as possible.

c. The units may use infrared lens covers on flashlights, if required. They use the same procedure used between stationary and moving units.

APPENDIX 8 (PASSAGE OF LINES)
TO ANNEX B (OPERATIONS)
TO BRIGADE TSOP

1. GENERAL. The commander and S3/2 of the passing unit contact the stationary unit on receipt of a warning order to execute a passage of lines or withdrawal through a rearward position.

2. PREPARATION FOR THE PASSAGE OF LINES.

a. Liaison. Immediate liaison is established and maintained until the operation is completed.

b. Forward and Rearward Passage of Lines. Coordination is established to provide for the following:

- Selection of CP for passing unit near the stationary CP.
- Exchange of intelligence.
- Exchange of tactical and communication plans.
- Arrangements for reconnaissance of routes, and for passage or withdrawal point patrols.
- Security measures for the operation (recognition signals, exchange of SOI items, and so on).
- Time and location for passage of command.
- Administrative, refueling, supply, and medical support.
- Route priority and movement control.
- Areas of passage or withdrawal, and guides.
- Fire support.
- Signal support.

(1) Areas selected for the passage or withdrawal should be unoccupied between or on the flanks of units in position, and units should use multiple routes to reduce their vulnerability during the operation.

(2) Priority of routes go to units executing the passage or withdrawal. Traffic control is the responsibility of the unit in position. This responsibility transfers with the passage of command.

(3) Passage of command is determined by mutual agreement by both commanders and is approved by the higher commander who directed the passage or linkup.

(4) The unit in position provides all possible tactical support assistance. It breaches minefields, provides guides, and provides indirect and direct fire support. The unit in position is responsible for fire support during a passage of lines until the transfer of responsibility for the zone. Then the passing unit artillery commander assumes responsibility for coordinating artillery fires of both units. The unit in position

supports the unit in contact throughout the withdrawal, until it is complete. At this time, the artillery commander of the unit in position is responsible for coordinating artillery fires of both units.

(5) The unit in position provides the following administrative support:

- Evacuation of casualties and EPWs.
- Civil-military operations.
- Facilities (fueling points, water points, and so on).
- Route priority and traffic control.

c. Conduct. Liaison is established from the passing unit to the unit in position, down to and including company level.

(1) Movement during execution must be as deliberate and rapid as the tactical situation, light, and terrain allow.

(2) Subordinate commanders report as soon as the operation is completed.

(3) Movement schedules are planned to preclude assembly in the sector of the unit in position.

(4) Routes, passage points, and so on are reconnoitered to the lowest level practicable.

APPENDIX 9 (ASSEMBLY AREAS)
TO ANNEX B (OPERATIONS)
TO BRIGADE TSOP

1. GENERAL. The brigade occupies an assembly area for security while preparing for future operations. Preparations can include reorganizing, planning and issuing the order, rehearsing, receiving and issuing supplies, and maintaining vehicles and equipment.

2. QUARTERING PARTY. The commander sends a quartering party to the forward assembly area in advance of the main body. The quartering party precedes the main body and moves by infiltration—not as part of the march column.

a. The mission of the quartering party is to reconnoiter the new area and to guide march elements into the assembly area. The quartering party also ensures that the assembly area is free of the enemy, obstacles, and NBC hazards. The OIC of the quartering party must be told the route, order of march, and ETA of the main body. A brigade quartering party is usually led by the S1 or the HHC XO, and consists of the quartering parties from each subordinate battalion and company. A battalion quartering party usually consists of a headquarters representative and one element from each company.

b. A quartering party should have an OIC, a security element, communications and medical personnel, and necessary staff section and subunit representatives. The quartering party should also have sufficient guides, markers, and pioneer tools to improve the new area. To secure the area, the quartering party must establish OPs, set up early warning devices and NBC alarms, or provide early warning by some other means. As march elements clear the RP, quartering party members (waiting in covered and concealed positions) move out to guide the march elements without halting to selected or designated areas.

c. The quartering party reconnoiters and organizes the assembly area before the battalion arrives. This reduces the possibility of detection during the occupation of the position. The quartering party ensures that the area has the characteristics described above. It selects and marks areas for each company, for the CP, and for each CS/CSS element. It then guides arriving elements into position to avoid congesting or stopping the unit on an exposed route of march.

3. ORGANIZATION. The assembly area may be organized by assigning battalions either sectors of the brigade perimeter or dispersed assembly areas within the brigade assembly area.

a. The security may be augmented by visual observation, sensors, and surveillance devices. Contact points for battalions can also be designated to aid in coordinating security efforts. All routes in and out of the assembly area are strictly controlled. Roads are not used to define unit boundaries. Roads are the specific responsibility of the company whose sector they pass through.

b. The battalions might be tasked to reconnoiter routes of movement to counterattack positions, defensive positions, or passage lanes; or, they may be tasked to provide security by establishing OPs, roadblocks, or traffic control points.

c. The CS elements are positioned with units they are to support, or they are located to provide support to all elements of the brigade.

d. The assembly area must allow adequate dispersion of all elements of the brigade.

e. The OPs cover key terrain features and avenues of approach.

f. The brigade CP and trains are centrally located for security and to simplify planning, issuing orders, distributing supplies, and other activities.

g. The brigade communicates by wire (if time and distance allows it to be installed) or by messenger to avoid enemy direction-finding capabilities. Radio is used only when necessary.

h. The battalion assembly areas should be large enough to allow dispersion. They must be sited to use available concealment from enemy observation and cover from enemy direct fires. Locating battalion positions within the brigade assembly area should ease movement in future operations.

i. The mortar positions should depend on their minimum employment distances. If this results in some mortars being positioned in adjacent battalion sectors, their emplacement must be coordinated.

j. The occupation of an assembly area during limited visibility requires preparation by the quartering party. Usually, the most critical handover occurs at the RP. Thorough coordination is necessary for the march unit to pass smoothly through the RP without halts.

k. There are several marking techniques used to aid in smooth nighttime occupation. Guides using prearranged colored or infrared lights for recognition signals meet the march unit at the RP and lead the unit along a marked route to the assembly area. Light discipline is practiced by shielding all illumination devices, including infrared. Communication wire, engineer tape, or both can be used to mark routes to platoon RPs. Subunit guides, using prearranged infrared or colored lights or flash recognition signals, link up with platoons or sections and lead them to prepared sectors. Individual, vehicle, crew, or squad positions can be marked with stakes, chemical lights, engineer tape, and (prelaid) communication wire and used to guide the elements into position. Telephones are connected to the wire once the units are in position, and the guide wire becomes the communications network.

ANNEX C (FIRE SUPPORT)
TO BRIGADE TSOP

1. BRIGADE FIRE SUPPORT ELEMENT.

a. The brigade FSE is responsible for the following:

(1) Producing the FS portions of the brigade's operations, plans, and orders.

(2) Coordinating fire support for the current battle.

b. The FSE is collocated with the main CP. The FSCOORD (or FSO in his absence) is usually with the brigade commander. The TAC augments the FSE.

c. Naval gunfire is coordinated by the brigade air/naval gunfire platoon, a part of the air naval gunfire liaison company (ANGLICO). The brigade air/naval gunfire platoon is organized and equipped to plan, request, coordinate, and control naval gunfire and naval air at the brigade level. Each brigade platoon is organized with a team to support the brigade and two battalion supporting arms liaison teams (SALTs). Under normal conditions, two maneuver battalions are provided a SALT officer. The SALT is composed of a SALT air officer and six personnel, who become part of the FS cell. Firepower control teams (FCTs) are sent to the maneuver companies to request, observe, and adjust naval fire support. The NGLO advises the FSCOORD on all matters pertaining to naval gunfire employment, to include capabilities, limitations, and targets suitable for naval gunfire engagement.

2. COMMUNICATIONS NETS.

3. COMMANDER'S GUIDANCE FOR FIRE SUPPORT. Development of the commander's guidance for fire support is an important first step. The commander's guidance sets priorities for fire support on the battlefield and provides for fire support at the critical time and place. The commander's guidance for fire support also allows the FSCOORD/FSO to integrate and synchronize the fire support system into the overall concept of the operation. To be useful, the commander's guidance for fire support must be feasible and clear. This requires a combined effort by both the FSCOORD/FSOs and the supported commanders; they must spell out and understand exactly what fire support can do and is expected to do during an operation. The commander's requirements of the fire support system must be within the capabilities of the resources available, adjusted as necessary for METT-T factors.

APPENDIXES:

1 - Field Artillery Support
2 - Offensive Air Support
3 - Target Numbering System
4 - Coordinated Surface and Air-Delivered Fire Support

APPENDIX 1 (FIELD ARTILLERY)
TO ANNEX C (FIRE SUPPORT)
TO BRIGADE TSOP

1. PURPOSE. This appendix establishes procedures for planning field artillery in support of brigade operations.

2. OPERATIONS.

a. All preplanned fire requests from battalion FSOS are coordinated through the brigade FSCOORD.

b. All shell reports, bomb reports, and chemical reports are sent to the brigade FSE IAW Appendix 3 to Annex 1.

c. The brigade FSCOORD obtains any ground sensor locations from the S2. The FSE integrates this sensor information into its preplanned target data.

3. FIRE PLANNING. Using top-down fire planning techniques, the FSCOORD provides the battalion FSOs with a target list, target overlay, and an allocation of targets which they may plan for. It is necessary for battalion and company FSOS to refine the target list they receive to ensure those targets support the subordinate commanders' scheme of maneuver. The FSCOORD provides copies of the refined target list and overlay to the next higher headquarters, the supporting FA battalion, and its subordinate batteries.

4. FIRE SUPPORT CONTROL MEASURES.

a. An RFL is established between converging friendly forces. Fires and the effects of fires across the RFL are prohibited unless the firing force coordinates with the effected force.

b. Airspace coordination area data and aviation control measures are disseminated by the brigade FSE.

c. A CFL is a line beyond which conventional or improved conventional indirect fire means may fire at any time within the zone of the establishing headquarters without additional coordination. The purpose of a CFL is to expedite the attack of targets beyond it.

APPENDIX 2 (OFFENSIVE AIR SUPPORT)
TO ANNEX C (FIRE SUPPORT)
TO BRIGADE TSOP

1. GENERAL. Offensive air support consists of tactical surveillance and reconnaissance (TSR), air interdiction, counterair, and close air support (CAS). Of these types of air support missions, the brigade is involved most often with CAS. These missions are integrated by the FSCOORD, who works closely with the S3 Air and with members of the TACP.

2. REQUEST CHANNELS.

a. Planned Missions.

(1) The requests for planned CAS missions originating at the battalion are forwarded to the brigade FSE over the FSC net (FM voice) or any other means available.

(2) The battalion FSO, working with the ALO, coordinates preplanned CAS and forwards the consolidated requests to the brigade FSE.

(3) The brigade FSCOORD and ALO eliminate duplications, assign priorities, and forward requests to the supporting air operations center over the Army fire support net, external (FM voice).

(4) The AI requests are prepared at the brigade FSE.

b. Immediate Missions.

(1) The companies request CAS over the FSC net (FM secure voice) using the Joint Application of Firepower (J-Fire) reference guide (TRADOC Pam 34-2).

(2) The brigade FSCOORD/ALO forwards the request to the appropriate (USAF/USN/USMC) air support operations center over the TAR net.

(3) The brigade TACP monitors the transmission and acknowledges its receipt.

(4) The brigade approves or disapproves the request within 10 minutes. Silence indicates approval.

3. EMPLOYMENT OF CAS.

a. Target Identification. Targets are identified by casualty-producing ordnance (artillery or mortar rounds, illumination rounds with point-detonating fuzes, tracer rounds, directed-energy weapons such as lasers, 90-mm rounds, and so on).

b. Friendly Position Identification. Friendly positions are marked by noncasually-producing devices, smoke, grenades, flares, fires, signal mirrors, panels, strobe lights, reflecting tape, and so on.

c. Munitions Restrictions. Certain ammunition are not used during preparation of DZs, LZs, PZs, or within an objective area. These include cluster bomb units and proximity, long-delayed, magnetic, or seismic fused ammunition.

d. Impact Adjustment.

(1) Every effort is made to mark the target and to make the fighters confirm the mark.

(2) Cardinal directions are preferred over clock references or corrections to attack headings.

(3) The CAS aircraft must be cleared hot by the ground observer before they deliver ordnance.

(4) Available FSE/TACP/ANGLICO personnel may exercise terminal control in the absence of a qualified FAC, to ensure timely and effective fires on target.

e. Battle damage assessments are given, consistent with COMSEC requirements.

APPENDIX 3 (TARGET NUMBERING SYSTEM)
TO ANNEX C (FIRE SUPPORT)
TO BRIGADE TSOP

1. SYSTEM.

a. Target numbers are alphanumeric designators that each consist of two letters and four numbers. The letters "I" and "0" are excluded from this system to preclude confusion with the numbers one and zero.

b. A series of targets is identified by a code name or nickname that does not correspond to the phonetic alphabet.

c. A group of targets is identified with a group designator that consists of the two letters assigned to the brigade, such as XA, with a number inserted between them. In this example, the first group of targets would be XIA, the second would be X2A, and so on.

2. SECURITY. Target assignments are, sent over a secure means of communications or are encoded and transmitted over an unsecure means. However, if a target is being attacked within 15 minutes from the time of transmission, target assignments may be sent in the clear by unsecure means.

3. TARGET NUMBER ALLOCATIONS. The brigade allocation of target numbers is as follows:

0001—1999 . . . . . FSE

2000—2999 . . . . . FSO, lowest-numbered maneuver battalion

3000—3999 . . . . . FSO, 2d lowest-numbered maneuver battalion

4000—4999 . . . . . FSO, 3d lowest-numbered maneuver battalion

5000—6999 . . . . . Additional FSOs

7000—7999 . . . . . FDC direct support artillery

8000—8999 . . . . . Counterbattery (counterfire) targets

9000-9999 . . . . . Toxic chemical targets

APPENDIX 4 (COORDINATED SURFACE AND AIR-DELIVERED FIRE SUPPORT)
TO ANNEX C (FIRE SUPPORT)
TO BRIGADE TSOP

1. PLANNING PROCEDURES. The FSCOORD, S3 Air, and TACP prepare a complete plan of engagement before an operation. Their plan must anticipate the use of tactical air and Army aviation. The plan must include, but is not limited to the following:

a. Artillery gun-target lines.

b. Location of friendly troops in relation to the gun-target lines and to the probable flight corridors of aircraft. Adjacent units must be considered.

c. Orbit areas, immediate safe bail-out, and nearest recovery base or ship for tactical and Army aviation.

d. H-hour during airborne or air assault operations.

e. Sequence of employment of fire support means.

f. Employment of FSC measures.

g. Plans for tactical air, Army aviation, FA, and naval gunfire.

h. Signals for shifting or lifting fires and ground marking systems.

i. Designation of personnel to control each type of fire support.

j. Channels of radio communication.

2. EXECUTION PROCEDURES.

a. Effective artillery fire employed in support of soldiers in close contact may shift, but does not lift to allow simultaneous attack by aircraft.

b. The battalion FSO obtains the gun-target line's greatest ordinate in front of supporting artillery and organic mortar fire, and center of impact, then relays this information to the TACP/FAC/pilot.

c. The brigade commander specifies FSC measures, as required. These restrictive measures should be applied at the latest possible time before the air strike, and should be removed upon completion of the air strike.

d. The battalion FSO/ALO employs aircraft maneuver coordination measures (airspace coordination area) upon notification that aircraft are on station; this allows a safe distance between the unit and aircraft maneuvers.

e. Tactical air and Army aviation employed simultaneously must be separated laterally and must know the other's attack heading, ordnance, breakaway direction, and orbit area.

3. SEPARATION PROCEDURES.

a. Artillery and tactical air can be separated laterally, vertically, or both.

b. Fighters on high-angle attack with a pullout over 1,000 feet above the target surface can, using vertical separation, work very close to or directly above low-angle artillery.

c. Fighters on low-angle attack must be separated laterally from mortar or artillery firing high angle.

ANNEX D (INTELLIGENCE)
TO BRIGADE TSOP

1. GENERAL. The battalion S2s maintain continuous radio contact with the brigade S2 on the brigade O&I net. Priority and perishable intelligence are sent by voice. Routine intelligence (INTSUMs, weather reports, and so on) is sent by DMDG at noncritical times to keep the command net free for priority traffic.

2. INTELLIGENCE PRODUCTS.

a. Intelligence Annex. This is a formal intelligence tasking document. It disseminates information about enemy forces; it also serves as a medium for higher commanders to instruct subordinate commanders to acquire information necessary for the conduct of the operation.

b. Intelligence Estimate. This is a logical and orderly examination of the intelligence factors affecting mission accomplishment. It provides the commander with an analysis of the area of operations, and of enemy strengths and capabilities that can influence his mission. The intelligence estimate provides the basis for planning operations and for disseminating intelligence assets.

3. REQUESTS AND REPORTS. (See Appendix 2, Annex H.)

a. The required reports and times for submission are established in each OPORD based on the mission.

b. The SALUTE/SALT reports are submitted when any known or suspected enemy activity has been observed.

c. The S2 dispatches INTSUMs as needed to companies and to higher headquarters.

4. INTELLIGENCE OPERATIONS CHECKLIST.

a. Planning phase.

(1) Analyze the mission.

(2) Prepare analysis of the area of operations, area of interest, and IPB.

(3) Prepare the intelligence estimate.

(4) Recommend PIR and IR.

(5) Forward RFI.

(6) Determine with the S3 the need for EW and deception.

(7) Request and distribute maps and imagery.

(8) Develop intelligence acquisition tasks for higher, lower, and adjacent units in coordination with the S3.

(9) Develop and coordinate plans for EPW, refugees, and captured materiel and documents with the S1, S4, and CI section.

(10) Develop and coordinate SIGSEC and OPSEC measures with the S3 and signal officer.

(11) Prepare the intelligence annex to the OPORD/OPLAN.

(12) Request intelligence augmentation support.

(a) Intelligence analysts.

(b) Interpreters.

(c) Interrogators.

(d) SIGINT.

(e) Psychological warfare teams.

(f) COMSEC monitoring teams.

(13) Determine and coordinate intelligence communications links.

(14) Coordinate rehearsal target construction with the S3 and S4.

(15) Coordinate weather support.

(16) Establish PIR with the S3.

(17) Conduct threat and OPSEC briefings.

(18) Coordinate reporting schedules with higher and subordinate units.

(19) Coordinate LO functions.

(20) Develop access controls for planning, rehearsing, and staging areas.

(21) Verify the construction of targets at the rehearsal sites.

(22) Address the industrial toxic material threat in a LIC or MOUT environment.

b. Execution Phase.

(1) Report all significant information to higher headquarters by way of report formats in Appendix 2 to Annex H.

(2) Ensure subordinate units are reporting promptly.

(3) Disseminate information to subordinates promptly.

(4) Keep the commander and S3 informed.

(5) Check the fire support net periodically for information.

(6) Recommend changes to PIR and IR.

(7) Update the effect of weather and terrain on enemy operations.

(8) Report the capture of EPW and equipment (especially radio frequencies) promptly.

(9) Debrief patrols and raids.

(10) Conduct OPSEC.

(a) Monitor nets for unnecessary chatter.

(b) Ensure soldiers carry no personal items on operations.

(c) Ensure friendly units leave no compromising trash behind.

(d) Control access into the TOC area.

APPENDIX:

1 - Intelligence Annex OPORD Format

APPENDIX 1 (INTELLIGENCE ANNEX OPORD FORMAT)
TO ANNEX D (INTELLIGENCE)
TO BRIGADE TSOP

1. GENERAL. The intelligence annex is a formal intelligence tasking document that usually accompanies an OPORD or OPLAN. It disseminates information about enemy forces and serves as a medium for instructing subordinate commanders to acquire information necessary for the conduct of the operation.

2. FORMAT.

a. Summary of enemy situation.

b. Intelligence requirements.

(1) Commander's critical information requirements.

(2) Priority intelligence requirement.

(3) Information requirement.

c. Intelligence acquisition tasks.

(1) Orders to subordinate and attached units.

(2) Requests to higher, adjacent, and cooperating units.

d. Measures for handling personnel, documents, and materiel.

(1) EPWs, deserters, repatriates, inhabitants, and other persons.

(2) Captured documents.

(3) Captured materiel.

e. Documents or equipment required.

f. Counterintelligence.

g. Reports and distribution.

h. Miscellaneous instructions.

ANNEX E (OPERATIONS SECURITY)
TO BRIGADE TSOP

1. GENERAL. Operations security is the protection of military operations and activities. Good OPSEC results from identifying and subsequently eliminating friendly intelligence indicators that are susceptible to hostile exploitation. OPSEC applies to all the activities of the brigade and its subordinate elements. The OPSEC must preserve the advantage of surprise; it is a continuous process of protecting classified and unclassified information.

a. Physical Security. Physical security includes using security forces; restricting access to areas; and limiting access to equipment, activities, materials, and so on. Methods of enhancing physical security include the following:

(1) Using sandbags on headlights.

(2) Covering windshields of parked vehicles with ponchos or poncho liners.

(3) Employing at least one OP for each platoon.

(4) Employing at least 33 percent security.

(5) Employing at least one security patrol from each unit, to be sent out at first light and sporadically during other times.

(6) Conducting a first and last light aerial reconnaissance (if assets are available).

(7) Departing from perimeter only with approval through chain of command.

(8) Enforcing noise and light discipline strictly. Banning open fires and cigarette smoking at night. Limiting light, to include IR, to essential requirements to achieve a blackout.

(9) Emplacing obstacles to control access.

b. Signal Security. The SIGSEC includes communications security (COMSEC) and electronic security (ELSEC).

(1) Considerations for SIGSEC include the following:

(a) Adhering to proper authentication procedures in all operations.

(b) Securing the SOI.

(c) Operating radios on low power.

(d) Keeping all transmissions under 10 seconds, at which time contact must be broken.

(e) Using directional antenna when possible.

(f) Using abbreviated radio procedures and reports

(g) Having operators use secure mode when possible.

(h) Submitting timely and accurate reports following the SALUTE format.

(i) Having operators keep radio volume low and using hand mikes while listening.

(j) Having operators use brevity codes and OPSKEDs where possible.

(k) Having operators whisper at night.

c. Information Security. Material that might provide the enemy with intelligence, including classified and unclassified information, must be protected. Examples include documents, requisitions, and reports that might expose sensitive operations. Techniques include screening or protecting orders, news releases, and graphic information. The following actions should be taken:

(1) Classify all plans and OPORDs; mark them with appropriate downgrading instructions, and destroy them accordingly.

(2) Classify all training orders as required.

(3) Sign out plans/OPORDs only on a need-to-know basis.

(4) Brief supporting units on the sensitive nature of the plans/OPORDs.

(5) Safeguard unit rosters and follow proper mail-handling procedures.

(6) Follow trash discipline.

(7) Use expedient methods, such as burning, crumbling, chewing, or swallowing, to destroy sensitive information.

d. Deception and Countersurveillance Measures. The following should be considered:

- Dummy weapons positions.
- Dummy radio traffic.
- Air assault false insertions.
- Dummy resupply operations.
- Vehicle movement.
- Lighting.
- Engineer work (obstacles).
- Fictional overlays, maps, or both, left where the enemy finds them.
- Dummy obstacles.

ANNEX F (LOGISTICS)
TO BRIGADE TSOP

1. GENERAL.

a. The FSB commander will be in charge of the rear CP, which is collocated with the FSB CP. The rear CP is responsible for administrative and logistical functions.

b. The battalion field trains will normally be located in the BSA.

2. REPORTS. (See Annex H for formats.)

a. Daily Logistical Status Report. The LOGSTAT report is due to the S4 NLT 0600Z as of 24002 when the logistics operations center has been established. Submission is by secure means. The LOGSTAT report is confidential when filled in. After initial submission, only changes are reported.

b. Battle Loss Report. This report is a spot report indicating a loss of such significance that mission accomplishment may be impaired. Its submission constitutes a request for corrective action. The logistics operations center immediately coordinates with higher headquarters as appropriate to effect corrective action.

c. Resupply Insertion Request. This request initiates resupply when needed into the objective area.

3. SOLDIER'S LOAD.

a. Leaders must plan detailed logistics support to reduce the soldier's load.

b. Echelon loads into combat, sustainment, and contingency loads.

ANNEX G (PERSONNEL AND ADMINISTRATION)
TO BRIGADE TSOP

1. PERSONNEL MANAGEMENT.

a. Reports. Annex H, Appedix 1. Formats for reports are IAW FM 71-100-2, Appendix 1, Section IV. Units report their status ASAP, when present-for-duty (PDY) strength falls below 85 percent, 70 percent, and 50 percent. Key personnel losses and any identified or temporary replacements are highlighted.

b. Replacements. All replacements are controlled at the logistics operations center. Transportation for replacements is coordinated through this center; pickup times and locations are published depending on the tactical situation.

c. Casualties. All casualties are reported on the administrative/logistics radio net by way of personnel status report (PERSTATREP). Team leaders and above each carry DA Form 1155/1156 pads in the top flaps of their rucksacks for recording casualty information. Transportation of bodies is coordinated on the administrative/logistics net by the battalion S4 as soon as the tactical situation allows. If no evacuation transportation is available, the dead are buried and the eight-digit grid coordinates are recorded for future recovery. The battalion S4 arranges for the recovery of bodies and personal effects for evacuation to the soldiers' home stations.

d. Enemy Prisoners of War. Enemy prisoners of war are evacuated to a collection point as specified in the OPORD—not to command posts. Units provide guards to remain with EPWs until transferred to MP custody.

2. PERSONNEL ADMINISTRATION.

a. Postal. Delivery and postal services are established at the logistics operations center. Only first-class mail is delivered to the objective area. Mail received at brigade for dispatch to units in the objective area is placed in bundles for delivery. Mail is secured and transported in a locked mail bag.

b. Awards and Decorations. All awards and decorations are processed IAW AR 672-5-1. Valor awards include two witness statements.

c. Finance. Notification of areas designated as subject to hostile fire are made by the Secretary of Defense. Determination of hostile-fire pay is made IAW DOD Military Pay and Allowances Entitlements Manual.

3. MEDICAL.

a. Planning.

(1) Three basic elements of medical support are planned for tactical operations.

(a) Triage/treatment.

(b) Evacuation.

(c) Supply/resupply.

(2) Medical augmentation is established by brigade or other higher headquarters on a mission-by-mission basis.

b. Medical Evacuation. Reports are initiated on the command net, then transferred to administrative/logistics for execution and recovery. Units must try to evacuate patients back to unit aid stations for sustained treatment. Evacuation priorities are determined by the unit senior aid man based on patient condition. Personal equipment is evacuated with the individual.

c. Preventive Medicine.

(1) Daily personal hygiene includes washing, shaving, and brushing teeth.

(2) Personal inspection for removal of ticks should be performed every six hours in heavily forested/jungle areas. All parasitic infestations (ticks, fleas, lice, and so on) should be reported to medical personnel immediately.

(3) Soldiers should avoid trying to capture or handle snakes for any reason. Snake bite first aid should include the following:

(a) Apply a tourniquet loose enough to pass one finger under the tourniquet. Put it above the bite (between the injury and the heart).

(b) Evacuate immediately for expert medical care (usually to the location of the senior aidman or battalion surgeon).

(4) Soldiers should avoid trying to capture or handle animals. Any animal bites are reported immediately to the battalion surgeon.

(5) Company preventive medical teams make daily inspections of latrine and mess facilities. The preventive medical teams report daily inspection results to their company executive officers. Deficiencies are corrected immediately.

(6) All diarrhea illnesses are reported to the brigade surgeon.

4. RELIGIOUS SERVICES. Brigade chaplains coordinate religious services within their unit.

5. LEGAL.

a. Discipline, Law, and Order.

(1) Personnel remain assigned to their units for military justice. Commanders may exercise the full range of judicial, nonjudicial, and administrative measures available to them. In the event that judicial action is contemplated, evidence is preserved (as much as possible), sketches are made, and statements are taken for eventual action upon redeployment.

(2) Soldiers separated from their units and stragglers may be picked up by follow-on forces for rapid return to their units or other appropriate disposition.

(3) Legal defense services are unavailable during the initial stages of deployment. Legal assistance can be provided by the division SJA as appropriate.

b. Conduct if Captured. Soldiers identify themselves as American soldiers and insist on proper treatment IAW the 1949 Geneva Convention. The Code of Conduct and the Uniform Code of Military Justice remain in effect.

c. Claims. Claims by local citizens should be referred through the unit claims officer to SJA for disposition. Reasonable effort should be made to preserve evidence of accidents for further investigation by US Claims authorities. Under no circumstances should soldiers promise or commit the United States to reimburse for damages.

d. War Crimes. Suspected violations of the law of war whether committed by the enemy, United States allies, or US personnel are immediately reported through the chain of command or other appropriate channels (provost marshal, inspector general, chaplain, and JAG) for rapid investigation.

e. Disposition of Captured Weapons, Materiel, and Equipment.

(1) All captured materiel is evacuated through appropriate channels as US Government property.

(2) No war trophies or mementos are taken.

(3) Personal property of EPW, civililians, or enemy KIA remains with the indivual or the body as appropriate.

f. Weapons and Munitions.

(1) No privately owned weapons, ammunition, or explosives are carried or used by soldiers during operations.

(2) All military munitions, explosives, ammunition, and firing devices are strictly controlled, accounted for, secured, and turned in upon completion of operations.

ANNEX H (REPORTS AND REQUESTS)
TO BRIGADE TSOP

1. SCHEDULE OF REPORTS.

a. The following is a schedule of mandatory recurring reports and the frequency with which they are due:

Report	Freq	Net Used	As-of Time	Due to Bde Ops Center	Proponent
PERTATREP	D/X	admin/log	1100Z	1500Z	S1
PERSTATREP (See I)	x	admin/log	2400Z	0300Z	S1
Cdr's situation report	D	Cmd	2400Z	0800Z	S3
LOGSTAT	D	admin/log	2400Z	0800Z	S4
Battle loss	D/X	Cmd	2400Z	0800Z	S4
Effective downwind message	D/X	Cmd	Updated every 12 hours	N/A	S3
Chemical downwind message	D/X	Cmd	Updated every 6 hours	N/A	S3

(D = Daily, X = by exeption)

2. MEANS OF TRANSMISSION. The preferred means of transmission for reports is by messenger. When messengers cannot be used, wire or secure radio is used.

3. FORMATS.

a. Appendix 1 - Personnel Reports

(1) Tab A - PERSTATREP

(2) Tab B - Casualty Feeder Report

(3) Tab C - Witness Statement

(4) Tab D - Serious Incident Report

b. Appendix 2 - Intelligence Reports

(1) Tab A - Patrol Report

(2) Tab B - EPW/Captured Materiel Report

(3) Tab C - SALUTE Report

(4) Tab D - Intelligence Summary

(5) Tab E - Air Request Reconnaissance

(6) Tab F - MIJI Feeder

(7) Tab G - Weather Forecast

(8) Tab H - RFI Format

c. Appendix 3- Operations Reports

(1) Tab A - Results of Contact Report

(2) Tab B - Commander's Situation Report

(3) Tab C - Minefield Report

(4) Tab D - Naval Gunfire Request

(5) Tab E - TACAIR Request

(6) Tab F - Air Request Support

(7) Tab G - SHELREP, MORTREP, BOMREP

(8) Tab H - Order Message

(9) Tab I - OPLAN/OPORD Change

(10) Tab J - Air Defense Alert Message

(11) Tab K - Fire Support SITREP

(12) Tab L - Deployment/RedeploymentReport

(13) Tab M - Closure Report

d. Appendix 4 - Logistics Reports

(1) Tab A - LOGSTAT

(2) Tab B - Battle Loss

(3) Tab C - Resupply Insertion Request

e. Appendix 5 - NBC Reports

(1) Tab A - NBC 1 Report

(2) Tab B - NBC 2 Report

(3) Tab C - NBC 3 Report

(4) Tab D - NBC 4 Report

(5) Tab E - NBC 5 Report

(6) Tab F - NBC 6 Report

(7) Tab G - NUCWARN/CHEMWARN

(8) Tab H - Effective Downwind Message

(9) Tab I - Chemical Downwind Message

ANNEX I (OPSKEDs)
TO BRIGADE TSOP

	TASK	CODE NAME
Appendix 1.	Movement to Contact	GOLD
2.	Ambush	BLACK
3.	Road March	SILVER
4.	Patrol	KHAKI
5.	Raid	WHITE
6.	Air Assault	GRAY
7.	Relief in Place	GREEN
8.	Defense	PINK
9.	Passage of Lines	ORANGE
10.	Linkup	YELLOW
11.	River Crossing	PURPLE
12.	MOUT	BROWN
13.	Attack	VIOLET

NOTE: Appendix 1 is an example OPSKED. Appendixes 2 through 13 are omitted.

APPENDIX 1 (MOVEMENT TO CONTACT)
TO ANNEX I (OPSKEDs)
TO BRIGADE TSOP

MOVEMENT TO CONTACT OPSKED (GOLD)

1. Executing Movement
2. Conducting Passage of Lines
   a. Completed
   b. Passage Halted
3. Crossing LD
4. Crossing Phase Line _____
5. Crossing Intermediate March Objective _____
6. Occupying Battle Position _____
7. Requesting Additional Forces
   a. Infantry
   b. Engineers
   c. Fire Support
   d. ADA
   e. Aidmen
   f. Other
8. Sending Forces To _____
9. Holding Up Movement at _____
10. Commencing Hasty Attack on Objective _____
11. Destroying Enemy at OBJ _____
12. Announcing Objective Secured
13. Continuing Advance/Pursuit
14. Arriving at LOA
15. Requesting resupply at _____
16. Spare
17. Spare

Appendix B
AIRBORNE BRIGADE

The airborne brigade can be deployed strategically and can be inserted rapidly anywhere in the world. The method of insertion into the objective area is the main difference between an airborne brigade operation and an infantry brigade operation. Airborne operations require detailed planning and close coordination between Army forces and Air Force elements. (See FM 100-27 and FM 90-26 for more information on joint airborne and tactical airlift operations.)

B-1. ORGANIZATION

The airborne brigade has three airborne infantry battalions assigned, but this number can vary from two to five. The only permanently assigned unit is the HHC. The airborne brigade can be task-organized with division assets for CS and CSS. Normally, CS and CSS units remain attached to the brigade until their parent units are established within the airhead. The brigade normally splits into assault and follow-on forces for an airborne operation. Assault forces are the units required to seize objectives in the initial stages of the operation. Follows forces include units required to sustain the operation or conduct operations as part of the larger force. These can include the rest of the assault units and CSS elements.

B-2. MISSIONS

Airborne brigades execute parachute assaults to destroy the enemy and to seize and hold important objectives until linkup is accomplished. The parachute assault enhances the basic inftantry combat mission to close with the enemy by fire and maneuver, to destroy or capture him and to repel his assaults by fire, close combat, and counterattack.

a. Missions can be strategic, operational, or tactical.

(1) ***Strategic missions.*** Simply alerting airborne forces for employment is a show of force that is politically significant in a strategic context. Airborne forces have strategic mobility. They can move from distant bases to strike at important targets deep in enemy-held territory with little warning. Strategic missions may require airborne forces to seize an airhead from which follow-on ground or air operations can be launched. Operation Just Cause was a strategic mission.

(2) ***Operational missions.*** The brigade can be employed anywhere in the theater of war. It can attack deep to achieve operational-level objectives. For example, the seizure of objectives, such as airfields, bridges, or other key terrain deep in the enemy's rear area, is an operational mission. This is linked to the operational-level commander's concept and simplifies his accomplishment of assigned tasks. These missions are usually short and require a linkup with other friendly forces or extraction of the airborne force. Operation Market Garden in the fall of 1944 is a good example of an operational mission.

(3) ***Tactical missions.*** The brigade can assault in the rear or to the flank of the enemy, preferably where few fixed defenses exist and where well-organized enemy combat units are not initially present. It can either assault its objective and move to link up with friendly forces, or seize an objective and hold for the arrival of other friendly ground forces. They can also be used for rapid reinforcement of friendly ground units.

b. The airborne brigade can—

(1) Provide a show of force.

(2) Seize and hold important objectives until linkup or withdrawal.

(3) Seize an advance base to further deploy forces or to deny use of the base by the enemy.

(4) Conduct raids.

(5) Reinforce units beyond the immediate reach of land forces.

(6) Reinforce threatened areas or open flanks.

(7) Deny the enemy key terrain or routes.

(8) Delay, disrupt, and reduce enemy forces.

(9) Conduct economy-of-force operations to free heavier more tactically mobile units.

(10) Exploit the effects of chemical or nuclear weapons.

(11) Conduct activities within the spectrum of operations other than war:

B-3. CAPABILITIES

The strategic mobility of the airborne brigade permits rapid employment to meet contingence across the operational continuum anywhere in the world. Airborne forces provide a means by which a commander can decisively influence operations. When augmented with appropriate combat, CS, and CSS, the brigade can conduct sustained combat operations. The advantages of airborne operations are as follows:

- Quick response on short notice.
- Ability to bypass all land or sea obstacles.
- Surprise.
- Ability to mass rapidly on critical targets.

B-4. FUNDAMENTALS

The brigade commander and his staff must understand the fundamentals of airborne operations to plan and execute a successful airborne assault. These fundamentals are valid at every level.

a. Airborne forces require specially selected, trained, and highly disciplined soldiers and leaders.

b. Airborne operations must capitalize on surprise.

c. The ground tatictal plan must drive all other plans through the reverse planning process.

d. Airborne operations require centralized detailed planning and aggressive decentralized execution.

B-5. LIMITATIONS

The commander and planners must recognize the limitations of airborne forces and plan accordingly. They must consider the following:

a. An airborne force depends on USAF aircraft for long-range movement, fire support, and CSS. The availability and type of aircraft dictates the scope and duration of airborne operations.

b. Airborne forces are vulnerable to enemy attack while en route to the DZ. Although the USAF can conduct limited airdrops without air superiority, large operations require neutralization or suppression of enemy air defenses. This may require SEAD, radar jamming and fighter aircraft in addition to transport and CAS sorties.

c. After the initial airdrop, the sustained combat power of airborne forces depends on resupply by air. Any interruption in the flow of resupply aircraft can cause a potential weakening of the airborne force. Enemy air defense fires against resupply aircraft and long-range artillery and mortar fires on the DZ can hamper the delivery, collection, or distribution of critical supplies.

d. Once on the ground, the airborne force has limited tactical mobility. That mobility depends on the number and type of vehicles and helicopters that can be brought into the objective area.

e. The airborne force has limited FA and ADA support until additional assets can be introduced into the objective area. Additional target acquisition assets are needed to provide accurate and timely targeting information,

f. Evacuation of casualties from the airhead is diffcult. Until evacuation means are available the brigade must be prepared to provide medical care through the attachment of divisional medical elements.

g. The airborne force has limited capability against armored/motorized units in open terrain. In a protracted battle, this limitation extends to all types of terrain because of resupply restrictions.

B-6. COMMAND AND CONTROL

The airborne brigade normally operates as a part of the division; however, it can conduct brigade operations as part of a joint task force.

a. Airborne operations are joint Army-Air Force operations. The Air Force provides the airlift, CAS, and aerial resupply; the Army provides the airborne units.

b. Participating airborne units are usually assigned to a JTF for airborne operations. The operation begins and ends on order of the joint task force commander.

c. During joint airborne operations, an airborne battlefield command and control center (ABCCC) or a joint airborne communications center/command post (JACPOT) may be used to provide the communications link between the brigade and the controlling headquarters.

B-7. AIRBORNE OPERATIONS PHASES

The planning, preparation, and execution of an airborne operation invokes several related phases. (FM 100-27 and FM 90-26 explain these in detail.) These phases are as follows:

a. **Ground Tactical.** This phase begins with the landing of units and extends through the seizure and consolidation of the initial objective(s). It ends when the

mission is completed or the airborne force is extracted or relieved. Subsequent operations can include an offensive operatio, defense of key terrain a linkup, a withdrawal, or any combination.

b. **Landing.** This phase ends when all elements of the relevant echelon are delivered to the objective area.

c. **Air Movement.** This phase begins with the takeoff of loaded aircraft and ends with the delivery of units to their DZs and LZs.

d. **Marshaling.** This phase starts with the receipt of the warning order or planning directive and lasts until the aircraft lifts off. During this time, joint tactical support planning takes place. Soldiers, equipment, and supplies are assembled, manifested, and readied. Briefings, prejump training, rehearsals, and briefbacks are conducted.

B-8. PLANNING

Planning for airborne operations starts at the joint command level where studies, concepts, and OPLANs are prepared to cover possible missions and locations. Subordinate commands usually perform the detailed planning for specific airborne operations. When an airborne operation is necessary, the JFC ordering the operation furnishes the units with an initiating directive. This information forms the basis for the commander's preparation of planning guidance and development of OPLANs or OPORDs. Upon receipt of the warning order, the airborne brigade commander and his staff begin planning. They develop the ground tactical plan, the landing plan, the air movement plan, and the marshaling plan. They use the reverse planning sequence (Figure B-1).

a. **Ground Tactical Plan.** The basis for the ground tactical plan is the estimate process. Its development takes place as soon as possible since it is the basis for all other planning. It covers the conduct of operations in the objective area and the brigade scheme of maneuver once on the ground. It includes the strength and composition of the force required to accomplish assigned tasks and to develop a supporting logistics plan. Until the ground tactical plan is completed, no other final planning is possible. The plan consists of six primary elements developed in the following sequence: assault objectives, airhead line, security operations that includes reconnnissance and security forces, boundaries, task organizations, and reserves.

b. **Landing Plan.** The landing plan is published at brigade and below. At levels higher than brigade, it is informal. This plan links the air movement to the ground tactical plan. It provides the basis for the development of the air movement plan. The landing plan contains the sequence, method, time (p-hour), and place of delivery of troops, equipment, and supplies into the objective area to include the assembly plan. The nature and location of DZs, LZs, and LAPES zones are basic considerations in preparing the landing plan. These must be large enough to accommodate initial assault forces

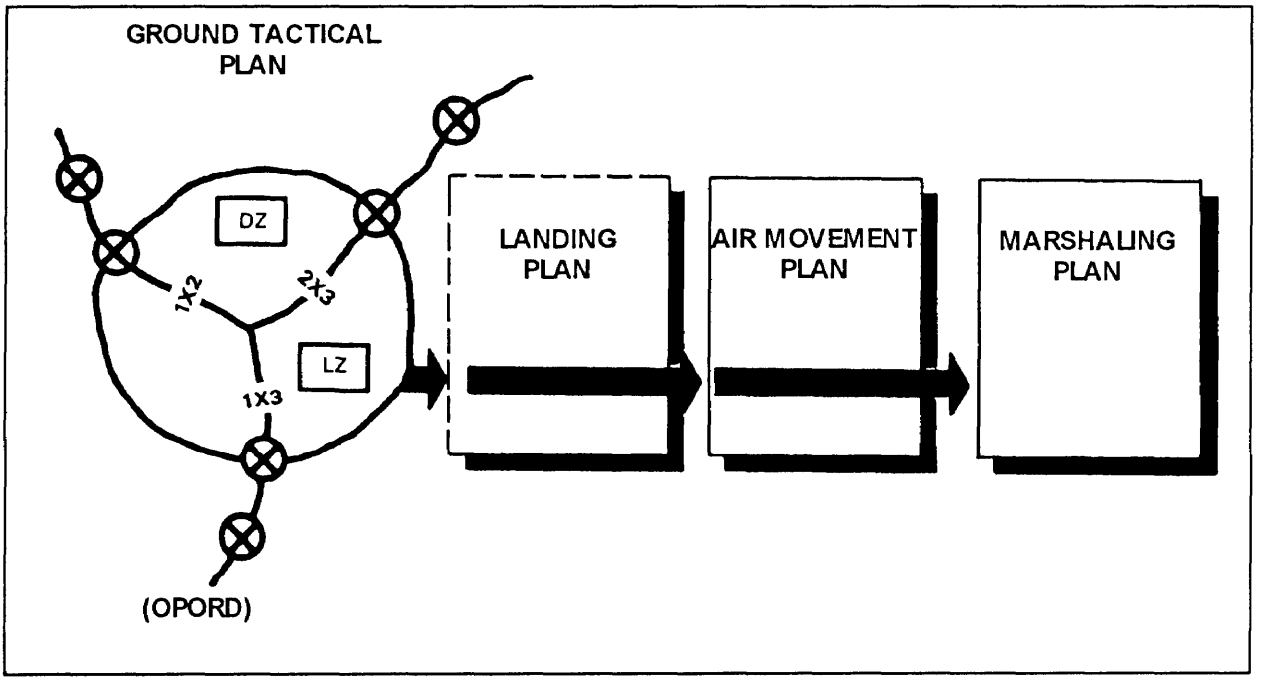


Figure B-1. Planning sequence.

and to assist in the seizure of assault objectives. Insertion of assault forces should be on or near assigned objectives. Use of battalion-size or larger DZs and LZs permits rapid assembly and reorganization. However, the use of company-size DZs and LZs may be necessary to avoid massing of forces. The following should be considered in the landing plan:

- Land near to or, if the enemy situation permits, directly on top of assault objectives.
- Avoid natural obstacles and NBC contamination in the landing area.
- Avoid enemy air defenses and strong ground forces.
- Ensure the handing area is easily identified from the air under any visibility conditions.
- Ensure the landing area permits straight-line approach from at least 10 to 15 miles out to allow aircraft enough time to line upon the DZ or LZ.
- Ensure the area is near dominating terrain, good road networks, and terrain favorable for defense against armored attack.
- Ensure the area is large enough for the force to be delivered in a single pass.
- Ensure the area has adequate cover and concealment for troops to assemble and reorganize near the landing areas.
- Ensure the area is out of range of enemy suppressive fires.

Air Movement Plan. This plan covers the time from loading until the aircraft arrives at the objective. Although the Air Force commander is responsible for executing the air movement phase, the plan is the product of joint Army/Air Force coordination. The two key elements of the air movement plan are the air movement table, which is prepared jointly, and a flight route diagram to the drop zone, which is prepared by the Air Force. The Army provides the landing plan and the procedures for the control and disposition of troops at the departure airfields. This includes the bump plan and the marking of key and bump personnel. The Air Force controls takeoff times and coordinates timing between different departure airfields to ensure a proper arrival sequence. It indicates the time that units must begin loading aircraft. The plan lists takeoff times, flight routes, order of flight, and arrival times at DZs or LZs. It ensures timely delivery of units to the objective area IAW the landing plan.

d. **Marshaling Plan.** This plan occurs during the alert/marshaling phase when forces achieve final combat readiness for the airborne assault. It includes the preparations required to load equipment and personnel aboard aircraft. Key elements of the plan are the movement to marshaling areas, execution of administrative and logistic requirements, detailed mission briefings, movement to the departure airfield and aircraft loading. Unit marshaling areas should be near departure airfields to limit rnovement. When this is not possible, the movement of units to marshaling areas must appear routine.

B-9. OPERATIONS

The introduction of the airborne brigade into the objective area can be by a parachute assault, an airland operation, or a combination of both.

a. **Parachute Assault.** The parachute assault permits delivery of assault forces into the objective area in less time than airland operations. There is no requirement for LZs, and the criticality of DZ security is not as great as for airland operations.

(1) All parachute assaults begin offensively oriented with brigade assault forces seizing initial objectives. The brigade commander assigns battalion objectives and zones of action to the assault force. He also establishes priority of fires and provides the necessary forces (based on the mission of each battalion).

(2) The DZs are located on or near the assault objectives to exploit the advantage of surprise.

(3) During the assault of objectives, the determination on retaining a dedicated reserve depends upon METT-T factors. The commander assigns reserve planning priorities based on criticality of objectives and on enemy resistance. He must deny the enemy a direct fire or observed indirect fire capability against any LZs to be used by the follow-on forces.

(4) After seizing initial objectives, the brigade forms an airhead to receive the follow-on forces (Figure B-2). When follow-on forces close on the airhead, the brigade conducts offensive operations or defends the airhead and awaits link up. (Chapter 8 discusses linkup operations.)

(5) During the defense of the airhead, the brigade commander assigns battalion sectors and sometimes battle positions. He also decides if battalions are to change their task organizations following the assault. He establishes priority of fires, engineer support, and CSS.

b. **Combination of Airland and Airborne Operations.** When an operation involves both airland and airdrop elements, airland elements must follow airdrop elements as closely as possible. To conduct airland operations with parachute operations, elements of the brigade are infiltrated or parachuted into the

objective area early. Airfield seizure is critical to the success of this operation. These elements perform the initial assault to secure, repair, or construct a suitable LZ. Forces secure the LZ by seizing and defending key terrain and neutralizing enemy forces in the area.

(1) When the airland operation is part of a combined parachute and airland operation, key terrain and enemy forces in the area become-the assault objectives.

(2) Brigade forces airland into the objective area as early as possible, consistent with security and availability of LZs. Units must land on or close to their employment area. Since all elements cannot travel to the objective area in the same aircraft, forces must reorganize before beginning operations, being careful not to present a lucrative target. Selection of covered and concealed assembly areas reduces unit vulnerability.

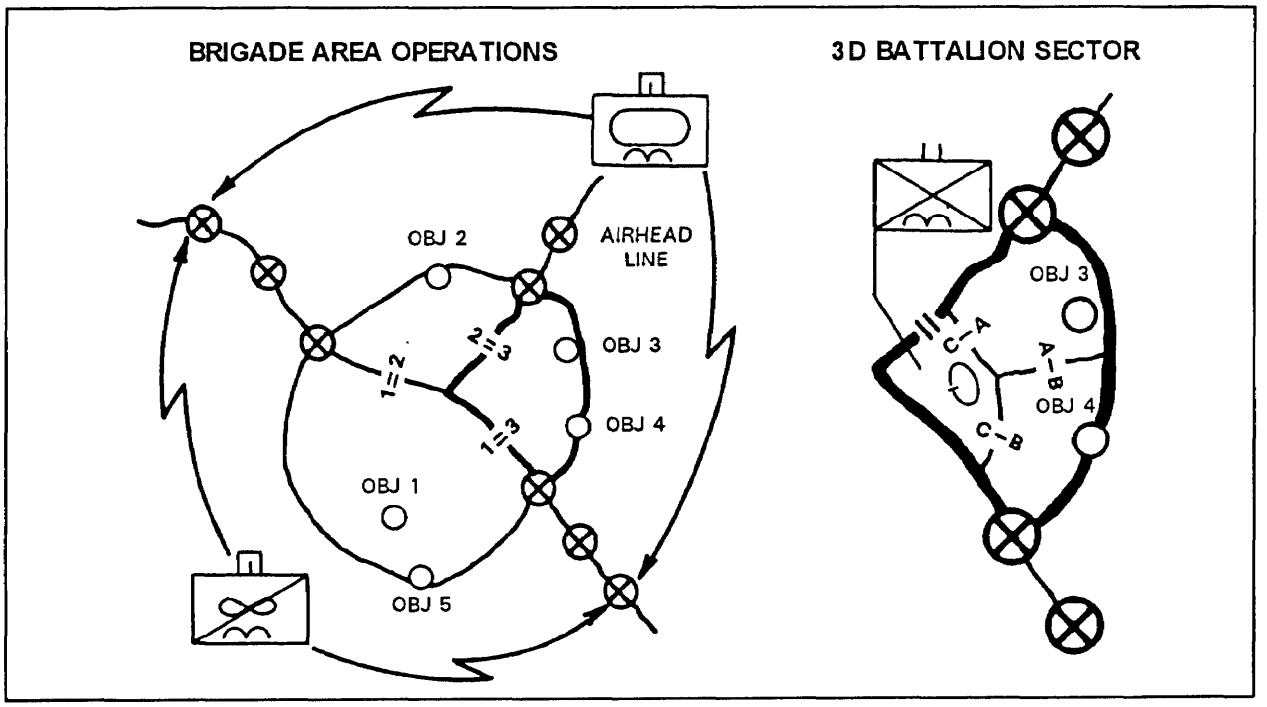


Figure B-2. Brigade airhead.

B-10. COMBAT SERVICE SUPPORT

There are specific CSS considerations for airborne operations; Chapter 9 discusses infantry CSS operations.

a. Supply Support. Initial combat requirements dictate the quantity and type of supplies and equipment that the brigade assault forces carry. Factors influencing these requirements include the handling capability in the objective area, the availability and capacity of the airlift aircraft the projected date of linkup or withdrawal, the anticipated weather, and the enemy's capabilities. If they have unused allowable cargo load, the follow-on aircraft normally carries supplies for forces already in the objective area.

(1) ***Supply Phases.*** Airborne operations require the use of accompanying, follow-on, and routine phases of supply. Provisions are also required for emergency resupply of units in the objective area.

(a) *Accompanying.* Accompanying supplies are taken into the airhead by assault forces and follow-on echelons. Each unit receives and prepares its own accompanying supplies before marshaling. These supplies include unit prescribed loads and enough additional items to sustain the brigade's initial combat requirements.

(b) *Follow-on.* Follow-on supplies are delivered after initial assault landings to resupply units until routine procedures can be instituted. Delivery can be automatic or on-call. Supporting supply units prepare follow-on supplies for delivery.

(c) *Routine.* Routine supplies are items obtained through normal requisitioning procedures as replacements for expended supplies or to build reserve stocks.

(2) ***Loading.*** Combat loading (cross-loading) distributes supplies among aircraft so that essential equipment and supplies are readily accessible to the brigade on landing. It also precludes the loss of the entire supply of one item if an aircraft aborts or is lost.

Units should duplicate vital equipment. Units plan and arrange loading to provide the greatest support to the force in the objective area compatible with the unloading and delivery capability. The use of airlift must be as effective and efficient as force requirements in the objective area will permit.

(3) ***Delivery.*** Supplies are airdropped as close as possible to using unit. Preparation and delivery of follow-on supplies must be commensurate with the tactical situation and with the handling and transport capabilities.

b. **Transportation Support.** During the early stages of an airborne operation, lines of communication to the objective area are usually air lines of communication. Accordingly, limited transportation is available within the airhead, thus, use of local resources may be necessary. An early operation of airland zones must have high priority to make sure the brigade receives proper logistics support.

(1) The requests for movement of supplies go through logistics channels from the unit S4, through the FSB, to the division MCO. The MCO controls vehicles from the supply and transportation battalion.

(2) The division aviation brigade provides Army aircraft for CSS airlift. The division G3 allocates aircraft to the G4 based on availability and requirements. The division transportation officer controls CSS airlift for the G4. Requests for air movement of troops go through operations channels to the division TOC. Requests for air movement of supplies go through logistics channels.

(3) The direct delivery of supplies and equipment to the battalion or company reduces transportation requirements within the airhead. Using the low-altitude parachute extraction system, the container delivery system, or a heavy drop reduces transportation requirements, speeds delivery, and reduces the exposure of ground transportation assets to enemy action.

c. **Maintenance Support.** Intensive maintenance before departure ensures that all equipment meets the highest standard of operational readiness. Maintenance units provide support during marshaling. Maintenance personnel organic to the assault units normally perform required maintenance during the assault phase. The forward maintenance company of the DISCOM enters the objective area in the follow-on echelon Upon arrival in the airhead, maintenance support teams deploy to battalion and company locations to assist in on-site repair. The forward maintenance company normally deploys with a 15-day level of repair parts.

d. **Personnel Services Support.** Personnel administration planning for an airborne operation is the same as for normal ground operations. A record is required of all personnel participating in the airborne assault and those renaming in the departure area. After the assault landings, the brigade units submit strength reports IAW brigade SOP.

Appendix C
AIR ASSAULT BRIGADE

The air assault brigade uses helicopters to move combat, CS, and CSS units on the battlield; therefore, it can deploy and redeploy rapidly. The method of insertion is the main difference between an air assault brigade operation and an infantry or airborne brigade operation. Air assault operations are based on the ground tactical plan and the available airlift capabilities. Air assault operations require detailed planning and close coordination throughout the operation between Army air assault forces and the Air Force and Navy assets. (FM 90-4 and FM 71-100-3 contain more information.)

C-1. ORGANIZATION

The air assault brigade normally has three air assault infantry battalions assigned; however, the number may vary from two to five. The only permanently assigned unit is the headquarters and headquarters company. The air assault brigade can be task-organized with division assets for CS and CSS. The brigade normally splits into assault and follow-on forces for an air assault operation. Assault forces are the units required to attack objectives in the initial stages of the operation Follow-on forces include units to sustain the operation or to conduct operations as part of the larger force. These may include the rest of the assault units and CSS elements.

C-2. MISSION

An air assault brigade can conduct the same missions as an infantry brigade. The following are examples of missions suitable for the air assault brigade:

- To capture intermediate staging bases or forward operating bases for projecting ground or air operations.
- To seize and control vital objectives behind enemy lines until reinforcemcnt, linkup, or withdrawal.
- To conduct deep attacks and raids beyond the forward line of troops or line of contact using helicopters to insert and extract forces.
- To conduct river crossing operations.
- To conduct rear area combat operations.
- To occupy areas or reinforce units beyond the immediate reach of land forces.
- To conduct operations other than war that require speed and flexibility.

C-3. CAPABILITIES

The air assault brigade is tailored toward its air movement capability and can deploy more rapidly than most infantry brigades. All equipment is air transportable and all personnel are specially trained for air assault operations. The air assault brigade has the following additional capabilities:

- To rapidly concentrate, disperse, or redeploy.
- To conduct operations in all types of terrain and visibility.
- To provide surveillance or screen over a wide area.
- To present a show-of-force worldwide.
- To conduct sustained, conventional, ground combat operations when augmented with ground transportation, fire support, and CSS.

C-4. LIMITATIONS

The following are limitations for the staff to consider when planning an air assault operation:

- Deployment and initial resupply depend on the availability of aircraft and flight routes.
- There will be limited ground mobility once the brigade is inserted into the objective area.

- Local air superiority is essential during air assaults, and enemy air defense and EW assets must be suppressed or avoided.
- High winds, thunderstorms, and low visibility can affect operations.
- Only limited combat operations can be sustained in an NBC environment.
- Aviation fuel and ammunition consumption rates will be high.

C-5. COMMAND AND CONTROL

The air assault brigade can operate as part of any division or unilaterally. Air assault operations exploit the close tactical integration of troop lifts and supported fires applied with precision and speed over extended distances. Operations also use terrain obstacles to achieve tactical advantage and surprise. The air assault brigade commander is the senior ground tactical commander and directs the entire operation. He coordinates directly with the air mission commander. The AMC is responsible for overall mission support.

C-6. PLANNING

The planning, preparation, and execution of an air assault operation involves interrelated plans. The air assault staff coordinates and develops these plans concurrently to make the best use of available time. The fleeting nature of tactical opportunities often precludes adequate planning time with detailed orders and written plans. Such cases require compression or concurrent conduct of the planning steps. Orders and written plans can be replaced by oral orders. Echelons above brigade perform many routine tasks related to air assault operations. The division is the lowest echelon that can allocate assets, assign appropriate missions, gather required data,and analyze capabilities. Thus, when the division, or higher, assigns an air assault mission, the assigning headquarters begins the planning process. The division uses its resources to gather data and to provide planning information to lower echelons. Key to an air assault operation is the air mission briefing, which is the last coordinating meeting of the principal participants in an air assault mission. (FM 90-4 contains information on format and content.)

a. **Ground Tactical Plan.** The staff normally develops the ground tactical plan first since it is the basis for the other plans. This plan differs from any other infantry attack plan in that its preparation capitalizes on speed and mobility to achieve surprise. The air assault task force staff prepares the plan with input from all task force elements. The plan is detailed enough to ensure that all aircraft crews know the ground tactical plan and the ground commander's concept of operation. If adequate combat power cannot be introduced into the objective area quickly, then the air assault force must be prepared to land away from the objective and build up combat power. Airspace planning for the air assault brigade is an integral part of the mission planning process. The request for airspace to conduct the missions is coordinated through the aviation brigade liaison officer to the division A2C2 cell.

b. **Landing Plan.** The landing plan must support the ground tactical plan. The landing plan sequences elements into the area of operations at the proper locations and times, prepared to execute the ground tactical plan. Key elements of a landing plan are selection of an LZ, landing formations, and fires (both direct and indirect) to support the handing plan.

c. **Air Movement Plan.** The air movement plan is based on the ground tactical and landing plans. This plan specifies the schedule and provides instructions for air movement from PZs to LZs. Two key elements of the air movement plan are the air movement table and the flight route overlay. The planned use of attack helicopters, including security and linkup locations (if different from the PZ), is also in the air movement plan. This plan is normally a coordinated effort with the air mission commander or the aviation liaison officer.

d. **Loading Plan.** The air movement plan forms the basis for the loading plan. The loading plan ensures that unit integrity is maintaincd and that soldiers, equipment, and supplies are on the correct aircraft. It is most important when mixing internal and external loads or when mixing aircraft types (lift and medium helicopters). It is essential that an aircraft bump plan is developed as part of the landing plan. Each aircraft must be cross-loaded so that it arrives at the LZ with soldiers organized and prepared to fight.

e. **Staging Plan.** The loading plan forms the basis for the staging plan. It prescribes the arrival time of ground units (soldiers, equipment, and supplies) at the PZ in the proper order for movement. It also restates the PZ organization, defines flight routes to the PZ, and provides instructions for linkup of all aviation elements.

C-7. OPERATIONS

The air assault brigade can conduct operations in the same environments as other brigades. However, it is most effective when the enemy has limited lines of communication or when the enemy lacks air superiority and effective air defense systems.

a. Air assault forces operate relatively free of the terrain influences that restrict surface operations. Their missions are often to locate and destroy enemy

forces and installations, or to seize terrain objectives in order to prevent enemy withdrawal, reinforcement, supply, or shifting of reserves.

b. Air assault forces use organic intelligence and EW assets to locate enemy forces and to determine their weaknesses. They employ the combination of firepower and mobility to fix enemy forces, to reduce enemy firepower, to limit enemy maneuver capabilities, and to support friendly maneuver forces in seizing terrain and destroying the enemy. Attack helicopter units are ideal for use in rapid reaction situations. Their primary use is in an antiarmor role through integration into the tactical plan of the ground force commander. (See the discussion of attack helicopters in Chapter 8.)

c. Air assault operations are characterized by speed and surprise and timely withdrawal based upon detailed planning. Rapid execution of successive operations facilitates seizing and maintaining the initiative, achieving tactical surprise, and avoiding engagement by superior hostile forces. The constant threat of air assault operations causes the enemy to allocate combat forces to protect support units, installations, and rear areas.

d. Air assault operations give the brigade commander the ability to rapidly move forces and to concentrate combat power. They can—

- Attack enemy positions from any direction.
- Bypass barriers and obstacles to reach strike objectives in otherwise inaccessible areas.
- Conduct attacks deep in enemy area by using helicopters to insert and extract forces.
- Concentrate forces.
- Move reserve forces to critical areas on the battlefield.

C-8. COMBAT SERVICE SUPPORT

When employed as an infantry brigade, the air assault brigade conducts CSS operations as described in Chapter 7.

a. Both organic and external elements support the brigade by pushing supplies, fuel, and ammunition forward by air. The brigade must rely on the FSB to support the operation. The exact organization and disposition of CSS elements depend upon the mission of the brigade and anticipated follow-on operations. Normally, two options for organizing and positioning CSS elements prevail.

(1) If the brigade anticipates extraction following mission completion, unit trains and supporting CSS elements normally remain in the BSA.

(2) If the brigade is to remain in the objective area to link up with other forces or to conduct extensive follow-on operations, the FSB and BSA move forward when the enemy situation permits.

b. The organization, location, and control of the trains for all brigade elements must facilitate consolidating, packaging, and moving support packages configured to unit size (normally company or platoon). The organization of the trains varies with the mission assigned the brigade and the CS and CSS available. Trains can be centralized or echeloned.

c. Transporting supplies and equipment by helicopter external (sling) load provides the advantage of rapidly moving heavy, outsized, or urgently needed items directly to the using unit. Logistics planners must plan sling load operations in advance. (See FM 55-450-1 for more information.) They must also understand the limitations of external load operations. The three units in a sling load mission are the supported unit, the aviation unit, and the receiving unit. The responsibilities and functions of each are as follows:

(1) ***The supported unit (normally the brigade S4)—***

- Selects, prepares, and controls the PZ. (Pathfinders can be of assistance.)
- Requisitions all the equipment needed for sling load operations, including slings, A-22 bags, cargo nets, and containers.
- Stores, inspects, and maintains all sling load equipment.
- Provides trained ground crews for rigging and inspecting loads, guiding helicopters, hooking up loads, and clearing aircraft for departure.
- Secures and protects sensitive items of supply and equipment.
- Provides load derigging and disposition instructions to the receiving unit.
- Provides disposition instructions to the receiving units and aviation units for the slings, A-22 bags, cargo nets, and containers.

(2) ***The aviation unit—***

- Establishes coordination with the supported and receiving units.
- Advises the supported unit on the limitations of the size and weight of rigged loads.
- Advises the supported and receiving units on the suitability of the selected PZs and LZs.
- Arranges for the aircraft to be at the PZ or LZ on schedule.

- Provides assistance in recovering and returning slings, A-22 bags, cargo nets, and containers to the PZ as required by the supported unit.
- Establishes safety procedures to ensure uniformity and understanding of duties and responsibilities between the ground crew and flight crew.

(3) ***The receiving unit—***

- Selects, prepares, and controls the LZ. Provides trained ground crews to guide the aircraft in and derig the load.
- Coordinates with the supported (sending) unit for the control and return of the slings, A-22 bags, and other items belonging to the supported unit.
- Prepares, coordinates, inspects, and readies backloads for hookup or loading.

d. The logistics package is the most efficient method of resupplying forward brigade units. The brigade SOP establishes the standard LOGPAC.

e. Maintenance personnel normally do not accompany the assault echelon. Contact teams are used to make repairs above operator level. If they cannot, the dead-lined or damaged equipment is evacuated.

f. The medical platoon and medical company provide medical support. The administrative and logistics annex to the OPORD addresses medical support to include—

- Locations of far-forward casualty collection points.
- Ground and air evacuation plans and routes.
- Locations of support hospitals.
- Communications instructions.

(1) ***Medical evacuation.*** The MEDEVAC helicopter is the preferred means of evacuating seriously wounded or injured casualties. Backhauling wounded in follow-on aircraft, after off-loading personnel and equipment, can also be used.

(2) ***Control.*** There are two options for controlling MEDEVAC requests. One is to allow subordinate units to request them direct from the medical unit. The more common request is for the S1 section to receive and consolidate requests, establishing casualty priorities and dispatching aircraft.

(3) ***Coordination.*** When possible, the brigade S1 coordinates directly with the MEDEVAC unit commander or section leader. He provides the unit a completed copy of the brigade's SOI, PZs, LZs, and flight route overlay. The MEDEVAC communications are usually through the administrative and logistics net. One technique is to have the MEDEVAC helicopter trail the brigade while it is en route. This ensures that the helicopters are immediately available to take on wounded. It also ensures pilot familiarity with the route to the objective area.

g. In addition to their assault and assault-support roles, utility and medium (CH-47) helicopters move supplies, fuel, ammunition, and maintenance contact teams. They also evacuate damaged equipment.

h. Aviation units use large amounts of fuel, ammunition, Class IX, and maintenance support during intensive air assault operations. Although aviation units are normally responsible for meeting their own unique logistics support requirements, other logistics planners must know the requirements and plan accordingly. They must be ready to assist aviation units when required. Aviation units establish forward area rearming and refueling points, which are—

- Near the ground unit exercising operational control (behind the FEBA, and out of range of enemy artillery).
- Positioned to reduce turnaround time and repositioned often to avoid detection and destruction.
- Fully mobile.
- Capable of operation within 30 minutes of installation, and capable of redeployment within 30 minutes.
- Capable of performing rapid and efficient refueling and rearming operations.

i. Security of FARPs is coordinated between the aviation commander and supported commander. The type and amount of security depends on METT-T factors, which may include the following:

- The FARPs may be positioned inside a unit defensive belt.
- The ground maneuver forces may be tasked to provide FARP security.
- The ground maneuver forces may be used as door gunners during aviation operations.
- The FARPs may be positioned outside of medium-range artillery.

j. Aircraft also have substantial maintenance requirements; however, there is minimal maintenance in the operational area. When mechanical problems or combat damage forces an aircraft to land on enemy terrain, ground forces secure the aircraft and crew until evacuation, if possible. However, mission execution

has priority over rescue and recovery operations. Ground forces must immediately notify the brigade commander of downed aircraft. He takes action to secure and recover the crew and aircraft. The senior occupant of the aircraft assumes command and establishes a defense of the area or organizes evasive action. Destruction of abandoned aircraft must be IAW higher echelon SOPs (or the OPORD).

Appendix D
RANGER REGIMENT

The ranger regiment is a unique airborne, light infantry unit. It is manned with specially selected, trained, and equipped soldiers who perform a variety of missions. Its organization, equipment, and training facilitate strategic and tactical mobility and give it the ideal capability to participate in contingency operations or other force projections.

D-1. MISSION

The ranger regiment's mission is to plan and conduct special operations in support of US policies and objectives. These operations can be conducted independently or in coordination with operations of conventional forces; however, they differ from conventional operations in degree of risk, operational techniques, and modes of employment.

D-2. CAPABILITIES

The ranger regiment is specifically trained, equipped, and configured to rapidly deploy and conduct special operations worldwide. The regiment—

a. Deploys rapidly to conduct special operations in all types of terrain and weather.

b. Establishes a credible American presence in any area of the world.

c. Conducts or supports a forced entry with other joint and Army special operations assets.

d. Infiltrates and exfiltrates an area of operations by land (on foot or with specially configured vehicles), sea, or air.

e. Conducts direct-action operations to seize, destroy, or inflict damage on a specific high-value target, or to destroy, capture, or recover designated personnel or equipment.

f. Employs ranger terminal guidance teams (RTGT) for surgical strikes against high-value targets.

g. Employs regimental reconnaissance teams for short-duration, tactical reconnaisances.

h. Assumes operational control, for limited periods, of other US Army infantry battlions/special operations forces.

i. Provides the Army component command and control headquarters, and the Army SOTF (ARSOTF) with a JSOTF for limited periods of time.

j. Provides C2 for two separate and distinct ranger task forces conducting separate operations in multiple theaters at the same time.

k. Conducts limited light infant.ry operations.

1. Conducts operations in a constrained environment under restrictive rules of engagement.

D-3. LIMITATIONS

The ranger force—

a. Limits its capabilities against armored/motorized units in open terrain. Ranger units are equipped with medium, man-portable antiarmor/antipersonnel capabilities.

b. Limits its tactical transport capabilities.

c. Uses its man-portable air defense capabilities.

d. Requires mission support from other military services and nonmilitary agencies, when operating in the joint arena, to include but not limited to air, sea, and land strategic transport and for theater specific mission requirements.

e. Requires strategic level intelligence support, when considered in the context of the wide range of range missions and the need for real-time intelligence.

f. Requires prudent mission assignment since the Army personnel replacement system cannot rapidly reconstitute the ranger force.

g. Requires support for all foreign language requirements if operating in the combined and or coalition environments.

h. Limits its organic indirect fire support capability that consist of lightweight, man-portable systems It is dependent upon Army, Air Force, Navy, and SOF assets for additional fire support.

D-4. COMMAND AND CONTROL

Command and control of ranger forces is normally retained at a level where the unit's unique capabilities can be employed on a worldwide or theater basis. The strategic focus of potential targets suggests that ranger units are nomally employed no lower than corps level. Based on METT-T, the controlling headquarters could be a regional CINC's special operations command, a joint task force headquarters, or a contingency corps headquarters. Peacetime C2 of the regiment is exercised by the United States Army Special Operations Command, which is the Army component of US SOCOM. When deployed, command and control of the ranger regiment and its battalions are specified by the theater or joint commander exercising operational C2. Additional information on the C2 capabilities of the ranger regiment are as follows:

a. The regimental headquarters could be deployed as the Army component command of a JTF or, with minimal augmentation, be designated as a joint special operations task force.

b. The ranger regimental headquarters is capable of commanding and controlling three to five battalions, which can include ranger, conventional, and special operation forces, as well as other special operations forces.

c. The regimental headquarters can provide two command and control teams for extended periods to conduct operations at the same time in multiple theaters.

d. When only one ranger battalion is employed, the regimental headquarters normally provides a C2 liaison cell with a communications package to the higher headquarters. This ranger cell provides representation on the higher staff, operations interface, logistics interface, fire support planning/coordination, intelligence analysis/dissemination, and communication between higher headquarters and the ranger battalion.

D-5. LOGISTICAL SUPPORT

OCONUS deployments of the ranger force requires logistical support capable of outloading up to three ranger battalions and a regimental headquarters from three different home stations, on short notice. The support that is provided will be as deployable as the ranger force. This support is capable of deploying with, or ahead of, the ranger force to establish a REMAB in CONUS or ISB in OCONUS.

a. When the ranger force deploys OCONUS, it requires support for the entire regiment and its augmentation at a basic requirement REMAB for a minimum of 15 days. This includes site construction supply of Class I, II, III, IV, V, VIII, and IX, water and services, area security, construction and security of rehearsal sites, and DS maintenance.

b. The logistical support establishes liaison with a theater Army component. Maintenance required above the DS level will be provided by the component with a theater Army special operations support command to effect logistical support from the theater Army component.

c. The ranger force requires the following logistical support from USASOC support units and theater Army assets:

(1) Organizational and DS supply to include requisition, receipt, storage, and distribution of all supplies.

(2) Organizational and DS maintenance for all equipment except medical.

(3) Air drop, air drop equipment supply, parachute packing and maintenance, and unit level maintenance support.

(4) Map supply services.

(5) Purchasing and contracting services.

(6) Maintenance operational readiness floats for organic equipment.

(7) Outloading.

D-6. NUCLEAR, BIOLOGICAL, AND CHEMICAL SYSTEMS

The ranger units have limited detection and identification devices and capabilities. Additional capabilities, if required, must be provided by the controlling headquarters.

D-7. AVIATION

Ranger organizations depend upon the controlling headquarters for all aviation requirements/assets. Army special operations aviation may deploy as part of the ranger task force.

Appendix E

LIGHT/MECHANIZED/SPECIAL OPERATIONS FORCES OPERATIONS

Employing light brigades with mechanized and special operations units is a combat multiplier. Light/mechanized operations effectively use the light brigade's ability to operate in restrictive terrain, such as urban areas, forests, and mountains. This increases their survivability while using the mobility and firepower of mechanized units. The light/rnechanized force should be mutually supporting based on the commander's concept of employment to ensure the assets of both forces are integrated and synchronized. The SOF provides the commander the capability to receive time-sensitive intelligence. The SOF teams can also assist the brigade in the conduct of combat missions. This appendix discusses the light brigade commander's considerations in planning and executing tactical operations with mechanized and special operations forces.

Section I
CONSIDERATIONS FOR EMPLOYMENT

The purpose of employing light/mechanized/SOF units together is to capitalize on the unique characteristics of each while offsetting the limitations of the other. To accomplish this, commanders must understand the capabilities and limitations of each force. They must be able to apply light/mechanized/SOF operations units to the principles of war and synchronize all combat, CS, and CSS units.

E-1. CAPABILITIES/LIMITATIONS

The employment of a mixed force must be based on sound METT-T analysis. By increasing capabilities and reducing limitations, commanders can effectively integrate light/mechanized/SOF units. A listing of capabilities for mechanized and SOF units along with considerations for reducing limitations is as follows:

a. **Mechanized Force Capaibilities.** Mechanized forces—

- Conduct sustained combat operations in all environments.
- Accomplish rapid movement and deep penetrations.
- Exploit success and pursue a defeated enemy as part of a larger formation.
- Conduct security operations (advance, flank, and rear guard) for a larger force.
- Conduct defensive operations or delay in sector over large areas.
- Conduct offensive operations.
- Conduct operations with light and special operations forces.
- Conduct operations other that war activities in the environments of peace, conflict, and war.

- Deploy personnel task organized to the brigade onto pre-positioned equipment and be ready for combat at C + 15 days.

b. **Mechanized Force Limitations.** The mechanized force limitations and the techniques used to reduce these limitations are as follows:

(1) Mechanized forces are mainly dependent on radio communications. This makes mechanized forces vulnerable to EW reconnaissance. Understanding of the commander's intent, doctrine, drills, and control measures for the operations ensures that execution plans are less disrupted when radio communications break down from jamming or inoperable systems.

(2) They have restricted mobility in jungles, dense forests, steep and rugged terrain, built-up areas, and water obstacles. This can be reduced by reconnaissance and security of routes through restrictive areas. Combining dismounted forces to protect the mechanized force at close ranges and to assist in identification of targets also reduces the effects of this terrain.

(3) They have a high consumption rate of supply items, especially Classes III, V, and IX. Anticipation of these supply needs, integration of supply assets into the BSA at the best times, and extensive use of LOGPACs can reduce this burden.

(4) They are vulnerable to antiarmor weapons and mines. Proper integration of dismounted infantry, use of artillery, terrain driving, and extensive reconnaissance to locate and target enemy antiarmor positions and minefield reduces this vulnerability.

(5) Tank elements have difficulty defending positions against enemy infantry. Employment of mechanized forces on mechanized avenues of approach combined with counterreconnaissance, deception, and the defending or dismounted approaches by infantry forces reduces this vulnerability.

(6) Mechanized forces are not able to conduct long duration or continuous dismounted infantry operations. The commander must determine when to commit dismount elements to the fight.

(7) Mechanized forces require a secure ground line of communication. Follow-and-support elements securing convoys for support units and integrating support assets in the march (coupled with breaks in the patterns of support) reduce the demand for a totally secure LOC.

c. **Special Operations Forces Capabilities.** The SOF can—

(1) Infiltrate and exiltrate specified operational areas by air, land, or sea.

(2) Conduct operations in remote areas and nonpermissive environments for extended time with little external direction and support.

(3) Develop, organize, equip, train advise, and direct indigenous military and paramilitary.

(4) Train, advise, and assist US and allied forces.

(5) Conduct reconnaissance, surveillance, and target acquisition.

(6) Conduct direct-action operations that include raids, ambushes, sniping, emplacing of mines and other munitions, or providing terminal guidance for precision-guided missions.

(7) Conduct rescue and recovery operations.

d. **Special Operations Forces Limitations.** Special operations forces—

(1) Depend on the resources of the Theater Army to support and sustain operations.

(2) Cannot conduct conventional combined armed operations on a unilateral basis. Their abilities are limited to advising or directing indigenous military forces conducting this type of operation.

(3) Do not have organic combined arms capability. They habitually require the support or attachment of other combat, CS, and CSS assets.

(4) Cannot provide security for operational bases without severely degrading operational and support capabilities.

E-2. ORGANIZATION OF MECHANIZED FORCE UNITS

A mechanized battalion is the most likely mechanized unit to be OPCON to an infantry brigade. The organization of an armor battalion, mechanized infantry battalion, infantry battalion (Bradley), and infantry battalion (M113) is as follows:

a. **Tank Battalion (M1A 1).** The organization, structure and personnel of a tank battalion (M1A 1) TOE 17375L000 is contained in Figure E-1.

b. **Mechanized Infantry Battalion** (M2). The organization, structure, and personnel of an infantry battalion (M2) TOE 07245L000 is contained in Figure E-2, page E-7 through page E-11.

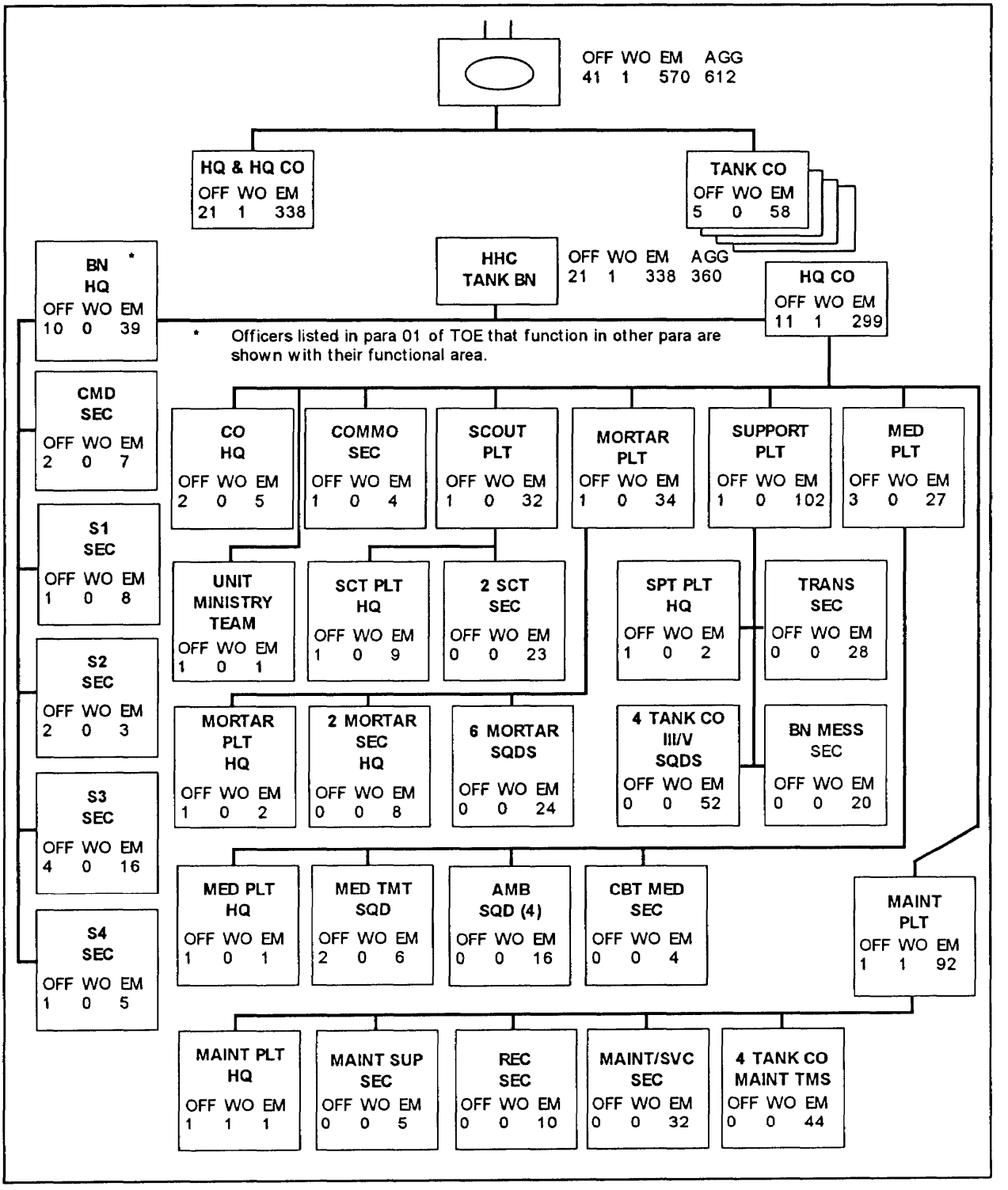


Figure E-1. Tank battalion organization.

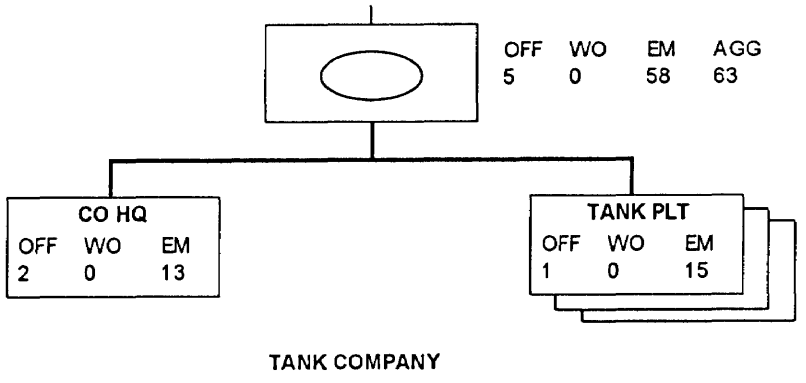
	Vehicles	Weapons Systems	Communications
COMMAND SECTION	2—M998 HMMWVs	1—M1A1 tank	3—VRC 92 radios 1—MSRT 1—DNVT
S1	1—M35A2 2 1/2-ton truck 1—M105 1 1/2-ton trailer	1—M2 cal .50 MG	1—TACCS
S2	1—M577A2 CCP		1—VRC 89 radio 2—DSVTs
S3	2—M998 HMMWVs 1—M577A2 CCP 1—M35A2 2 1/2-ton truck 1—M113A1 APC 1—M105 1 1/2-ton trailer	1—M1A1 tank 1—M2 cal .50 MG 1—M60 7.62-mm MG	1—VRC 87 3—VRC 92 radios 1—VRC 90 radio 1—FAX 1—MSRT 2—DVSTs
S4	1—M998 HMMWV 1—M577A2 CCP	1—M60 7.62-mm MG	2—DVSTs 2—VRC 90 radios 1—VRC 89 radio 1—FAX 1—MSRT
BN COMM SECTION	2—M998 HMMWVs 1—M577A2 CCP		1—VRC 92 radio 2—VRC 90 radios
COMPANY HQ	3—HMMWVs 2—M35A2 2 1/2-ton trucks 1—M105 1 1/2-ton trailer	1—M2 cal .50 MG	1—VRC 87 radio 1—VRC 89 radio 1—DNVT 1—VRC 90
BN SCOUT PLT			
HQ		6—M3 CFVs	6—VRC 91 radios
2 SCOUT SECTIONS		6—M60 7.62-mm MGs	8—VRC 89 radios
HVY MORTAR PLT			
HQ	2—M998 HMMWVs	2—M60 7.62-mm MGs	4—VRC 92 radios
2 MORTAR SECTION HQ	2—M577A2 CCPs		
6 MORTAR SQUADS	6—M106A1 4.2 carriers	6—120-mm mortars or 6—107-mm mortars 6—M2 cal .50 MGs	6—VRC 88 radios

Figure E-1. Tank battalion organization (continued).

	Vehicles	Weapons Systems	Communications
BN SUPPORT PLT			
PLT HQ	1—M998 HMMWV		1—VRC 89 radio
TRANS SECTION	3—M985 cargo HEMTTs 4—M978 fuel MEMTTs 4—M900 5-ton cargo trucks 1—5-ton trailer 3—1 1/2-ton trailers	2—M2 cal .50 MGs	2—PRC 119 radios
CLASS III/V SECTION	12—M985 cargo HEMTTs 12—M978 fuel HEMTTs	8—M2 cal .50 MGs	4—PRC 119 radios
BN MESS SECTION	6—M35A2 2 1/2-ton trucks 4—M998 HMMWVs 3—M186 water trailers	3—M2 cal .50 MGs	
BN MEDICAL PLT			
PLT HQ	1—M988 HMMWV		1—VRC 89 radio
MEDICAL TREATMENT SQUAD	2—M577A1 CCPs 2—M35A2 2 1/2-ton trucks 2—M105 1 1/2-ton trailers		1—VRC 88 radio
4 AMBULANCE SQUADS	8—M113A1 battlefield ambulances		8—VRC 90 radios
BN MAINT PLT			
PLT HQ	2—M998 HMMWVs		2—VRC 90 radios
MAINT SUPPLY SECTION	5—M35A2 2 1/2-ton trucks 5—M105 1 1/2-ton		

Figure E-1. Tank battalion organization (continued).

	Vehicles	Weapons Systems	Communications
RECOVERY SECTION	1—M35A2 2 1/2-ton truck 1—welding shop trailer 1—M983 10-ton wrecker 1—M816 wrecker 3—M88A1 medical recovery vehicles	3—M2 cal .50 MGs	5—VRC 90 radios
MAINT/SVC SECTION	1—M998 HMMWV 5—M35A2 2 1/2-ton trucks 4—M105 1 1/2-ton trailers	1—M2 cal .50 MG 1—M60 7.62-mm MG	1—VRC 90 radio
CO MAINT TEAMS	4—M35A2 2 1/2-ton trucks 4—M105 1 1/2-ton trailers 4—M113A1 APCs 4—M88A1 medical recovery vehicles	8—M2 cal .50 MGs	8—VRC 90 radios
UNIT MINISTRY TEAM	1—M998 HMMWV		



TANK COMPANY

HQ SECTION	1—M113 APC 2—M998 HMMWVs 1—M35A2 2 1/2-ton truck 1—M186 water trailer	2—M1A1 tanks 2—M2 cal .50 MGs	1—VRC 91 radio 1—VRC 89 radio 3—VRC 92 radios 1—GRC 160 radio
3 TANK PLTs		12—M1A1 tanks	6—VRC 89 radios 6—VRC 87 radios

Figure E-1. Tank battalion organization (continued).

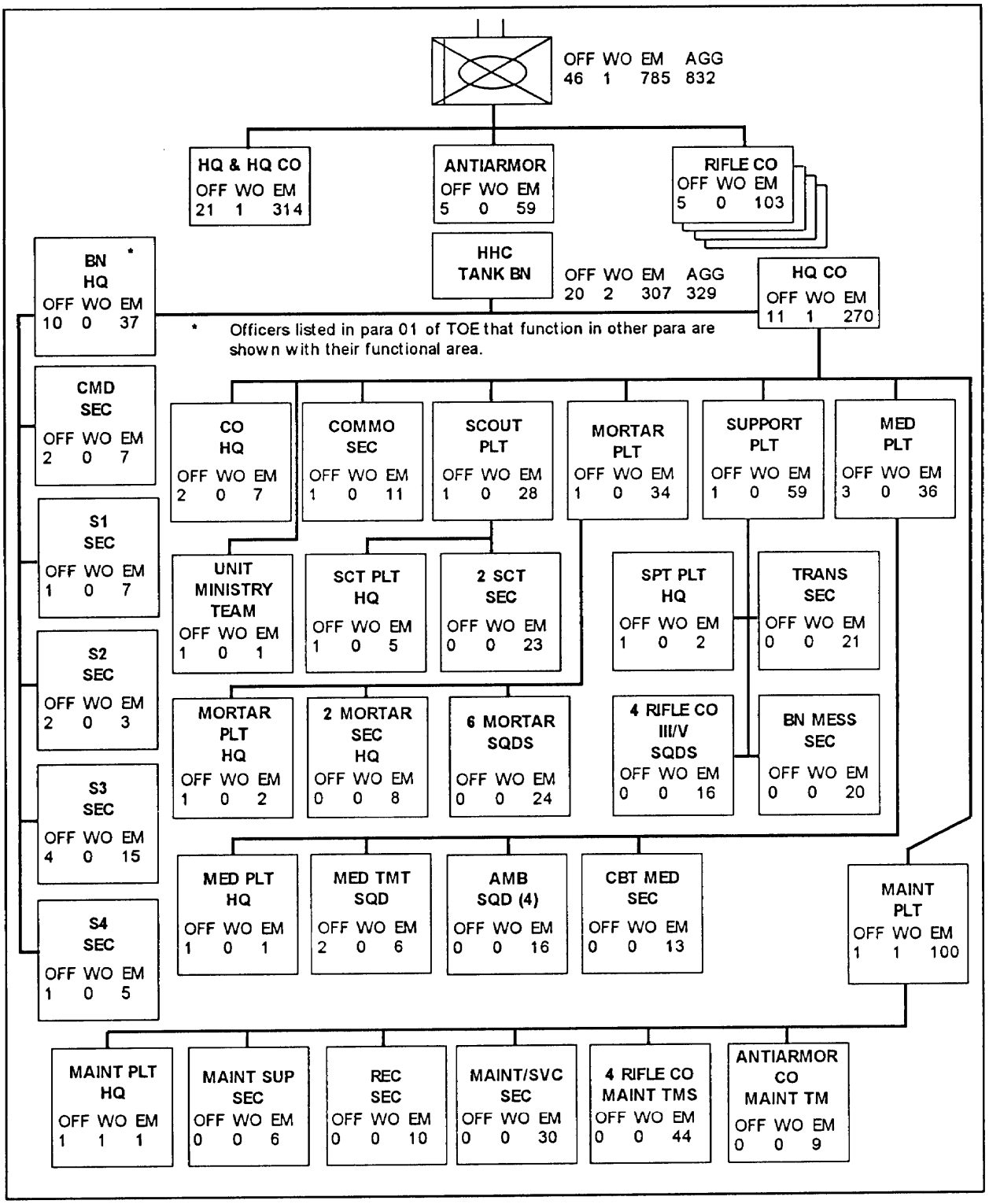


Figure E-2. Mechanized infantry battalion (M2) organization.

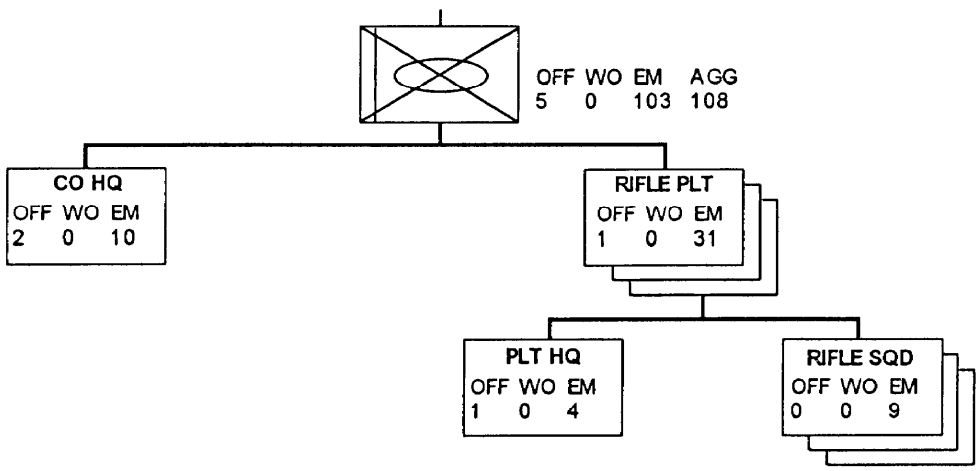
	Vehicles	Weapons Systems	Communications
COMMAND SECTION	2—M998 HMMWVs	1—M2 BFV	1—GRC 213 radio 3—VRC 92 radios 2—PRC 119 radios
S1	1—M35A2 2 1/2-ton truck 1—M105 1 1/2-ton trailer	1—MK 19 grenade launcher	1—TACCS
S2	1—M577A2 CCP		1—VRC 92 radio 1—DNVT
S3	2—M998 HMMWVs 1—M577A2 CCP 1—M113A1 APC 1—M35A2 2 1/2-ton truck 1—M105 1 1/2-ton trailer	1—M2 BFV 1—M249 1—MK 19 grenade launcher	2—DSVTs 3—VRC 92 radios 2—VRC 90 radios 1—PRC 119 radio 1—FAX 1—MSRT 1—GRC 213 radio 1—Diazo copier
S4	1—M998 HMMWV 1—M577A2 CCP	12—M202 Flash 1—M249	2—DSVTs 2—VRC 90 radios 1—VRC 89 radio 1—MSRT 1—FAX 1—TACCS 1—DNVT
BN HEAVY MORTAR PLT			
MORTAR PLT HQ	2—M998 HMMWVs		2—VRC 92 radios
2 MORTAR SECTION HQ	2—M577A2 CCPs	2—M249s	2—VRC 92 radios 2—VRC 87 radios
6 MORTAR SQUADS	6—M106A1 mortar carriers	6—120-mm mortars or 107-mm mortars 6—M2 cal .50 MGs	6—VRC 88 radios
BN SUPPORT PLT			
PLT HQ	1—M998 HMMWVs		1—VRC 89 radio
TRANS SECTION	5—M985 cargo HEMTTs 4—M978 fuel HEMTTs 6—5-ton cargo trucks 3—M105 1 1/2-ton trailers	2—M2 cal .50 MGs 4—MK 19 grenade launchers	2—PRC 119 radios
CLASS III/V SECTION	4—M978 fuel trucks 8—M985 cargo HEMTTs	4—M2 cal .50 MGs	4—PRC 119 radios

Figure E-2. Mechanized infantry battalion (M2) organization (continued).

	Vehicles	Weapons Systems	Communications
BN MESS SECTION	8—M35A2 2 1/2-ton trucks 4—MKTs 5—M998 HMMWVs 4—M186 water trailers	4—M2 cal .50 MGs	
COMPANY HQ	1—M186 water trailer 2—M998 HMMWVs 2—M35A2 2 1/2-ton trucks 2—M105 1 1/2-ton trailers	1—M2 cal .50 MG 4—M249s	1—VRC 87 radio 1—VRC 90 radio 1—PRC 119 radio 1—DNVT
BN COMM PLT	2—M998 HMMWVs 1—M577A2 CCP		2—VRC 90 radios 1—VRC 92 radio (retrans)
BN SCOUT PLT			
PLT HQ	1—M113 APC 2—M998 HMMWVs	2—M2 .50 cal MGs 1—M249 1—MK 19 grenade launcher	2—VRC 91 radios
2 SCOUT SECTIONS	8—M998 HMMWVs	4—Javelins 2—TOWs 2—ITVs w/o TOWs 4—MK 19 grenade launchers 2—M2 cal .50 MGs	8—VRC 91 radios
UNIT MINISTRY TEAM	1—M998 HMMWV		
BN MEDICAL PLT			
PLT HQ	1—M998 HMMWV		1—VRC 89 radio
MED TREATMENT SQUAD	2—M577A2 CCPs 2—M35A2 2 1/2-ton trucks		1—VRC 89 radio 1—VRC 88 radio
4 AMBULANCE SQUADS	8—M113 battle ambulances		8—VRC 90 radios
BN MAINT PLT			
PLT HQ	2—M998 HMMWVs		2—VRC 90 radios
MAINT SUPPLY SECTION	6—M35A2 2 1/2-ton trucks 6—M105 1 1/2-ton trailers	5—MK 19 grenade launchers	6—DNVTs

Figure E-2. Mechanized infantry battalion (M2) organization (continued).

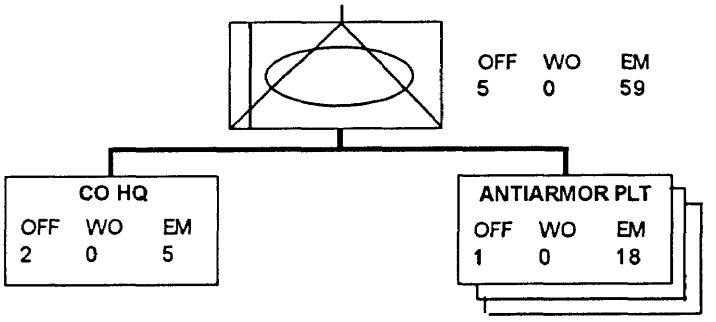
	Vehicles	Weapons Systems	Communications
RECOVERY SECTION	1—M900 5-ton cargo truck 1—M983 10-ton wrecker 1—M816 5-ton wrecker 1—M105 welding trailer 3—M88A1 medical recovery vehicles	3—M2 cal .50 MGs	5—VRC 90 radios
MAINT/SVC SECTION	1—M998 HMMWV 1—M113A1 APC 5—M35A2 2 1/2-ton trucks 4—M105 1 1/2-ton cargo trailers	1—M2 cal .50 MG 1—M249 2—MK 19 grenade launchers	1—VRC 90 radio
ANTIARMOR CO MAINT TEAM	1—M113A1 APC 1—M35A2 2 1/2-ton truck 1—M105 1 1/2-ton trailer	1—M2 cal .50 MG 1—MK 19 grenade launcher	1—VRC 90 radio
4 CO MAINT TEAMS	4—M35A2 2 1/2-ton trucks 4—M113A1 APCs 4—M105 1 1/2-ton trailers 4—M88A1 medical recovery vehicles	4—M2 cal .50 MGs 4—MK 19 grenade launchers	8—VRC 90 radios



MECHANIZED INFANTRY RIFLE COMPANY

Figure E-2. Mechanized infantry battalion (M2) organization (continued).

	Vehicles	Weapons Systems	Communications
HQ SECTION	2—M998 HMMWVs 2—M35A2 2 1/2-ton trucks 1—M105 1 1/2-ton trailer 1—M186 water trailer 1—M113A1 APC	1—M24 sniper system 2—M2 BFVs 1—M2 cal .50 MG 1—VRC 90 radio 2—M249s 1—MK 19 grenade launcher	4—VRC 92 radios 4—PRC 119 radios 1—VRC 90 radio
3 RIFLE PLATOONS		12—M2 BFVs 18—M249s 9—Javelins	12—PRC 126 radios 15—PRC 68 radios 3—PRC 119 radios 6—VRC 87 radios 9—VRC 91 radios



MECHANIZED INFANTRY ANTIARMOR COMPANY

HQ SECTION	2—M998 HMMWVs 2—M35A2 2 1/2-ton trucks 1—M105 1 1/2-ton trailer 1—M186 water trailer 1—M113A1 APC	3—M2 cal .50 MGs 1—MK 19 grenade launcher	3—VRC 92 radios 1—VRC 90 radio
3 ANTIARMOR PLATOONS	12—M901 ITVs 3—M113A1 APCs	12—TOWs (ground mounted) 12—M60 MGs 3—M2 cal .50 MGs 3—MK 19 grenade launchers	3—VRC 91 radios 12—VRC 88 radios

Figure E-2. Mechanized infantry battalion (M2) organization (continued).

E-3. ORGANIZATION OF SPECIAL OPERATIONS FORCES

Typical SOF organizations include the joint operations task force, a special forces operation base, a forward operational base, an advanced operational base, a special forces operational detachment "A", a ranger regiment, a special operations aviation task force, a psychological operation task force, and a civil affairs task force. (See FMs 100-25 and 31-20 for detailed information.)

E-4. LIGHT/MECHANIZED PLANNING CONSIDERATIONS

The effective employment of a force with both light and mechanized elements requires detailed planning. Mutual planning, development of orders, rehearsals, and coordination between respective commanders and staffs must take place to capitalize on advantages and to address concerns. Critical areas in the planning process include the command and support relationship, the composition of the CS and CSS support, and the effective use of terrain. A common SOP or understanding of each unit's SOP is essential to the synchronization of all combat, CS, and CSS units. Specific planning considerations include the following:

a. **Intelligence.** Detailed intelligence is critical to the success of light-mechanized integration. The intelligence requirements for each force must be understood and integrated into the IPB process. Mechanized forces orient on unit concentrations, tank and antitank locations, counterattack routes, armor obstacles, engagement areas, artillery and air defense assets. The PIRs and the decision support templates of both forces need to be combined, compared, and explained to both staffs in detail. Reconnaissance and surveilance plans should be jointly developed. The mechanized force uses its long-range observation devices to conduct reconnaissance.

b. **Maneuver.** Either the light or mechanized force can fix the enemy. The maneuver force then attacks. In both cases, the mechanized force requires the advantage of maneuverable terrain.

(1) The mechanized force is best suited to open and mixed terrain. Mobility and organic firepower make it easier for mechanized and armored forces to disperse and rapidly concentrate at the decisive point on the battlefield.

(2) The operational tempo differences between light and mechanized units must always be a consideratiom, including the scheduling of rehearsals. It may dictate an early rehearsal time to allow both forces to take part.

(3) Both unit's direct and indirect fires should mutually support each other. The mechanized battalion can use its long-range direct fires to provide suppression and overwatch fires for the light brigade. The light brigade should plan to use the long-range antiarmor fires of the mechanized force. In mechanized-light operations, differences in equipment may dictate different techniques in marking TRPs.

c. **Fire Support.** The mechanized force must recognize that dismounted infantry operations focus on stealth, which could preclude preparation and other preliminary fires. The available fire support for each force must be integrated into the fire plan. Planners must be familiar with the organization, capabilities, and limitations of all forces involved. A liaison team should be used during the planning and preparation phases to facilitate the synchronization of fire support. Restrictive fire control measures must be jointly developed and understood by everyone.

d. **Air Defense.** Direct special attention to ADA resupply requirements. Centralized planning is required to orchestrate ADA support of light-mechanized organizations. The ADA units can be consolidated to provide denser coverage around the most critical targets. Mechanized forces provide excellent coverage and capability in air defense. Mechanized forces can carry the resupply of missiles.

e. **Mobility/Survivability.** Develop obstacle belts that support the commander's scheme of maneuver. Consider using light infantry to clear choke points and obstacles for the mechanized force. Consider the weapons' range disparities and their affect on prepared obstacles, and the use of terrain during battle handover to a mechanized force. The priorities of mobility and survivability may be different for each force. The light force must be prepared to take full advantage of mechanized force engineer assets. When light forces breach obstacles for mechanized forces, make sure the breach is large enough for the widest vehicle in the operation.

f. **Combat Service Support.** The CSS requires an understanding of the current, ongoing, and forecasted needs of both forces.

(1) The brigade must be able to identify where CSS support needs to be focused throughout the operation Commanders need to know where and how the support can be obtained. Mechanized forces are dependent upon their parent unit for CSS. Success in any operation depends on how well these requirements are satisfied. Special ground and air lines of communication must be developed to ensure the needs of each unit are met in a timely manner. The requirements inherent in both an attached and operational control relationship must be clearly understood.

(2) Commmanders must be able to establish normal, ad hoc, surge, and cross-leveling to support the overall support requirements. The light brigade can coordinate the use of transportation assets of the mechanized force. The light brigade emphasizes replacing parts, but the mechanized unit emphasizes repair. This requires continuous attention throughout the duration of the operation. The mechanized force performs maintenance continuously. The light commander must understand this requirement and provide an opportunity for such maintenance. Also, mechanized forces can provide the light force with water, resupply, and casualty evacuation as they move through the AO.

g. **Command and Control.** The directing headquarters defines the authority and responsibility within the light-mechanized force by designating command relationships. A light brigade attached to a armore/mechanized division or a armored/mechanized force under OPCON to a light brigade is the preferred method of operation in most situations. Liaison officers must be exchanged between the light and mechanized force. The planning process is jointly conducted, and the development of orders and overlays is coordinated. Briefbacks are required at brigade level of combat, CS, and CSS units to ensure timing, synchronization, and understanding of intent. Standard operational terms and symbols must be W4 and codes, recognition signals, and SOIs are exchanged. The directing headquarters may need to setup a rettansmission site to compensate for the shorter range of the light brigade's communications equipment.

h. **Nuclear, Biological, Chemical.** The light brigade is more limited in its decontamination capabilities than the mechanized force. The mobility of the light brigade is affected by the need for soldiers to carry protective clothing in addition to their standard load. The use of mechanized unit vehicles should be planned for assisting in transporting NBC equipment. A mechanized battalion has expedient devices and water haul capabilities that can be used to offset light force shortfalls.

E-5. SAFETY CONSIDERATIONS

Infantry leaders at all levels must be aware of certain safety concerns when operating with armored vehicles. Leader awareness and involvement are important if the infantry brigade has had little training with armored vehicles. All personnel in the brigade must be aware of these considerations and remain alert during light/mechanized operations to prevent casualties.

a. The armored crew's observation is focused on the enemy or potential enemy locations and not on avoiding soldiers nearby. The infantry soldier is responsible for being alert and maintaining a safe position in relation to the vehicle.

b. The high-velocity, armored-piercing, discarding-sabot round fired by tanks and the 25-mm gun on the M2/M3 present a safety problem due to the discarded sabot that falls to the ground shortly after leaving the muzzle. The danger area extends at an angle of about 10 degrees below the muzzle level, out to at least 100 meters and about 17 degrees left and right of the muzzle. Infantry soldiers in this area require overhead cover and protection (a berm or tree) from the rear.

c. The exhaust from the Ml tank may be in excess of 1700 degrees. Soldiers following behind the tank must position themselves off to the side of the exhaust grill or at safe distance if directly behind the grill.

d. The WP smoke used by BFVs is a potential hazard to dismounted soldiers.

e. Infantry soldiers can ride on top of the armorcd vehicles. (FM 7-8 discusses the specifics for rigging a vehicle and carrying soldiers on top.) The main concern is the vulnerability of the exposed soldiers to any weapon that the enemy may direct against the vehicle. Infantry soldiers should ride on top of the vehicles when the risk of enemy contact is low and the need for speed is great.

E-6. SPECIAL OPERATIONS FORCES PLANNING CONSIDERATIONS

The following are planning considerations for requesting direct support of SOF and linkup procedures.

a. Commanders can request direct support of SOF from the unified command's SOCOM. The SOCOM forms a joint special operations task force, as required.

b. During the planning phase, an SOF liaison officer is assigned to the brigade along with all communications assets necessary for immediate communications with SOF assets at JSOF headquarters and at the objective area. The SOI and signal plan must standardize not only frequencies and call signs, but address visual signals as well as daylight and night operations.

(1) A SOCCE links up with the brigade through the SOF liaison officer.

(2) The SOCCE coordinates with the S2/S3 sections and both elements provide the current situation, commander's intent, and future operations of their respective forces (within OPSEC limits).

(3) The SOCCE provides SOF locations through personal coordination, overlays, and other friendly order of battle data to the FSE and brigade operation section.

(4) The SOCCE requests appropriate restrictive fire support coordination measures and provides time windows when these measures are to be effective. The SOCCE must also ensure that FSE dissemination of these measures does not result in OPSEC violations.

Section II
LIGHT-MECHANIZED CONCEPT OF EMPLOYMENT

Light-mechanized operations give the commander an additional range of options, providing him greater flexibility. Using the estimate process, the brigade commander must determine the task organization, the appropriate command or support relationship, the tasks to be accomplished, and the concept of CSS. Light-mechanized forces are employed to conduct missions in which the mechanized or light force is given the main effort. Exactly how the commander determines the main effort depends on METT-T. This includes the size and type of force; the support structure available; the duration of the operation, as well as expected future operations; the type of threat, which element is most effective on the terrain; and possibly which force has been in the area the longest. Light-mechanized organizations can be used to conduct all the operations that either a mechanized or light force can conduct. This section discusses the missions and roles that mechanized and light forces can conduct in mechanized-light or light-mechanized operations.

E-7. OFFENSIVE OPERATIONS

The fundamentals, principles, and concepts discussed in Chapter 4 still apply in light-mechanized offensive operations. However, there are many different ways that light and mechanized forces may operate; these are some of the fundamental methods for conducting light-mechanized offensive operations.

a. The mechanized force attacks by fire, then moves forward rapidly and joins the light forces for the assault. In this method, the mechanized force vehicles suppress the objective from hull defilade positions after the light infantry has moved into an assault position. When the light infantry masks the vehicle fires, or on a prearranged signal, the mechanizcd force moves rapidly forward and joins the infantry in the final assault.

(1) This method should only be used with tanks in the assault. Other armored vehicles should only assault with the infantry when the AT threat is low. When unable to assault with the infantry, the armored vehicles can be used to isolate the objective area, and once the objective is secured, they support the consolidation of the objective. During the assault, the tanks and infantry may move together, or the tanks may move slightly ahead of the infantry.

(2) This method is used when the enemy has prepared obstacles on the mounted avenues of approach. In this case, the infantry must breach the obstacles and clear a lane for the tanks to get to the objective. Time is needed for careful coordination and preparation of a detailed supporting fire plan. Advantages of this method are that the tanks are exposed to enemy fire for a shorter period, because the tanks can move forward at their own speed, and the infantry is not endangered by enemy fire directed at the friendly tanks. This method may also provide the infantry the best chance to approach the objective undetected.

b. When light and mechanized forces advance together, the infantry and vehicles move at the same speed. The vehicles may advance rapidly for short distances, stop, provide overwatch, then move forward again when the infantry comes abreast. Tanks are best suited for assaulting under fire. The mechanized infantry vehicles may be used in this manner, but the threat of AT fires must be small. If an antitank threat exists, infantry usually leads with the vehicles following as close as needed to provide fire support.

(1) This method may be used when the enemy situation is vague; when the objective is large and consists of both open and restrictive terrain; or when visibility, fields of fire, and mechanized force movements are restricted. These conditions exist in fog, towns, woods, and at night. The vehicles provide immediate close-in direct fires, and the infantry protects the vehicles from individual antitank measures.

(2) When the primary enemy threat is small-arms fire, the infantry may follow closely behind the tanks to gain protection from frontal fires. From this location, they can protect the flanks and rear of the tanks from hand-held AT weapons.

(3) In operations that require long and fast moves, the light and mechanized forces may advance together with the infantry riding on the armored vehicles until contact with the enemy is gained. This provides speed, but results in increased exposure of infantry soldiers to enemy fire, particularly to air burst munitions. It also interferes with the operation of the mechanized force vehicles.

c. Mechanized force vehicles attack by fire while the infantry assaults the objective. In this method, vehicles fire from hull defilade positions until the fires are masked by the infantry. This method is generally the most effective method for mechanized infantry vehicles. It may also be used with tanks when antitank weapons/obstacles prohibit them from moving to the objective.

(1) This method may also incorporate a feint to deceive the enemy as to the location of the main attack. In this case, the mechanized force supporting attack by fire is timed to divert the enemy's attention from the light force's assault. Their fires may also cover the sound of the infantry approach/breach. Close coordination between the mechanized and light force commanders is essential to ensure effective fire control is maintained.

(2) Another variation of this method may be used when the terrain or the enemy disposition limits the mechanized forces' ability to support the infanttry assault by fire. In this case, the mechanized force may be tasked to suppress/fix adjacent enemy positions or accomplish other tasks that isolate the objective area.

d. Mechanized and light forces converge on the objective from different directions. In this method, mechanized force vehicles and light infantry advance by different routes and assault onto the objective at the same time. Usually, the infantry elements must move out and close on their assault position under cover of darkness and poor weather so that both forces can assault onto the objective at the same time. This synchronization provides surprise, increases fire effect and increases shock action.

(1) When using tanks, mechanized and light forces use this method effectively. Mechanized infantry vehicles are less suitable but may be needed to clear obstacles. Favorable conditions are open, or partly open, terrain free from mines and other tank obstacles, and effective neutralization of enemy antitank weapons by supporting fires and smoke. However, neutralization is needed only during the brief period required for the tanks to move from their line of departure to the near edge of the objective.

(2) This method requires coordination between mechanized and light forces to provide effective fire control between the two forces on the objective. When conditions do not permit a rapid advance by the armored vehicles, infantry should accompany them to provide protection.

E-8. OFFENSIVE MISSIONS/ROLES

In the conduct of offensive operations, the fire power, mobility and shock effect of the mechanized force is integrated with the dispersed and synchronized attacks of the light forces. (Tables E-1 and E-2, page E-15 through page E-17 give a listing of missions and roles that mechanized and light forces conduct in mechanized-light or light-mechanized offensive operations)

MECH-FORCE DIV/BDE MISSION	LIGHT-FORCE BDE/BN ROLE
MOVEMENT TO CONTACT	CLEAR AND SECURE RESTRICTIVE AREAS.
	AIR ASSAULT TO FIX AN ENEMY FORCE OR TO CREATE A WEAKNESS IN THE ENEMY DEFENSES.
	RECONNOITER.
	CONDUCT A DECEPTION.
	SEIZE KEY AND DECISIVE TERRAIN.
	ESTABLISH CONTACT POINTS FOR LINKUP.
ATTACK	RECONNOITER.
	INFILTRATE TO DESTROY ANTITANK WEAPONS.

Table E-1. Mechanized-light offensive operations.

MECH-FORCE DIV/BDE MISSION	LIGHT-FORCE BDE/BN ROLE
ATTACK (CONTINUED)	CONDUCT A FEINT, DEMONSTRATION, OR RUSE.
	INFILTRATE TO SEIZE OBJECTIVE, OR TO SECURE KEY OR DECISIVE TERRAIN.
	INFILTRATE TO EXPLOIT THE HEAVY FORCE PENETRATION BY ATTACK OR ASSAULT FROM ENEMY REAR.
	BREACH OBSTACLES.
	SUPPRESS/DESTROY ENEMY THAT DEFENDS OBSTACLES.
	REDUCE STRONGPOINT.
	PROVIDE SECURITY TO HEAVY FORCE.
	PASS THE FORCE FORWARD FOLLOWING PENETRATION OR SEIZURE OF KEY OR DECISIVE TERRAIN.
	AIR ASSAULT TO SEIZE OBJECTIVE.
	SEIZE AND SECURE RESTRICTIVE TERRAIN.
	CREATE WEAKNESS IN ENEMY DEFENSE.
	DISRUPT ENEMY COMMAND, CONTROL AND COMMUNICATION CAPABILITIES.
	ATTACK BY FIRE.

Table E-1. Mechanized-light offensive operations (continued).

LIGHT-FORCE BDE MISSION	MECH-FORCE BN ROLE
	ISOLATE THE OBJECTIVE.
	ESTABLISH ROADBLOCKS.
MOVEMENT TO CONTACT	BLOCK LIKELY ENEMY AVENUES OF APPROACH.
	PROVIDE ATTACK BY FIRE FORCE.
	PROVIDE DIRECT SUPPORTING FIRE.
	PROVIDE HEAVY MORTAR SUPPORT.
	REINFORCE WITH ANTIARMOR UNITS FROM E COMPANY.
	OVERWATCH AND ASSIST IN REDUCING OBSTACLES.
	DEFEND A MOVING FORCE.
	PROVIDE A COVERING FORCE AND OR GUARD.
	PROVIDE A COUNTERATTACK FORCE.

Table E-2. Light-mechanized offensive operations.

MECH-FORCE DIV/BDE MISSION	LIGHT-FORCE BDE/BN ROLE
ATTACK	PROVIDE SUPPRESSIVE FIRES.
	EXPLOIT INITIAL PENETRATION BY LIGHT FORCE.
	ISOLATE THE OBJECTIVE.
	COUNTERATTACK.
	PROVIDE INITIAL HASTY DEFENSE DURING CONSOLIDATION.
	ATTACK BY FIRE.
	EXPLOIT/REINFORCE SUCCESS.
	OVERWATCH COUNTERATTACK ROUTES ON OBJECTIVE.
	CONDUCT A DECEPTION.
	ASSIST IN ASSAULT BREACH.
	PROVIDE A RESERVE/EXPLOITATION FORCE.
	SUPPORT BY FIRE.
	PROVIDE A LEAD FORCE.

Table E-2. Light-mechanized offensive operations (continued).

E-9. EXPLOITATION

Exploitation in battle follows success, taking full advantage of the enemy's disorganization to drive deep to the enemy's rear and complete his destruction and defeat. The mechanized force is usually the commander's most capable exploitation force. A tank-heavy force operating as a team may exploit a local success following the defeat of an enemy force or the capture of an enemy position. This operation is directed at destroying all enemy personnel and installations nearby. A common combination is the mechanized force battalion reinforced by an attached infantry company, engineers, and other supporting units. The infantry may be transported in armored vehicles or trucks, or they may ride on the tanks. Riding on treks may be the most desirable method since it reduces road space, decreases supply problems, and keeps the members of the team together. The infantry leaders ride with the corresponding tank unit commanders.

E-10. DEFENSIVE OPERATIONS

Light-mechanized forces are well-suited to conduct defensive operations. The mechanized force provides a concentration of antiarmor weapons and the capability to rapidly counterattack by fire or maneuver. The light force can occupy strongpoints, conduct spoiling attacks, and conduct stay-behind or hide-force operations. The fundamentals, principles, and concepts discussed in Chapter 5 still apply in light-mechanized defensive operations. The following techniques are for conducting light-mechanized defensive operations:

a. The force defends along the FEBA with the light force used as a flank unit or a covering force, or positioned in depth The mechanized force keeps its freedom of maneuver. The light force emplaces its force to best use restrictive terrain. Contact points between light and mechanized units should be in restrictive terrain to protect the light brigade.

b. The mechanized unit is used as a covering force forward of a light brigade defense. In its role, the covering force masks the location of the light brigade. Battle handover to the light brigade requires careful planning. Of special concern is the relative scarcity of the light brigade's direct-fire overwatch weapons supporting from inside the battle handover line. A method is to OPCON some mechanized forces antiarmor assets to the light infantry. Mechanized units must assume a greater role in overmatching themselves as they pass through the positions of the light brigade.

c. The mechanized force assumes positions in depth behind the light brigade's defense. The light brigade's forward deployment shapes the battlefield for decisive action by the mechanized forces. The light brigade denies the enemy the use of restrictive terrain while leaving an avenue of approach into the engagement area of the mechanized unit. If the enemy penetrates the light brigade, the mechanized unit counterattacks to destroy or block the enemy until additional units can be repositioned to destroy him, The light brigade supports the counterattack by identifying the location of the enemy's main effort, slowing his advance, and destroying his C2 and CS elements. To achieve surprise on the enemy's flank, the light brigade can guide the counterattacking force through restrictive terrain.

d. A light brigade may defend to hold terrain while the mechanized brigade maneuvers to destroy the enemy from the flanks or rear.

e. The light brigade occupies a strongpoint with additional assets. The enemy is forced into the engagement area of mechanized units.

f. The light brigade occupies hide positions well forward of the FEBA. As the enemy passes, the light forces attack the enemy's C2, CS, or CSS elements. The mechanized force defends against enemy maneuver forces.

E-11. DEFENSIVE MISSIONS/ROLES

Tables E-3 and E-4 contain listings of missions and roles that mechanized and light forces conduct in mechanized-light or light-mechanized defensive operations.

MECH-FORCE DIV/BDE MISSION	LIGHT-FORCE BDE/BN ROLE
DEFEND	BLOCK LIKELY DISMOUNTED APPROACHES.
	OCCUPY POSITIONS IN DEPTH.
	BLOCK MOUNTED INFILTRATION ROUTES IN RESTRICTIVE TERRAIN.
	OCCUPY STRONGPOINTS.
	PROVIDE SECURITY.
	CONDUCT COUNTERRECONNAISSANCE.
	SET UP OBSERVATION POSTS.
	CONDUCT AMBUSHES.
	PROVIDE ANTIARMOR AMBUSH TEAMS.
	CONDUCT AIR ASSAULTS TO SEIZE OBJECTIVES.
	CONDUCT SPOILING ATTACKS AND RAIDS.
	PROVIDE REACTION FORCES TO COUNTER ENEMY RECONNAISSANCE.
	CONDUCT MOUT.
	RECONNOITER TO IDENTIFY ENGAGEMENT AREAS AND LOCATIONS OF FRIENDLY OBSTACLE POSITIONS.
	DEFEND OBSTACLES AGAINST ENEMY RECONNAISSANCE UNITS.
	CREATE WEAKNESSES IN THE ENEMY ATTACK.

Table E-3. Light-mechanized offensive operations.

LIGHT-FORCE DIV/BDE MISSION	MECHANIZED-FORCE BN ROLE
DEFEND	COUNTERATTACK TO RESTORE INTEGRITY OF THE DEFENSE.
	COVER OBSTACLES WITH LONG-RANGE, DIRECT FIRE.
	DECEIVE ENEMY ABOUT MAIN DEFENSE.
	PROVIDE A COVERING FORCE/SECURITY FORCE.
	PROVIDE A RESERVE/EXPLOITATION FORCE.
	CONDUCT COUNTERRECONNAISSANCE.

Table E-4. Light-mechanized defensive operations.

E-12. RETROGRADE OPERATIONS

Retrograde operations include delays, withdrawals, and retirements. The purpose of a delaying action is trade space for time. The purpose of the withdrawal is to free a unit for other missions. Mechanized forces are employed against hostile elements and their avenue of approach that threaten the success of the operation. Light forces must use additional transportation assets to include helicopters to move to subsequent positions.

a. Basic movement techniques are those of maneuver and bounding overwatch in reverse. Mechanized units with small, light-force units mounted in combination with infantry reconnaissance platoons and antitank elements move to subsequent delay positions under the cover of mutually supporting fires.

b. Mechanized forces are used to cover a withdrawal. When possible, the withdrawal is conducted under limited visibility.

c. All mechanized-force attacks for delaying purposes must have limited objectives, and they must be supported by artillery and all units in the covering force.

E-13. RETROGRADE MISSIONS/ROLES

Tables E-5 and E-6 contain listings of missions and roles that mechanized and light forces conduct in mechanized-light or light-mechanized retrograde operations.

MECH-FORCE DIV/BDE MISSION	LIGHT-FORCE BDE/BN ROLE
DELAY	DELAY ALONG LIKELY INFANTRY AVENUES OF APPROACH (NEED MOBILITY ASSETS TO QUICKLY MOVE).
	RECONNOITER AND PREPARE DELAY ROUTES.
	REINFORCE AT SUBSEQUENT DELAY POSITIONS.
	USE LIMITED COUNTERATTACKS TO ASSIST DISENGAGEMENT.
	ASSIST WITH OBSTACLES, PLANNED AND EXECUTED IN DEPTH.
	OCCUPY STAY-BEHIND POSITIONS.
WITHDRAWAL	ESTABLISH IN-DEPTH POSITIONS/OBSTACLES.
	PROVIDE AN AIR ASSAULT FORCE TO DECEIVE ENEMY/CAUSE MANEUVER PAUSE.

Table E-5. Mechanized-light retrograde operations.

LIGHT-FORCE BDE MISSION	MECHANIZED-FORCE BN ROLE
DELAY	OVERWATCH.
	COUNTERATTACK BY FIRE.
	CONDUCT A DECEPTION.
	REINFORCE.
	REPOSITION RAPIDLY TO PREVENT A BYPASS.
	RESERVE.
WITHDRAWAL	DECEIVE THE ENEMY.
	FIX THE ENEMY ATTACK.
	PROVIDE A DLIC.
	PROVIDE A REAR GUARD.
	OCCUPY IN-DEPTH POSITIONS.
	RESERVE.

Table E-6. Light-mechanized retrograde operations.

Section III
SPECIAL OPERATIONS FORCES CONCEPT OF EMPLOYMENT

During combat operations, SOF elements can conduct special reconnaissance missions to provide operational and tactical intelligence support to the brigade. Under the control of SOF headquarters, special forces, rangers, and special operations aviation can conduct combat operations against high-value targets. The brigade may support SOF in the conduct of combat operations.

E-14. EMPLOYMENT

The following are considerations by battle operating system for the employment of SOF during combat operations.

a. Intelligence

(1) Special reconnaissance teams allow the commander to conduct HUMINT collection in denied areas at the operational and strategic levels. It is time-sensitive information and provides the commander the ability to monitor or disrupt the enemy commander's scheme of maneuver.

(2) Civil affairs assets can provide timely intelligence to the commander through interviews and conversations with refugees.

b. Maneuver.

(1) The SOF and ranger units, under the command and control of SOF headquarters, can conduct direct-action missions against high-value targets such as critical C3 nodes.

(2) The audiovisual PSYOP teams can aid the tactical commanders deception plan

(3) The SOF assists in civil-military operations by training and advising host nation military forces.

c. **Fire Support**

(1) Special reconnaissance or direct-action teams can conduct terminal guidance operations using laser-target designators or beacons for high-peformance aircraft against high-value targets.

(2) Special reconnaissance or direct-action teams can provide nonattributable target acquisition and adjustment of deep fires in the deep battle area.

(3) Psychological operations elements provide nonlethal fire support to the conventional force by—

(a) Conducting information progams that undermine the enemy commander's morale and confidence.

(b) Conducting information programs that serve as an emotional and mental detriment to the enemy soldiers' morale.

(c) Conducting information programs that undermine the enemy's political and social programs or institutions in a denied area.

(d) Conducting information programs that define US foreign policy/objectives to friendly personnel.

(e) Conducting information programs that reinforce host nation economic and social programs.

(f) Interfacing SOCCE with fire control elements to prevent fratricide of SOF elements that are operating in the infantry brigade's area of influence.

(g) Conducting training to improve host nation fire support assets.

d. **Mobility, Countermobility, Survivability.**

(1) Successful special reconnaissance or direct-action missions contribute to the survivability of conventional forces.

(2) Escape and evasion nets are established that can assist in the recovery of downed USAF pilots.

(3) Special forces A Team can assist in civil-military operations by training and supervising host nation forces in vertical and horizontal construction methods or projects.

e. **Air Defense Artillery.**

(1) Counterair operations are conducted at enemy airfields or against enemy ADA sites (ADA MANPADS and sniper weapons respectively).

(2) The SOF trains host nation ADA.

(3) Air defense participates in JSEAD operations by monitoring and reporting enemy airfields, air bases, forward operating base, and FACs for destruction. Then FAAD C3I system supports this activity.

f. **Combat Service Support.**

(1) The SOF trains host nation CSS.

(2) The SOF assists in identifying host nation facilities.

(3) The SOF assists in coordinating host nation CSS support.

(4) The civil affairs elements assist in implementing population resource control measures.

(5) The civil affairs teams strengthen the existing host nation technocratic infrastructure.

(6) The civil affairs teams reinforce host nation credibility and capability through CMO activities (medical, dental, engineer).

(7) The CSS assists in refugee control operations.

g. **Command, Control, Communications.**

(1) The special forces teams can remain under the command and control of a SOF headquarters (JSOTF, SFOB, FOB, or AOB) and through the establishment of liaison element (SOCCE). They may provide time-sensitive information directly to a brigade headquarters.

(2) The special forces teams can remain under the command and control of a SOF headquarters and report all information through the JSOTF to the JTF for futher dissemination (the least-efficient method).

(3) The special forces teams may be placed in GS or DS to a brigade headquarters. In this method a special forces liaison element (SOCCE) is collocated with the supported brigade for interface between the teams and the conventional headquarters. This aids the flow of timely intelligence to the conventional headquarters while the teams remain responsive to the SOF headquarters.

(4) The special forces teams may be placed OPCON to the ground manueuver commander in whose area of operation the teams are working. If the teams are in denied territory, an SF liaison element (SOCCE) is collocated with the unit receiving OPCON to aid communications.

E-15. SPECIAL OPERATIONS FORCES INTERFACE

Because of the decentralized nature of SOF operations, it is probable that any unit (even down to a squad) may work with SOF. The missions are usually coordinated at brigade; however, there may be times when SOF personnel coordinate directly with a subordinate unit within the brigade. The key to the success of such operations is to decentralize decision-making requirements to ensure a quick response to the situation.

a. The brigade commander must make sure the units under his control understand this requirement. Knowing the commander's intent enables the subordinates to use their initiative and ensure a quick

response, thus avoiding a need for approvel that may result in a lost opportunity.

b. Likely missions of working with SOF for a unit subordinate to the brigade include:

- Provide a reaction force.
- Reinforce SOF direct-action or special reconnaissance missions.
- Conduct a linkup/relief in place.
- Isolate areas or objectives.
- Augment/support civl affairs and PSYOP personnel.

Appendix F
DIRECTED-ENERGY WEAPONS

The battlefield of the next war will include directed-energy weapons (DEWs). Several threat weapons have already been tested in combat; improved versions of these weapons may be fielded soon. For the brigade commander, the DEW battlefield is here now. It exists in the form of threat weapons that he must be prepared to face today and in the form of our own DEW systems, many of which are already being tested in prototype form. Commanders, S2s, and S3s must understand the nature of the DEW threat and how to defend against it, or it may become an enemy combat multiplier of enormous affect.

Section I
CHARACTERISTICS

The DEWs include microwave-radiation emitters, particle-beam generators, and lasers. Conventional weapons rely on chemical or kinetic energy in the form of a projectile. The DEWs rely on subatomic particles or electromagnetic waves that impact at or near the speed of light. Since the energy from DEWs is line of sight (LOS) and travels at or near the speed of light, it arrives at the target almost instantly. A DEW gunner need not lead a target, and resupply of ammunition is never a problem. The DEWs can attack heavily armored targets at their most vulnerable points-their optics (eyes) and soil electronics.

F-1. MICROWAVE RADIATION EMITTERS

Long-term exposure to high-intensity microwaves may produce physical and psychological effects on humans to include warmth, pain, headaches, fatigue, weakness, and dizziness. Used against equipment, high-intensity microwaves can cause on-board electrical systems to fail, they can severely damage or destroy miniaturized electronic components, such as microchips, by overloading them with electrical energy. Microwave energy also can cause electrically fuzed munitions to become duds or to detonate. This effect depends on the power output of the weapon and the distance to the target.

a. **Protection.** The only reliable protection for emitters is completely encasing susceptible equipment in a heavy gauge metal shielding or surrounding it with special metal screening. Burying or covering equipment with sandbags or other nonmetallic materials will not provide adequate protection. On combat vehicles, sensitive components should be left in their proper mounts, and their grounding strap should be checked. Smaller pieces of equipment should be placed in empty ammunition cans. Hatch covers should be kept closed unless someone is entering or exiting the vehicle. EMP follows ground contours, so terrain masking provides some protection

b. **Countermeasures.** Known or suspected locations of enemy ground-based microwave-generating weapons should be attacked by direct and indirect fires. The type of munitions used should be nonsmart rounds that do not require command guidance or triggering at the target location. Microwave radiation weapons can neutralize more advanced munitions by affecting their internal electrical components.

F-2. PARTICLE BEAM GENERATORS

A particle beam is a directed flow of atomic or subatomic particles. These high-energy particles, when concentrated into a beam that can interact with a target, can melt or fracture target material and generate X-rays around the point of impact. If effective particle beam weapons are developed for use in ground combat, the same kind of defensive measures taken against any direct-fire weapon will protect against their effects. Terrain masking is the most effective method available to counter particle beam weapons.

F-3. LASERS

These weapons are the category of DEWs most likely to be used against our forces. Laser weapons produce intense heat and light on a target. Optical devices, specifically vehicle sights and sighting systems, are the most likely targets. Lasers can burn out optical devices and flash-blind those who operate them. However, soldiers are susceptible to laser weapons even when not using optical devices. Laser energy from friendly and enemy systems can damage the naked eye (damage may be temporary or permanent). Because the eye is more sensitive to light during darkness, laser weapons have a greater effect at night than during the day.

a. **Direct-View Optical Devices.** A laser weapon targeted on see-through optical devices damages the eyes of the targeted operator. The beam passes through the optical device and burns the eye, causing either temporary loss of vision (flash-blinding) or permanent blindness When the optical device has a magnifying capability (such as binoculars), the beam strength is magnified, which causes greater injury to the eye (Table F-1).

b. **Electro-optical Devices.** A laser attacks a non-see-through optical device by burning the sensor or reticle inside of it, degrading its capabilities. Some of the electrical circuitry inside the device also may be damaged by the heat surge. However, lasers do not affect the operators of non-see-through optical devices.

c. **Hazards.** Soldiers should be aware of the potential hazards from laser devices, which are currently available in the US Army inventory. Just as a commander plans his unit fires to avoid the hazard of fratricide, he must likewise plan his laser fires.

(1) Devices most likely to be found near friendly troops are *laser range finders.* Laser range finders are used on the M60A3 and M1 tanks, and they are also used extensively by the artillery. Artillery FISTS all use systems based on laser emitters, either vehicle-mounted or lightweight, hand-carried units. This capability is also found in scout platoons with the GVS-5 laser range finder, and US Air Force and US Navy aircraft carry laser target designators for aiming precision-guided munitions. Operators of laser tiring devices receive extensive training in their safe employment. The devices themselves cannot be activated without deliberate action by the operator.

(2) While the possibility of an accident is remote, it can happen. A victim might suddenly and unexpectedly move directly into the path of a laser beam and look directly at it, or a laser beam might reflect off a shiny surface and strike a victim in the eyes. To prevent such accidents, operators of laser firing devices must be kept constantly aware of friendly troop locations, and they

DIRECT-VIEW DEVICES	ELECTRO-OPTICAL DEVICES
DIRECT VIEW	**IMAGE INTENSIFIERS**
EYEGLASSES	AN/PVS-4
CONTACT LENSES	ANPVS-5
SUN, WIND, AND DUST GOGGLES	
VISION BLOCKS	
MAGNIFYING	**THERMAL DEVICES**
BINOCULARS (7X)	THERMAL NIGHTSIGHT
ITV ACQUISITIONS SIGHT (3X)	AN/TAS 4A
ITV SQUAD LEADER'S PERISCOPE	GROUND LASER-LOCATION DESIGNATOR (GLLD)
ITV GUNNER'S SIGHT (13X)	M2/M3 INTEGRATED SIGHT TOW UNIT
DAYSIGHT	M1A1 TANK GUNNER'S PRIMARY SIGHT
INFRARED DEVICES	
INFRARED TOW MISSILE TRACKER	

Table F-1. Direct-view and electro-optical devices.

must positively identify targets before lasing them. They should not fire lasers at reflective surfaces, and, whenever possible, they should give the oral warning, LASING, before activating the laser.

(3) Conversely, commanders of soldiers operating in areas near friendly lasing must ensure that the commanders of laser-operating units are constantly aware of friendly troop locations. Soldiers should be alerted to the presence of friendly lasers in their areas and given the locations of the lasers if possible. They should be warned not to look in the direction of laser-emitting devices unless specifically told it is safe to do so. When possible, soldiers should wear the ballistic/laser protection system (BLPS), which is available through normal supply channels.

WARNING

USING GOGGLES TO LOOK THROUGH A MAGNIFYING OPTICAL DEVICE MAY NOT PROVIDE SUFFICIENT PROTECTION AGAINST LASERS, DEPENDING ON THE INTENSITY AND FREQUENCY OF THE LASER.

d. **Tactical SOP.** The following is a tactical SOP or offensive and defensive operations with DEWs.

(1) ***Offense.*** Soldiers must be protected from the time they cross the LD/LC until combat is over, because they will not know the exact locations of laser range finders and Laser designators. Therefore, leaders should—

(a) Mount and inspect all filters while in the *assembly area.* Leaders must inspect to ensure each soldier has serviceable laser goggles. Leaders review the soldier's knowledge of baser effects to ensure the soldier knows how to recognize when he has been engaged and knows the first-aid procedure for treating laser damage to eyes.

(b) While in the *attack position,* ensure that all soldiers wear their laser goggles, and that gunners keep optical devices covered except during use.

(c) Ensure that soldiers continue to wear their laser goggles, especially when using direct-view sights during the attack and consolidation.

(2) ***Defense.*** A laser is the LOS device most likely to be used first by the enemy during a defensive operation to locate friendly positions. An enemy tank may use a laser on a suspected target before firing its main gun, or an enemy artillery observer may use the laser designator or range finder to control indirect-fire missions. These actions can hurt friendly equipment or soldiers. Therefore, leaders should—

(a) Ensure that when a vehicle or soldier moves from a hide position or from a covered and concealed position, all filters, electro-optics.l devices, and laser goggles are used.

(b) Ensure that soldiers open optical protective doors *only* during required observation or engagement of targets. Ensure soldiers use the naked eye to scan the battlefield until target cues such as movement or dust are observed, then use precision optics to identify and engage targets.

(c) Ensure that scouts and soldiers in observation posts wear laser goggles full-time, when the commander determines that the risk warrants doing so.

e. **Soldier Preparation.** The main difference between being wounded by a laser weapon and being wounded by any other type of direct-fire weapon is the absence of noise and detectable signature from a laser weapon. Soldiers should be trained and educated accordingly. They must train using the laser protective equipment and techniques previously discussed. All soldiers should know how lasers affect them. (This information is contained in the laser survivability manual.) First-aid classes should be conducted to prepare soldiers to help DEW casulties. The battlefield is an unnatural and stressful environment where panic is always possible. This can be avoided through proper training, protective measures, and education.

(1) Soldiers most at risk from laser energy are those looking through devices with direct-view magnifying optics such as the TOW daysight or militiary binoculars. The laser energy that enters a direct-view optical device (DVOD) is increased by the square of the magnifying optic; the energy is further multiplied by the light transmission ability of the optic. Table F-1 lists examples of DVODs and electro-optical devices.

(2) Several methods can be used to protect against the possible effects of lasers directed against friendly soldiers. One way is to use nondirect-view optical devices such as thermal imaging or NVDs. The laser energy deposited on the screens of the imaging devices can burn out the devices themselves, but the eyes behind them are protected.

(3) Other protective measures are like those used against any LOS weapon. Cover and concelment should be used to avoid detection and possible lasing. Also, units should ensure that a minimum of optical surfaces are presented to the enemy-for example, binoculars not in use should be pointed toward the ground or, if they are laid aside during combat, their lenses should be capped. Antitank and armor direct-view optical and electro-optical sighting devices should be covered when not in use.

(4) Known and suspected locations of laser devices can be suppressed with artillery, mortars, or

direct-fire weapons. Smoke can degrade the effectiveness of many types of lasers. When firing from a defensive position, soldiers should use alternate and supplementary positions to reduce the chance of being detected, suppressed, or destroyed by aimed fire.

(5) Soldiers operating in an area where the enemy is known or suspected of using lasers should wear sur/wind/dust goggles with the laser filter attached. Commanders should realize that the BLPS filter does reduce contrast and available light for users. They can add a subparagraph to the "Coordinating Instructions" portion of OPORDs similar to that in the "Air Defense Warning Status" to provide soldiers with the best information available about enemy laser capabilities.

(6) Soldiers should know of the potential hazard from laser devices. Laser range finders are the ones most likely to be used near friendly soldiers. US Air Force and US Navy aircraft may also carry laser target designators, used for aiming precision-guided munitions. To avoid injury to other friendly soldiers, operators of laser-firing devices must positively identify their targets before lasing. Also, lasers should never be fired at reflective surfaces.

(7) Commanders must ensure that their subordinate units know the locations of any nearby friendly laser-operating units, and vice versa. Soldiers should be warned not to look in the direction of laser-emitting devices unless specifically told that doing so is safe. Each soldier should wear laser safety goggles matched to the wavelength of the friendly lasers.

Section II
TACTICAL IMPLICATIONS

The brigade task force must take precautions to protect itself in a DEW environment. It can do this by planning actions under a possible DEW attack and assuming an appropriate level of laser MOPP should such an attack occur.

F-4. PLANNING CONSIDERATIONS

The brigade task force conducts operations in a DEW environment by including the following in its planning:

a. The S2 identifies possible DEW threats during the IPB process and focuses reconnaissance assets to accurately identify and target those threats.

b. The S3 incorporates the DEW threat into his operational plan by—

(1) Integrating DEW countermeasures into the TF operation:

(a) Planning indirect suppressive fires on likely or suspected locations.

(b) Avoiding open terrain.

(c) Operating during conditions of poor visibility (fog, rain).

(d) Using obscurants.

(2) Advising the commander on the DEW protection level:

(a) Minimizing the number of personnel viewing through direct-view devices.

(b) Modifying vision blocks and other direct-view devices with tape or canvas to reduce personnel exposure (Figure F-l).

(c) Using eye protection equipment.

(3) Advising attached and OPCON elements of the threat.

(4) Advising supporting Army aviation and Air Force personnel of the danger.

c. To reduce the panic that may result from a DEW attack leaders must ensure that their soldiers know—

(1) Laser weapons can cause damage to the human eye ranging from temporary flash-blindness to permanent eye damage.

(2) Direct-view devices, optics, and especially magnifying devices, if attacked, pose the greatest danger to personnel (eye injury).

(3) Unless both eyes are being used in conjunction with an optical device, only one eye will be susceptible.

(4) Individuals might not immediately know the extent of damage, because the time that a person is flash-blinded by the brightness will vary among soldiers.

(5) Leaders and key system operators (gunners) are the most susceptible to DEW attack, because they are most likely to be looking out over the battlefield either with or without the aid of optics.

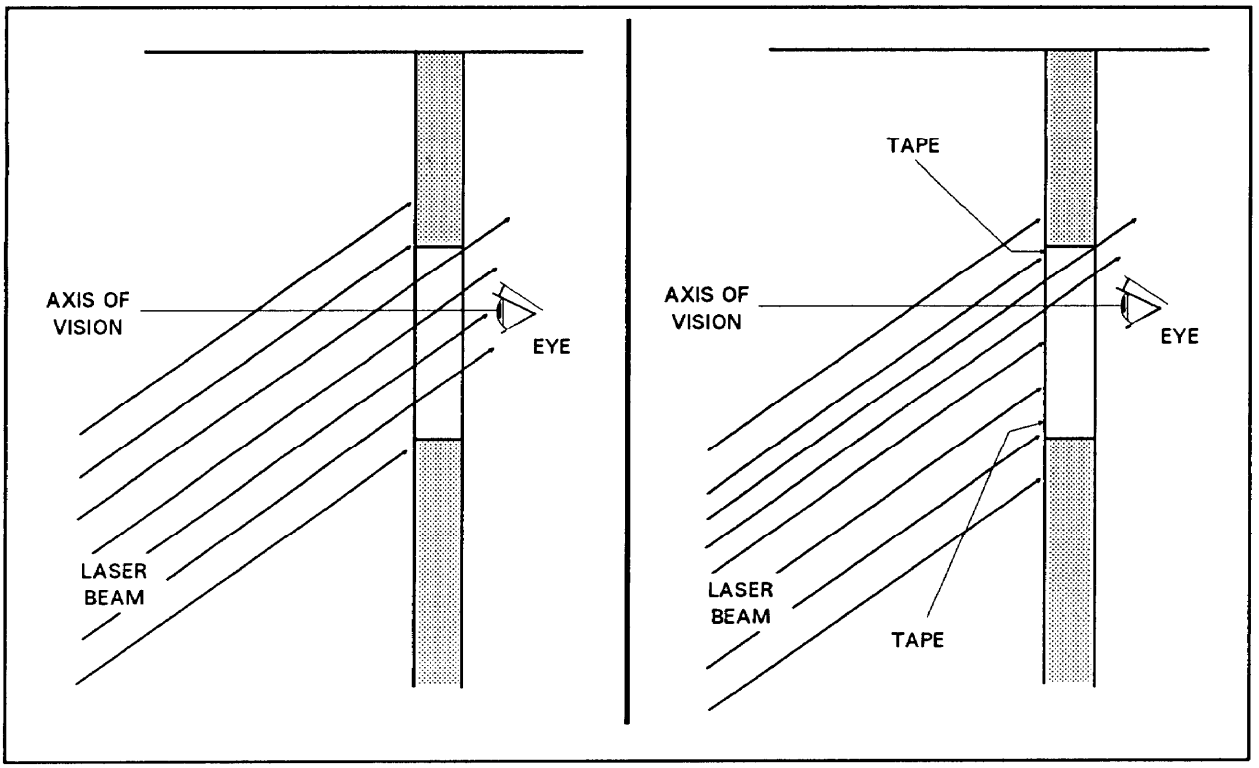


Figure F-1. Tape on vision blocks.

F-5. ACTIONS UNDER DIRECTED-ENERGY WEAPON ATTACK

When a unit comes under attack from DEW, it should—

- Suppress the enemy systems.
- Employ obscurants.
- Increase the DEW protection level.
- Advise higher headquarters of the attack.

F-6. TREATMENT OF LASER INJURIES

Laser eye injuries do not cause death. However, a laser injury can worsen with time, so soldiers with suspected laser injuries must be evaluated immediately and again at regular intervals. Most laser injuries can be treated in the unit or will heal by themselves.

a. **Symptoms.** After receiving laser eye injuries, soldiers may experience sharp pain, a sudden loss of vision, streaky or spotty vision, or disorientation.

b. **Corneal Burns.** Laser burns to the cornea (exterior surface of the eye) require eye ointment and an eye patch.

c. **Retinal Burns.** Laser burns to the retina (interior surface of the eye) do not require an eye patch, in fact, an eye patch reduces the soldier's remaining vision. When internal hemorrhage is suspected, the injured soldier should be positioned with his head up to allow the blood to settle out of his center of vision.

d. **Psychological Impact.** Because soldiers may not know the extent of their injuries, they are likely to experience shock. The psychological impact of a laser eye injury can be reduced by reassuring the injured soldier that the injury is not life threatening and that treatment is available, and evacuating him rapidly for further evaluation.

e. **Evacuation.** Except when accompanied by shock or other injuries, laser eye injuries should be treated as routine for evacuation purposes. Sending the eye protection devices worn at the time of injury along with the injured soldier helps medical personnel identify the type of laser used and provides intelligence about threat capabilities (see FM 8-50 and FM 8-55).

(1) ***Evacuate.*** A high-energy laser pulse may severely burn or perforate the cornea. When this occurs, the eye should be protected from further injury—it should not be patched—and the injured soldier should be evacuated to a medical facility. Soldiers seeing large dark spots at or near the center of their vision or large floating objects, experiencing

noticeable to severe vision impairment or an accumulation of blood in the eye must be evacuated for medical treatment.

(2) ***Restrict duties, but do not evacuate.*** Soldiers who experience little or no visual impairment but who are seeing dark spots in their fields of vision should be restricted to tasks they can perform effectively until they can again perform their normal duties.

(3) ***Return to duty.*** In the absence of other injuries, soldiers who are merely flash-blinded will recover in seconds.

F-7. LASER MISSION-ORIENTED PROTECTIVE POSTURE

The L-MOPP levels shown in Table F-2 are based on threat activity and known use of lasers in the area of operations.

MOPP LEVEL	LASER USE	LASER USE
L0	NO KNOWN LASER TECHNOLOGY. NO KNOWN USE IN AREA OF OPERATIONS. USE OF LASER TECHNOLOGY HIGHLY UNLIKELY.	PREPARE LASER-PROTECTIVE PROPERLY. STOW LASER-PROTECTIVE EYEWEAR NEARBY.
L1	THREAT POSSESSES LASER TECHNOLOGY. LASER-CAPABLE DELIVERY SYSTEMS SPOTTED IN AREA OF OPERATIONS. USE OF LASER CAPABILITY POSSIBLE. USE OF THREAT/FRIENDLY LASERS REPORTED IN THE AREA OF OPERATIONS. NBC-L REPORTING SYSTEM IN EFFECT.	ENSURE LASER-PROTECTIVE EYEWEAR IS READY FOR USE AND CARRY IT ON YOUR PERSON. WEAR LASER PROTECTION ON YOUR FACE AT ALL TIMES.
L2	USE OF LASER CAPABILITY PROBABLE/HIGHLY LIKELY.	

Table F-2. L-MOPP levels.

a. The purpose of establishing MOPP levels for a laser threat is not to restrict a commander's actions but to standardize reporting language and an appropriate response. A commander who feels there is a potential laser threat to his soldiers, be it enemy or friendly, would obviously increase his level of responsiveness (understanding that there is the potential for accidental lasing of friendly soldiers from friendly weapons). The L-MOPP levels were intentionally not tied into the current NBC MOPP system. This was done to avoid confusion with an existing system of procedures and since the ballistic laser eye protection system may not be required with NBC protection. Reference to bail ballistic laser eye protection refers to the mounting of outserts on the mask when wearing NBC overgarments and masks.

b. The following reflects the addition of a laser-use reporting column to GTA 3-6-3 and inclusion of laser-use reporting. Alphabetical line codes at the left reflect line items for providing required information to higher headquarters and adjacent units. (See FMs 3-3 and 3-7.)

(1) ***NBC 1 report.*** The observing unit uses the NBC 1 report (Table F-3) to provide CB and laser attack data.

(2) ***NBC 3 report.*** The unit uses the NBC 2 reports and the current wind information to predict the downwind hazard area and sends it as an NBC 3 report (Table F-4).

(3) ***NBC 6 report.*** The unit uses the NBC 6 report (Table F-5) to summarize information concerning chemical, biological, or laser attacks.

LINE	LASER	REMARKS
B	POSITION OF OBSERVER.	
C	DIRECTION OF ATTACK FROM OBSERVER.	
D	DATE-TIME GROUP FOR DETONATION/ATTACK.	
F	LOCATION OF AREA ATTACKED.	
G	MEANS OF DELIVERY SYSTEM.	STATE WHAT WEAPON DELIVERED THE LASER AND WHAT COLOR THE LASER WAS, IF KNOWN.
ZC	AREA/POINT LASING.	STATE WHICH WAS USED, IF KNOWN.

Table F-3. NBC 1 report.

LINE	LASER	REMARKS
A	STRIKE SERIAL NUMBER.	
D	DATE-TIME GROUP FOR START OF ATTACK.	
F	LOCATION OF PROBABLE AREA OF ATTACK.	

Table F-4. NBC 3 report.

LINE	LASER	REMARKS
A	STRIKE SERIAL NUMBER.	
D	DATE-TIME GROUP FOR START OF ATTACK.	
F	LOCATION OF AREA OF ATTACK.	
G	MEANS OF DELIVERY SYSTEM.	STATE WHAT WEAPON DELIVERED THE LASER AND WHAT COLOR THE LASER WAS, IF KNOWN.
I	NUMBER OF PERSONS LASED.	
M	ENEMY ACTION BEFORE AND AFTER ATTACK; EFFECT ON TROOPS.	
Y	PROBABLE DIRECTION THAT ATTACK IS HEADED.	

Table F-5. NBC 6 report.

Appendix G
COMMAND POSTS

The brigade has four types of command and control facilities: the command group, the TAC CP, the main CP, and the rear CP. The CP at any level must be able to do two things: ensure that the commander is continually abreast of the developing situation and ensure that subordinate commanders are provided with the means to accomplish their assigned missions.

G-1. BRIGADE COMMAND GROUP

The brigade command group is a temporary organization consisting of the brigade commander and other soldiers and equipment required to perform command group functions. The primary function of the command group is to influence the immediate action through the commander's personal presence. Other functions include observing the battlefield, synchronizing the battle, and providing planning guidance. The command group moves forward from the tactical command post. The command group sometimes operates from a C2 helicopter. Because of the criticality of communications in this configuration, the command group should include an experienced communications operator. Other considerations include refueling and NVG windows.

G-2. TACTICAL COMMAND POST

The tactical CP fights current close operations, provides the commander with combat critical information and disseminates the commander's decisions. It is supervised by the brigade S3 and is usually as far forward as the battalion main CPs. The TAC CP should strive to have redundant abilities in personnel and equipment as the main CP (Figure G-1).

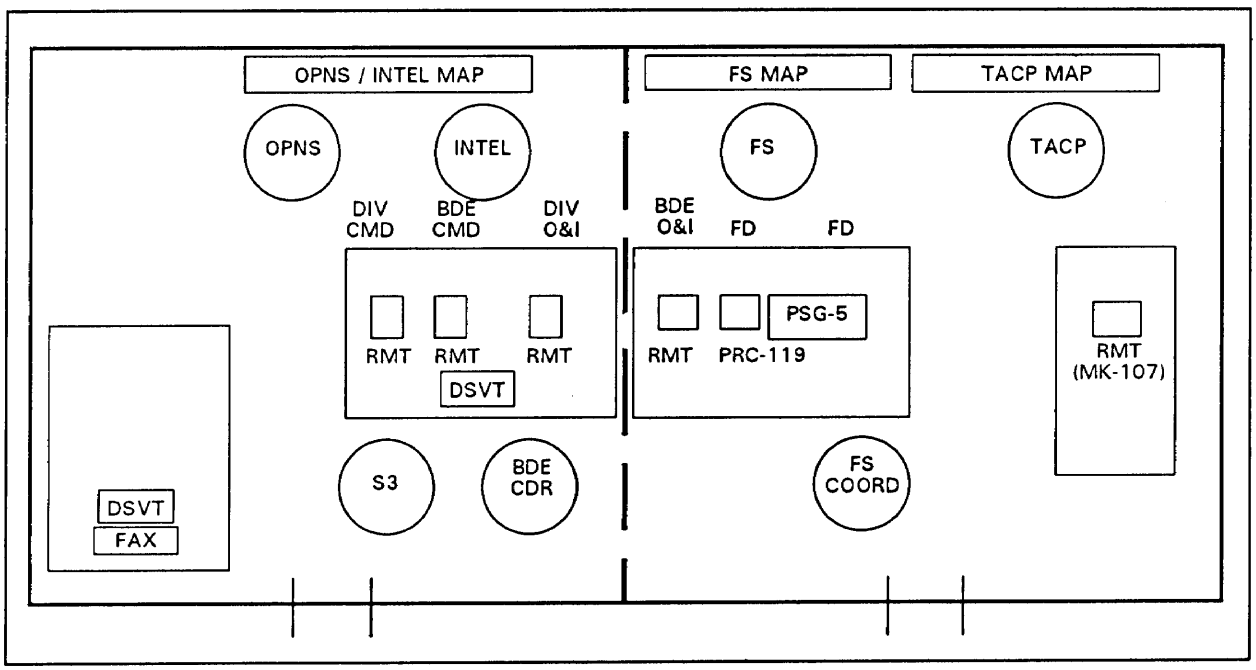


Figure G-1. Light infantry brigade tactical command post.

G-3. MAIN COMMAND POST

The main CP monitors the current battle, executes planned deep attacks, and plans future operations. It coordinates operations throughout the brigade sector and keeps higher headquarters informed. It is supervised by the brigade XO and includes staff personnel representing all facets of brigade operations. The TOC is the operations cell within the main CP. (For an example of a brigade TOC, see Figure G-2.) Combat requirements should be anticipated and rehearsed in the form of TOC drills. The shift OIC is the custodian of the TOC battle drill book and executes the drills by the unit SOP. Examples of TOC battle drills include receipt of division order, immediate request for attack helicopter, EPW evacuation, enemy minefield, unit out of contact, and so forth.

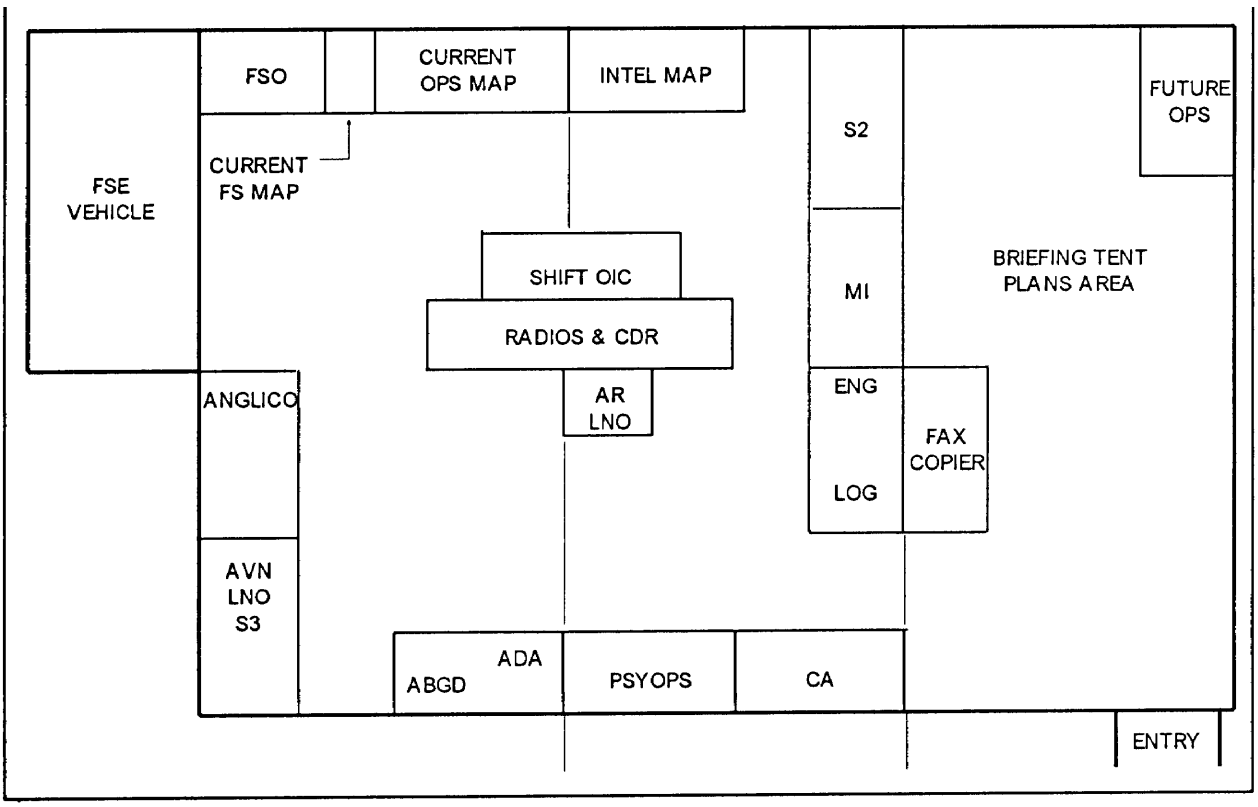


Figure G-2. Light infantry brigade tactical

G-4. REAR COMMAND POST

The FSB commander supervises the rear CP, which is collocated with the FSB CP. The rear CP is responsible for administrative/logistic functions. The rear CP or the DS artillery battalion main CP is usually designated as the brigade alternate CP. The FSB commander is responsible for fighting rear operations. (Figure G-3.)

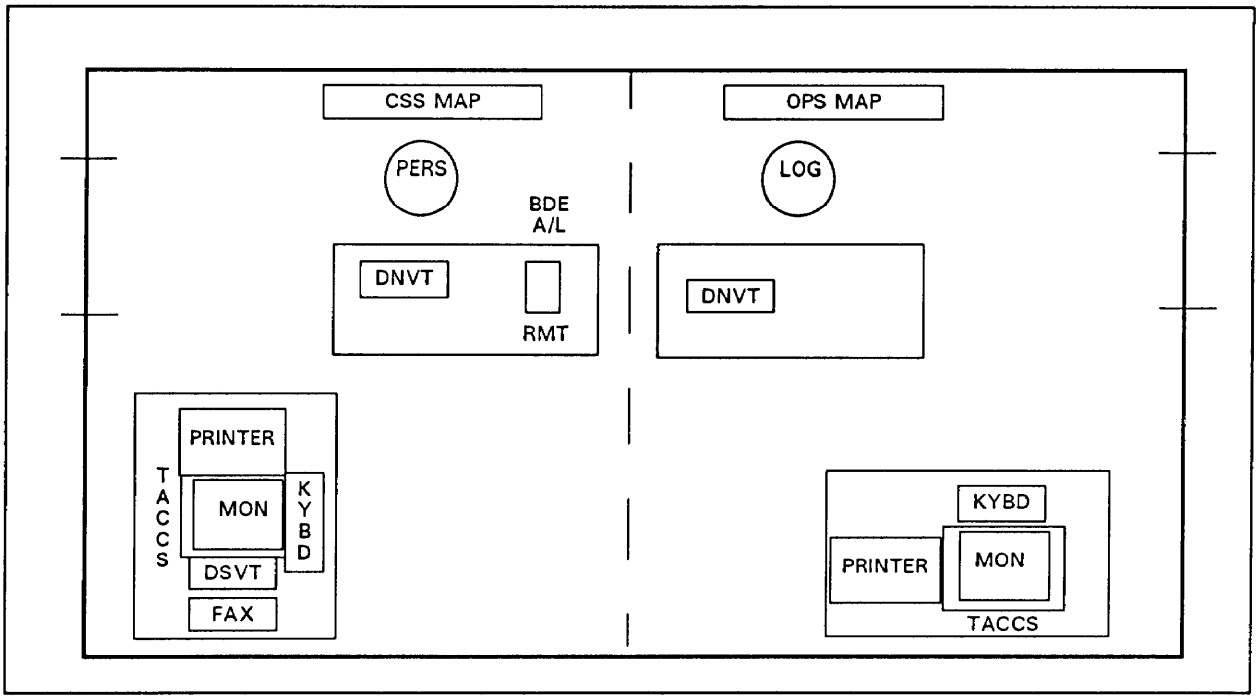


Figure G-3. Light infantry brigade rear command post.

G-5. COMMAND POST ORGANIZATION AND OPERATIONS

Command posts must be organized and setup to operate on a 24-hour basis. This includes operating while displacing. Shifts must be established that provide enough personnel to operate the CP and also the required expertise to make decisions. There should not be a "first team" and "second team" approach. Both shifts must be capable of efficient CP operation. Command group personnel are not included in the shifts. (Tables G-1 through G-3 are examples of CP staffing and shift schedules.)

COMMAND POST	SHIFT ONE	SHIFT TWO
OPNS	ASST OPNS SGT (SFC)	ASST S3 (CPT)
INTEL	ASST S2 (CPT)	SR ANALYST (SSG) INTEL ANALYST (SFC)
FS	FSNCO (SFC)	FS SPEC (SPC)
COMMAND GROUP COMMANDER (COL) DRIVER (PFC) X 2 S3 (MAJ) FSCOORD (LTC/MAJ) DRIVER (PFC) TACP (USAF) ANGLICO REP (USMC)		

Table G-1. Brigade tactical command post staffing.

COMMAND POST	SHIFT ONE	SHIFT TWO
OPNS	S3 AIR (CPT) OPNS SGT (SGM) ASST OPNS (SFC)	ASST S3 (CPT) OPNS SGT (MSG) OPNS SGT (MSG)
INTEL	S2 (MAJ) INTEL ANALYST (SGT) INTEL ANALYST (PFC)	SR ANALYST (SSG) CLERK TYPIST (SPC)
NBC	NBC NCO (SFC)	CHEM OFF (CPT)
COMM	COMM CHIEF (MSG)	SIG OFF (CPT)
FS	FSO (MAJ)	TARGETING OFF (WO2)
ADA	ADO (1LT, BTRY XO)	ADA NCO (SSG)
ENGR	ENGR (CPT)	ENGR NCO (SFC)
IEW	SIGINT ANALYST (SGT)	IEW IFF (CPT)
CSS	ASST S4 (CPT)	PSNCO (SFC)
COMMAND GROUP XO (LTC) CSM DRIVER (PFC) HHC CDR (CPT) TACP (USAF)		

Table G-2. Brigade main command post staffing.

COMMAND POST	SHIFT ONE	SHIFT TWO
CSS	S1 (MAJ) PERS SPEC (SPEC) SUPPLY SGT (MSG) CLERK TYPIST (SPC)	S4 (MAJ) ADMIN SPEC (SGT) PERS SPEC (SPC) SUPPLY SPEC (SPC)

Table G-3. Brigade rear command post staffing.

G-6. BRIGADE RADIO NETS

Infantry brigades operate in division nets and internal radio nets. The infantry brigade operates the command and operations FM net, the administrative and logistical FM net the intelligence net, and an on-call IHFR (voice) net. Additionally, attached and supporting elements from the air defense radio battalion, field artillery battalion, signal battalion, and USAF TACP provides radio equipment and operate in specific nets. (Figures G-4 through G-7.) See Chapter 7 for a discussion of communication support to the brigade.

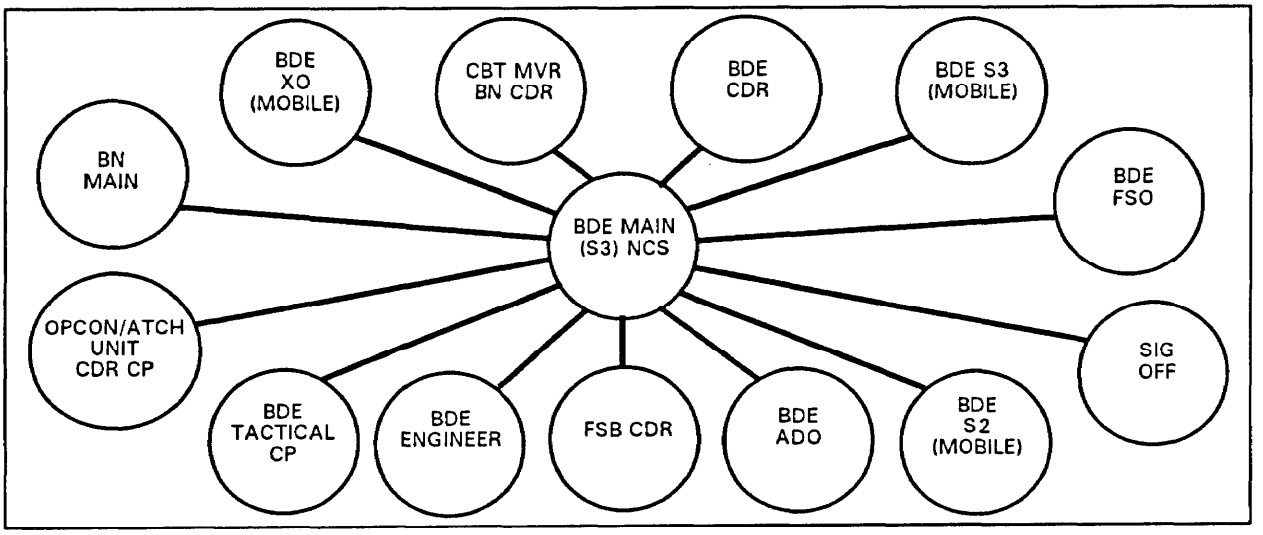


Figure G-4. Brigade command and operations FM net.

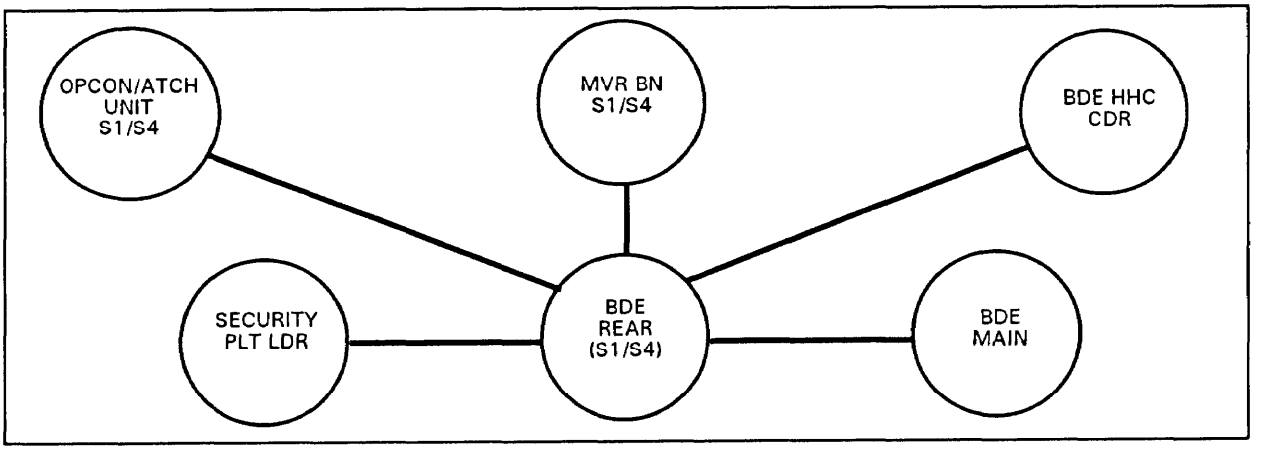


Figure G-5. Brigade administrative and logistical FM net.

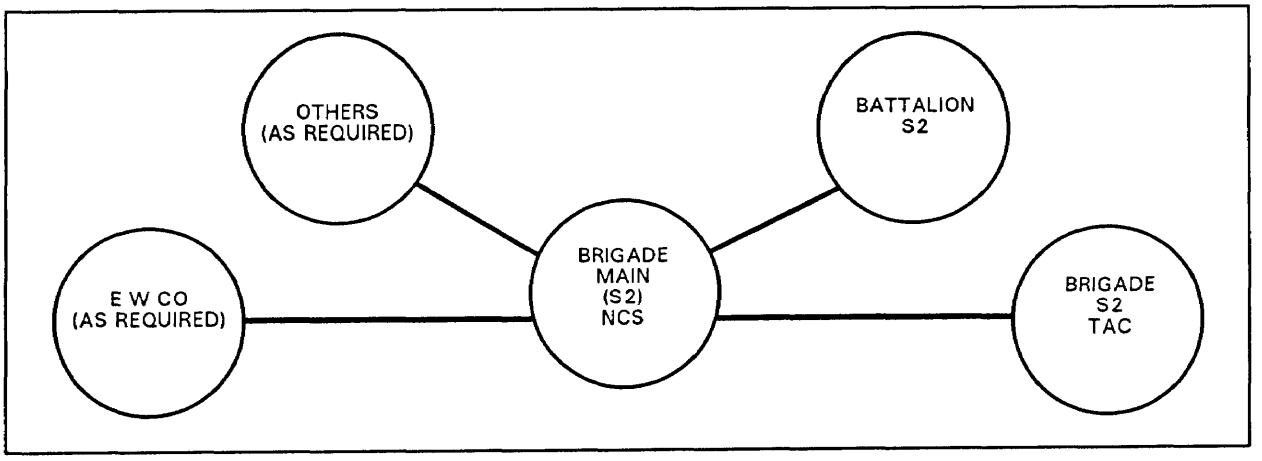


Figure G-6. Brigade intelligence net.

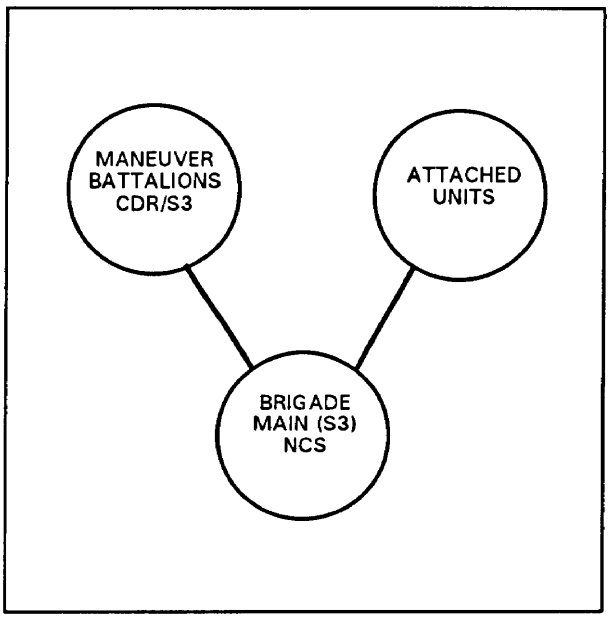


Figure G-7. Brigade HF voice net.

G-7. INFORMATION MANAGEMENT

The shift OIC is the focal point for information management. He controls all information going in and out of the CP. The CP must have an easily understood information management system. One such system is shown below (Figure G-8).

G-8. SHIFT OIC AND NCOIC

The shift OIC is the focal point of current operations. In addition to managing information flow, he is responsible for updating the current operations, maps, and charts. To accomplish his duties, the OIC must have guidance from the commander, XO, and S3; a thorough knowledge of the TACSOP; current orders; the synchronized matrix, DST, execution checklist, and other C2 tools; and subordinate plans and graphics. The shift OIC is assisted by the shift NCOIC. The shift NCOIC supervises updating maps and charts to ensure all information is exchanged. He supervises monitoring radios and maintenance. He ensures journals are properly prepared and prepares all reports for the OIC's approval.

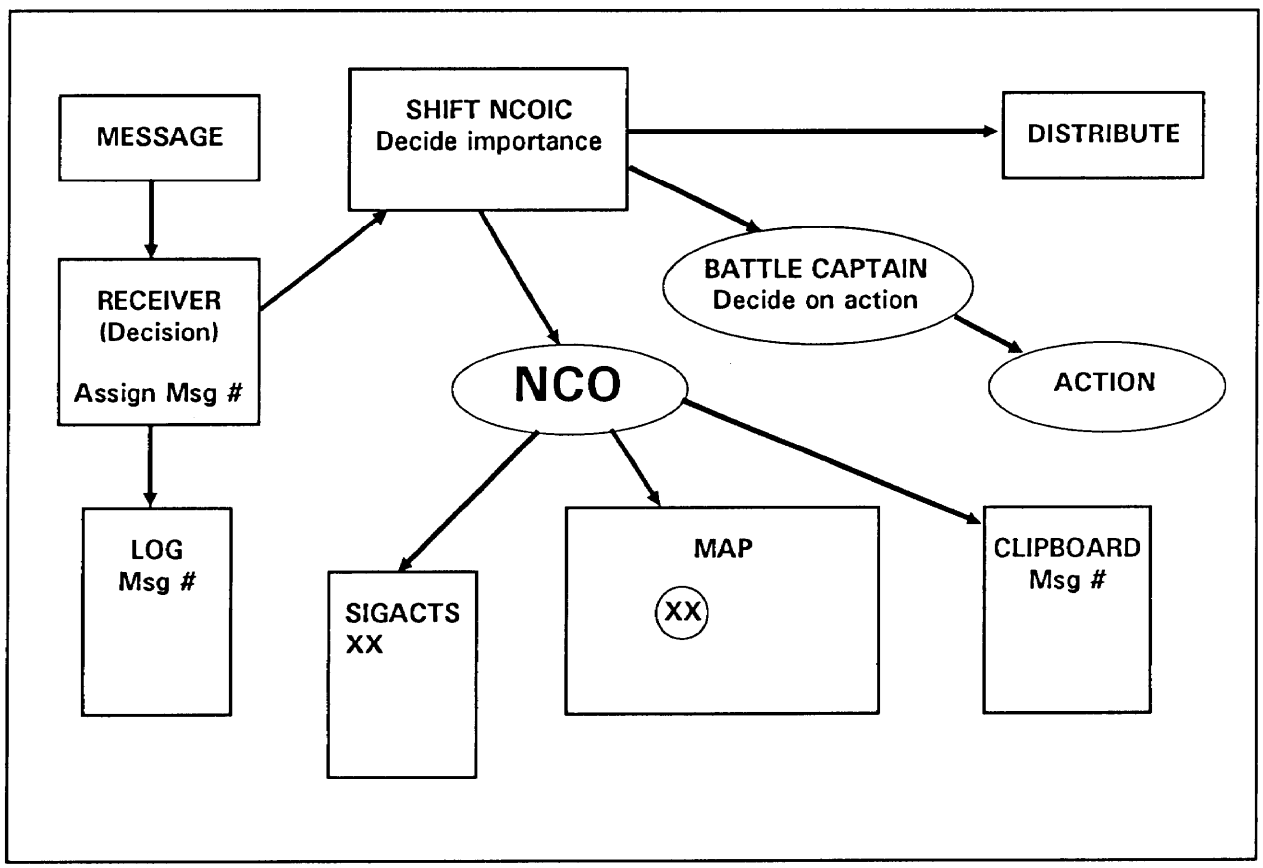


Figure G-8. Information management.

G-9. SHIFT CHANGE

The brigade must maintain continuous, synchronized operations. To establish the necessary battle rhythm to make this happen, the brigade makes optimal use of scheduled conference calls and shift change briefings. The brigade commander conducts conference calls with his subordinate commanders at regular intervals shortly after the division conference calls. The shift change brief is supervised by the outgoing TOC shift OIC and is designed to exchange information between the outgoing and incoming shifts. It can also serve as a commander's update, but the primary audience is the incoming shift.

G-10. TACTICAL OPERATIONS CENTER DRILL

Combat requirements should be anticipated and rehearsed in the form of TOC drills. The shift OIC is the custodian of the TOC battle drill book and executes the drills by the unit SOP. Examples of TOC battle drills include receipt of division order, immediate request for attack helicopter, EPW evacuation, enemy minefield, unit out of contact, and so forth.

Appendix H
OPERATIONS OTHER THAN WAR

The activities that comprise operations other than war range from operations that already are planned contingency missions; for example, noncombatant evacuation operations and raids, to activities such as peace enforcement and peacekeeping whose TTP may require some modification to some units' current mission-essential task list. Operations other than war are normally joint and combined in nature. The Army role is identified in JCS Publication 3.07, FM 100-20, FM 100-23, FM 100-19, and FM 7-98.

Section I
OPERATIONAL CONCEPTS

The principles of command and staff planning during war apply in operations other than war. However, operations other than war place greater emphasis on the political, economic, social, and psychological elements of power. This requires constant planning to include some unique areas.

H-1. PLANNING CONSIDERATIONS

This paragraph provides factors unique to operations other than war that must be considered in the planning process. The need for force protection must have priority in all operations other than war operations.

a. **Command Relationship.** Infantry brigades enter into operations other than war as part of a larger force (for example, division, JTF, or UN missions). Nonmilitary US agencies, specifically the ambassador, will usually have the lead in setting the overall parameters of the operation. Command relationships among US Army forces, between other US services, and between coalition and US forces could continue to develop as the operations unfold.

b. **Mission Analysis.** The same procedures for mission analysis outlined in Chapter 3 apply in operations other than war. Commanders must use tasks rather than operations in their mission statements, and the purposes of supporting efforts must be tied to the main effort.

c. **Intelligence.** Intelligence forms the foundation for the commander's decisions. However, processing and dissemination of information must be accelerated since much of it may be perishable. Data broadcast should be to the lowest level that can use the intelligence. Operations in unfamiliar environments require nontraditional, low-level, "police-type" intelligence to support the command. There will probably be a very undeveloped doctrinal threat data base. In such an environment, HUMINT is potentially the most important and productive source of intelligence. FM 34-130 contains excellent IPB considerations for operations other than war.

d. **Legal Restrictions.** Unusual legal issues may arise because of the unique nature of operations other than war. Operations other than war may be authorized by the UN, a regional organiization, or the national command authority. Regardless of who has authorized the operations, international law and US domestic laws and policy apply. For example, the laws of war, fiscal law and policy, and restrictions on the use of riot-control agents apply to US forces participating in the operations. The commander must solicit the advice of the SJA.

e. **Operation in a Foreign Environment.** The brigade commander must consider the differences in language, customs, practices, and religions when operating in a foreign environment. Training to learn the customs and courtesies is also beneficial. The brigade

can obtain interpreters through host nation support, or attached civil affairs and PSYOP personnel. The PSYOP and civil affairs personnel can also conduct cultural training and provide area studies. SOF can provide limited PSYOP and civil affairs support.

f. **Decentralizcd Operations.** Operations other than war are often small-scale, decentralized operations over extended distances. Subordinate commanders must be allowed maximum flexibility in the execution of their missions. However, they should be given specific responsibilities and understand the commander's intent. Commanders must remember to achieve mass, concentration, and objective, and must not become so decentralized as to piecemeal their efforts.

g. **Rules of Engagement.** The ROE are directives that explain the circumstances and limitations under which US forces initiate and or continue combat engagement with hostile forces. The ROE reflect the requirements of the law of war, operational concerns, and political considerations when military force shifts from peace to conflict or war, and back to the peace phase of an operation. These requirements are the primary means the commander uses to convey legal, political, diplomatic, and military guidance to the militaty force in peacetime for handling the crisis. There is close cooperation between tactical and legal channels when formulating ROE. The tacticians, usually represented by the S3, first decide what the desired intent of the ROE is. Then the SJA will put that intent in legal terms. Generally in wartime, the commander, through ROE, permits a wider use of military force. However, ROE restrict the use of military force to the achievement of the political objectives. In all operations, the commander is legally responsible for the care and treatment of civilians and property within the area of operations until transfer to a proper government. The ROE assist the commander in fulfilling these responsibilities. They vary in different conflicts and often change during the respective phases from combat or crisis through peace-building or nation-assistance. Even during a single phase and operation the rules are amended at the different levels of command, which may result in confusion. Also, rules that apply to a certain operation may not apply to another. The ROE must be based on METT-T to include any restrictions that fall between the established peacetime ROE and those ROE associated with hostilities (wartime). The ROE must be consistent with training and equipment capabilities. For example, "shoot to wound" is not an effective instruction unless soldiers have been trained in this skill. When necessary, command guidance can clarify ROE. While the rules must be tailored to the occasion, they should observe that nothing in such rules negates a commander's obligation to take all necessary and appropriate action in unit self-defense. Also, the rules should concisely establish guidance for the search and seizure of inhabitants, the authority of local security patrols, the control of black market operations, and surrender of hostile personnel.

(1) ***Request channels for rules of engagemcnt.*** Commanders at all levels need to know the request channels for ROE as well as the procedures to obtain approval for recommended changes to the ROE. Because ROE are developed with political considerations in mind, they normally come from JCS-level decisions. However, changes to the ROE may result from immediate tactical emergencies at the local levels. Therefore, the commander should have access to request and obtain changes to the ROE. Changes in ROE are requested through the operational chain of command and must be approved by the proper authority. Situations requiring an immediate change to the ROE could include introduction of combat forces from a hostile nation; attacks by sophisticated weapon systems including NBC; or incidents resulting in loss of life. These situations should be war-gamed and request channels exercised.

(2) ***Rules of engagement intent.*** ROE should be established for, disseminated down to, and understood by individual soldiers, but the ROE cannot cover every situation. Soldiers at all levels must understand the intent of the ROE and act accordingly despite any military disadvantage that may occur. The commander responsible for ROE formulation should consider including an intent portion that describes the desired end-state of the operation as well as conflict-termination considerations. This assists commanders and leaders at all levels in situations not clearly addressed in an OPORD.

h. **Force Protection.** Commanders must always consider the aspects of force protection and how they relate to the ROE. Some considerations are as follows:

(1) Coordinate for security forces. If the host nation secures the outside perimeter, US personnel must secure the inside perimeter.

(2) Avoid becoming a lucrative target.

(3) Include security in each plan, SOP, OPORD, and movement order.

(4) Develop specific security programs such as threat awareness and OPSEC.

(5) Restrict access of unassigned personnel to the unit's location.

(6) Constantly portray an image of professionalism and readiness.

(7) Consider force protection throughout the range of military operations; base the degree of security established on a continuous threat assessment.

i. **Command, Control, Communications, and Intelligence.** Brigades do not normally perform the function of a joint task force headquarters. If a JTF has not been established for the operation, a command and control element from the division performs the role of the JTF to integrate the other services. This role allows the brigade to focus on the control of its battalions.

(1) ***Command and support relationships.*** The ambassador to the country is responsible for US operations, both civilian and military, except military forces under the command of a regional CINC. He heads a country team that interfaces with civilian and military agencies. The term "country team" describes in-country interdepartmental coordination among the members of the US diplomatic mission. Examples are as follows:

- Economic officer.
- Director of USAID.
- Commercial Attache.
- Agriculture Attache.
- USIA.
- Chief, Security Assistance Office (SAO, MAAG, MILG, and so forth).

(a) The US area military commander is not a member of the diplomatic mission. The JTF interfaces with the senior military defense representative on the country team. If no JTF has been established, division or brigade headquarters may be responsible for interface with the country team and host nation.

(b) Command and control headquarters may be unilateral or established with the host nation. An interagency headquarters of civilian and military forces also include police, paramilitary, security, and even other US agencies. The headquarters must coordinate operations with civilian agencies to ensure no conflict of political and military objectives. The increased need for liaison with both military and civilian organization is evident.

(c) Civil affairs and PSYOP initiatives in and out of country are coordinated with the Agency for International Development and the US Information Service through the JTF. The brigade conducts detailed coordination to ensure the purpose of current PSYOP and civil affairs efforts is understood. It may influence the planning, preparation, and execution of operations.

(d) If a conventional force follows an SOF during a deployment, it should request a liaison before arrival in the operational area. Conventional forces coordinate with SOF through the JTF. If a JTF has not been created, the unit contacts the SOF through the security assistance ofice. (See Chapter 8 for linkup procedures.)

(2) ***Communications.*** Communications abilities are augmented to affect long-range communications and proper liaisons. Equipment compatibility, crypto use, information sharing, and security measures are considered when working with SOF, joint forces, and multinational forces.

(3) ***Inte!ligence consideration.*** The brigade uses the IPB to portray the intelligence estimate for the commander. Population status, ethnicity, and socio-economic factors take an increasing importance. Threat doctrinal information may be scarce. HUMINT is a major focus, and the intelligence effort must be continuous, (See FM 34-130, for more information on IPB for operations other than war.)

(a) *Organizations.* Organization sources include all host country military and civilian intelligence systems as well as US intelligence sources.

(b) *Collection.* Tactical collection includes all sources. Technological capabilities may not provide significant advantage in some environments. An intelligence database may or may not apply or be available to the tactical commander. The focus of the IPB and the main source of intelligence is often HUMINT; every soldier must be a collector.

(c) *Restrictions.* Internal and external restrictions may exist on the dissemination of information. Gathering information on and within another country in conditions other than war has political sensitivity; how information was gathered is always protected.

(d) *Emphasis.* The intelligence effort must have continued emphasis. Before force commitment, the brigade must effectively collect, process, and focus intelligence to support all planning, training, and operational requirements. During execution, intelligence determines the proper course of action.

H-2. PRINCIPLES

Brigades may participate in operations other than war independently or as part of a larger and usually joint force. The tenet of versatility requires brigades to be able to adjust rapidly to these diverse requirements. The principles of operations other than war provide guidance for how the brigade should conduct itself in all operations other than war situations. The principles are perseverance, objective, unity of effort, security, restraint and legitimacy.

a. **Perseverance.** FM 100-5 states that operations other than war "the underlying causes of confrontation and conflict rarely have a clear beginning or decisive resolution." This presents a challenge when received in conjunction with the principle of objective. Perseverance has not been traditionally a part of the

American way of war and both the US public and military have grown accustomed to quick victory with minimal casualties. Such conditions may be difficult to achieve in operations other than war, and brigade commanders must be sensitive to this reality. The US is more likely to persevere inactions not involving direct military intervention.

b. **Objective.** Under the principle of objective, FM 100-5 advises "direct every military operation toward a clearly defined, decisive, and attainable objective." However, the perseverance principle says decisive resolution in operations other than war will be difficult. To address this situation, the commander must articulate a clear end state for the operation. The end state may require continued refinement during the operation The end state for operation Restore Hope was "an environment in which the UN and NGOs can assume full responsibility for the security and operations of the Somalia relief efforts." Conditions must also be established to meet the end state. An example of these conditions drawn from Restore Hope is the *four no's:* no bandits, no checkpoints, no technical weapons, and no visible weapons.

(1) The brigade commander faces the difficult and important task of translating objective guidance into tangible, tactical tasks. For example, during the 1992 riots in Los Angeles, JTF-LA was to "conduct civil disturbance operations to restore order in the greater Los Angeles area." This statement identifies the operation and the purpose, but not the task. Subordinate commanders must take such guidance and analyze it to produce the tactical tasks such as "retain intersection X, " "clear zone Y," and "secure route Z."

(2) The brigade must be alert to mission creep and keep a close handle on its resources and requirements to help maintain focus. A mission matrix is one tool that is used to help accomplish this.

c. **Unity of effort.** Note that this is not the familiar "unity of command" from the principles of war. In operations other than war, the emphasis is on cooperation rather than command. Joint, multinational, NGO, and interagency personnel will be involved The demand for liaison is tremendous. In many operations other than war situations, the infantry brigade wil not be the main effort. Different personnel in the operation, especially relief agencies, may have different agendas. It is important to find out who has authority in the AO, whether it is religious, civic, business, military, political, or other basis, and work through and with them.

d. **Security.** The nonhostile intent of friendly forces involved in operations other than war does not mean that the enemy or noncomplying forces share that same intent. This danger is compounded by intelligence difficulties. There are no doctrinal threat templates for operations other than war to compare with those in FM 100-2 Soviet manuals. As R. James Woolsey said, "Yes, we have slain a large dragon. But we live now in a jungle filled with a bewildering variety of poisonous snakes. And in many ways, the dragon was easier to keep track of." This is compounded by the lack of HUMINT collection assets available in a HUMINT intensive environment. These conditions make the IFB process all the more important.

e. **Restraint.** Sometimes at odds with the need for security is the principle of restraint. Almost all operations other than war activities will be conducted IAW some rules of engagement. Soldiers will have to accomplish their mission without using maximum force. Predeployment training in the form of what if scenarios and ROE dilemmas is essential.

(1) Table H-1 is an extract of ROE dilemmas adapted for the 1992 Los Angeles riots. The dilemmas will vary for each ROE.

DILEMMA	RESPONSE
1. RECEIVE SNIPER FIRE (0 CASUALTIES).	TAKE COVER; EMPLOY SMOKE. IDENTIFY LOCATIONS OF SNIPER; SURVEIL SNIPER. REPORT TO CHAIN OF COMMAND. EMPLOY COMBAT VHS CAMERA. REQUEST BN COUNTERSNIPERS. INFORM POLICE LIAISON. MAKE DETAILED LOG ENTRY.
2. CROWD APPROACHES (GAIN CONTROL OF CROWD, IF UNLAWFUL, DISPERSE PEACEFULLY).	REPORT TO CHAIN OF COMMAND. MAKE DETAILED LOG ENTRY. EMPLOY VHS CAMERA. USE BULLHORN TO TELL CROWD TO DISPERSE. REQUEST APPROPRIATE ARMING ORDER (AO-I THRU AO-VI). INFORM POLICE LIAISON.

Table H-1. Adapted rules of engagement dilemmas.

DILEMMA	RESPONSE
3. PROJECTILES THROWN (NO SOLDIERS INJURED, APPREHEND ASSAULTER(S) AFTER USING MINIMUM FORCE).	REPORT TO CHAIN OF COMMAND. MAKE DETAILED LOG ENTRY. EMPLOY COMBAT VHS CAMERA. INFORM POLICE LIAISON. DODGE THE PROJECTILES; DO NOT THROW THEM BACK. APPREHEND THE ASSAILANT(S); TURN THEM OVER TO POLICE.
4. IN-PROGRESS CRIME AGAINST A PERSON (SERIOUS BODILY HARM OR DEATH MAY HAPPEN).	STOP THE ASSAULT WITH MINIMUM FORCE NECESSARY; USE DEADLY FORCE IAW ROE; REPORT TO CHAIN OF COMMAND. MAKE DETAILED LOG ENTRY. EMPLOY COMBAT VHS CAMERA. INFORM POLICE LIAISON.
5. IN-PROGRESS CRIME AGAINST (ARSON; LOOTING; DESTRUCTION) A JTF-DESIGNATED "PROTECTED FACILITY."	STOP THE CRIME WITH MINIMUM FORCE NECESSARY; USE DEADLY FORCE IAW ROE; REPORT TO CHAIN OF COMMAND. MAKE DETAILED LOG ENTRY. EMPLOY COMBAT VHS CAMERA. INFORM POLICE LIAISON.
6. IMMINENT HARM TO YOU.	PROTECT YOURSELF WITH MINIMUM FORCE NECESSARY; USE DEADLY FORCE IAW ROE. REPORT TO CHAIN OF COMMAND. MAKE DETAILED LOG ENTRY. EMPLOY COMBAT VHS CAMERA. INFORM POLICE LIAISON. APPREHEND ASSAILANT; TURN OVER TO POLICE.
7. PERSON OBSERVED WITH WEAPON.	REPORT TO CHAIN OF COMMAND. MAKE DETAILED LOG ENTRY. EMPLOY COMBAT VHS CAMERA. INFORM POLICE LIAISON. OBSERVE.
8. ACCESS TO KEY/VITAL/DESIGNATED FACILITY REQUESTED.	REPORT TO CHAIN OF COMMAND. MAKE DETAILED LOG ENTRY. EMPLOY COMBAT VHS CAMERA. INFORM POLICE LIAISON. CHECK WRITTEN SPECIAL INSTRUCTIONS. CHECK INDIVIDUAL'S ID. PROTECT YOURSELF WHILE MAKING CHECKS. BE COURTEOUS. DENY ENTRY TO UNAUTHORIZED PERSONNEL.
9. COME UPON CIVILIAN CASUALTY.	REPORT TO CHAIN OF COMMAND. MAKE DETAILED LOG ENTRY. EMPLOY COMBAT VHS CAMERA. INFORM POLICE LIAISON. RENDER FIRST AID. EVACUATE TO SAFE LOCATION.

Table H-1. Adapted rules of engagement dilemmas (continued).

(2) Another restraint consideration might be arming status. The appropriate arming status should be a function of the threat and soldier experience, training, and discipline. See Table H-2, page H-6, for the arming order levels that were used in the Los Angeles riots.

ARMING ORDER	RIFLE	BAYONET SCABBARD	BAYONET	PISTOL	BATON	AMMUNITION	
						CONTROL	CHAMBER
AO-I	AT SLING	ON BELT	IN SCABBARD	HOLSTERED	ON BELT	OIC/NCOIC	EMPTY
AO-II	AT PORT	ON BELT	IN SCABBARD	HOLSTERED	ON BELT	OIC/NCOIC	EMPTY
AO-III	AT SLING	ON BELT	FIXED	HOLSTERED	ON HAND	OIC/NCOIC	EMPTY
AO-IV	AT PORT	ON BELT	FIXED	HOLSTERED	ON HAND	OIC/NCOIC	EMPTY IN POUCH
AO-V	AT PORT	ON BELT	FIXED	HOLSTERED	ON HAND	OIC/NCOIC	EMPTY MAGAZINE IN RIFLE/PISTOL
AO-VI	AT PORT	ON BELT	FIXED	IN HAND	ON BELT	OIC/NCOIC	LOCKED/LOADED

Table H-2. Arming order levels.

f. **Legitimacy.** Build and sustain the willing acceptance by the international community, the US public, and the indigenous populace of the right of the sponsoring authority to take action. Loss of acceptance by any one of the above groups limits or jeopardizes the effectiveness of the operations.

(1) Legitimacy is first developed through the diplomatic process in the source of authority and development of a mandate. Military force and military operations do not establish legitimaey, they support it. They support it through the composition of the force, ROE, and restraint.

(2) The composition of the force must support the mandate and be politically acceptable to the international community while being able to complete the mission and protect the force. The composition of the force must support the stated goals of the sponsoring authority. Perception that the forces employed exceed the limits of the mandate lessens legitimacy with the international community, the US public, and the indigenous populace. Capability and acceptability are not constants but wary based on the threat, the intensity of operations, the missions to be performed, and changing international perceptions.

(3) Minimal use of violence and strict adherence to the mandate are the two fundamentals of building and maintaining legitimacy. Misplaced or wrongful use of force could require that an element be withdrawn from the effort. While commanders must protect their soldiers, only the minimal essential force required is acceptable in operations other than war. Respect, in word and action, for the people, both as individuals and as a culture, does much to legitimize the operations other than war forces. In situations where local cultures differ from one or more elements of the force, the achievement of respect may entail a significant troop education effort.

(4) Another major concern is the efforts to establish legitimacy by way of dealing with the media. The presence of the media on the battlefield is a reality that must be dealt with. The following is a sample guidance list of do's and don'ts for dealing with the media:

- You do not have to talk to the media if you do not wish to.
- Always protect classified information. Do not guess or speculate on things you don't know about. Anything you say can be in enemy hands within minutes.
- Members of the media will be credentialed and escorted by a military or DOD civilian escort.
- Discuss only matter in which you have direct knowledge. If you don't know say, "I don't know."
- Do not discuss political or foreign policy matters.
- Do not discuss operational capabilities, exact numbers or troop strengths, numbers/types of casualties, types of weapon systems, or future plans. Use the term "approximate" or light, moderate or heavy.
- Do not answer "what if" questions or render opinions.
- Never lie to the news media.
- Everything you say is "on the record, " never answer "off the record" questions. Simply say I can't tell you off the record, however, I can tell you... !

- Ignore the reporter's camera and talk to the interviewer.
- Be brief/concise; use simple language, not jargon. Avoid acronyms.
- Take your time; think-questions need not be answered instantly.
- Answer only one question at a time.
- Do not provide the enemy with propaganda material by grumbling and thoughtless complaining.
- If you accidentally say something classified, tell the reporter and ask him not to use it. Report the incident to higher. Do not confiscate any material or equipment from the media.
- Do not attempt to cover embarrassing events under a cloak of security classification.
- Maintain a professional attitude during interviews; remain in control even when the media seems aggressive or questions seem silly. Reasoned responses will help you stay in control of the interview.
- Do not allow yourself to be badgered or harassed.
- Be polite but firm in dealing with the press.
- Do not schedule or participate in an interview when it would interfere with your mission. However, do not use unit missions as an excuse to avoid the media or interview.
- Use the media opportunity to tell your unit and Army story.

Section II
ACTIVITIES

FM 100-5 addresses operations other than war and categorizes them into 13 activities. The boundaries between these activities are not always well defined nor are they meant to be exhaustive. The following is a general discussion of the common activities.

H-3. NONCOMBATANT EVACUATION OPERATIONS

Noncombatant evacuation operations are conducted to evacuate US citizens whose lives care in danger. These operations may also include evacuating natives of the host nation and third country aliens friendly to the US. This type of operation involves swift insertion and temporary occupation of an objective followed by a planned withdrawal. Leaders use only the amount of force required for protection of the evacuees and for self-defense.

a. The key in planning is to determine whether the evacuation takes place in a benign environment, involves facing the threat of violent opposition, or will, in fact, be a combat operation. The NEOs are conducted in three types of environments:

(l) ***Permissive.*** In permissive environment, there is no apparent physical threat to evacuees. The host government will not oppose their orderly departure or US military assistance. Military assistance is normally limited to medical, logistics, military police, and transportation. Security forces are tailored to what is required to protect military property personnel. Depending on the political situation in the HN, the JTF commander may elect to have a reaction force on standby to respond rapidly if the environment becomes less permissive.

(2) ***Uncertain.*** In an uncertain environment, the degree of danger is uncertain. The host government may or may not be in control but cannot ensure the safety of US citizens. Because of the uncertainty, the JTF commander may elect to reinforce the evacuation force with additional security units. The need for a reaction force comes more important. Forced entry may be required. In this environment, the JTF commander will probably elect to issue weapons and ammunition to evacuation force personnel. The ROE must be disseminated early enough to ensure troops are trained, and they must be strictly enforced to avoid escalation of hostilities.

(3) ***Hostile.*** In a hostile environment, host government or other forces are expected to oppose evacuation and US military assistance. The JTF commander may elect to deploy a sizable security

element with the evacuation force. He may position a large reaction force, either with the evacuation force or at an ISB. Forced entry may be required. The ROE must be strictly enforced.

b. The brigade objectives are limited to those tactically needed to provide a suitable avenue of evacuation. Care of civilians and maintenance of order in and around the evacuation site are prime responsibilities. Because of the sensitive nature of the mission, political concerns and constraints apply. The military NEO role consists of five phases:

PHASE I: Predeployment. The military NEO role begins with the brigade being notified and ends with the deployment phase.

PHASE II: Deployment. During this phase, the brigade moves to the intermediate staging base (ISB) or directly to the host nation.

PHASE III: Evacuation. During this phase, the evacuation force establishes an evacuation site, coordinates with US Embassy personnel, escorts US citizens to designated assembly areas and the evacuation site, processes the evacuees, and transports them to the safe haven. Commanders should anticipate evacuating more personnel than estimated by the US Embassy.

PHASE IV: Safe Haven Operations. During this phase, planners may wish to collocate the safe haven with the ISB, since they both must be at the nearest protected site to the host nation. Two other possibilities are involved during this phase. The *first* is that the host nation asks the US forces to leave the safe haven, since the political situation makes its presence undesirable. Therefore, the processing of evacuees is turned over to the US Embassy officials from the safe haven country. The State Department personnel have the responsibility for this phase rather than the military, since they screen all evacuees before they enter the US. The *second* possibility is that the military transports the evacuees directly to the US. The screening then takes place on US soil and the military cannot participate.

PHASE V: Withdrawal. During this phase, the evacuation force recovers all equipment, retrieves rear detachments, and moves back to its home base. If the operation is smooth, this phase is short and simple. If US citizens or the military must remain in either the host nation, ISB, or the safe haven after the US Embassy closes, the joint task force commander is responsible for the safety and security of both US forces and evacuees.

H-4. SUPPORT TO DOMESTIC CIVIL AUTHORITY

Domestic support operations are covered in detail in FM 100-19. Support to US civil authority includes those activities provided by military forces in support of federal and state officials under and limited by the *Posse Comitatus Act* and other laws and regulations. Congress and the courts view requirements for military support in civilian domestic affairs as situation-specific. These requirements restrict military support to situations that involve disaster assistance, civil disorder, threats to federal property, and some other emergencies. Congress defines drug trafficking, illegal immigration, and customs violations as threats to national security that warrant military support. Military involvement either as a primary or a supporting agency, is depicted in Table H-3.

a. **Disaster Assistance.** Disaster assistance provides emergency aid to civilians and helps restore vital public activities and facilities. The brigade becomes a rapidly deployed manpower base in response to these crises. Military assistance includes:

- Medical supplies, equipment, and emergency medical treatment.
- Food, water, and shelter.
- Rescue and fire fighting services.
- Police protection.
- Route clearance and traffic control.
- Prevention of panic.
- Communications.
- Restoration of facilities.
- Enforcement of curfews.

b. **Civil Disorders.** The mission of the brigade forces during civil disorders is to assist local authorities in restoring and maintaining law and order. The brigade can do the following:

- Present a show of force.
- Establish road or area blocks.
- Disperse crowds.
- Release riot control agents.
- Patrol.
- Serve as security forces or reserves.

AGENCY	EMERGENCY SUPPORT FUNCTIONS											
	TRANSPORTATION	COMMUNICATIONS	PUBLIC WORKS AND ENGINEERING	FIREFIGHTING	INFORMATION AND PLANNING	MASS CARE	RESOURCE SUPPORT	HEALTH AND MEDICAL SERVICES	URBAN SEARCH AND RESCUE	HAZARDOUS MATERIALS	FOOD	ENERGY
USDA	S	S	S	P	S	S	S	S	S	S	P	S
DOC		S	S	S	S	S	S			S		
DOD	S	S	P	S	S	S	S	S	P	S	S	S
DOED					S							
DOE	S		S		S		S			S		P
DHHS					S		S	P	S	S	S	
DHUD						S						
DOI		S	S	S	S	S				S		
DOJ					S			S		S		
DOL			S				S		S	S		
DOS	S									S		S
DOT	P	S	S		S	S	S	S	S	S	S	S
TREAS					S							
VA			S			S	S	S				
AID								S	S			
ARC					S	P		S			S	
EPA			S	S	S			S	S	P	S	
FCC		S										
FEMA		S		S	P	S	S	S	S	S	S	
GSA	S	S	S		S	S	P	S	S	S		S
ICC	S											
NASA					S							
NCS		P			S		S	S				S
NRC					S					S		S
OPM							S					
TVA	S	S										S
USPS	S					S		S				

LEGEND

P—PRIMARY AGENCY RESPONSIBLE FOR MANAGEMENT OF THE EMERGENCY SUPPORT FUNCTIONS.

S—SUPPORT AGENCY RESPONSIBLE FOR SUPPORTING THE PRIMARY AGENCY.

Table H-3. Military support to domestic civil authority.

H-5. PEACE ENFORCEMENT

Peace enforcement operations possess unique characteristics that make them distinct from war and unique in operations other than war. (See Figure H-1.)

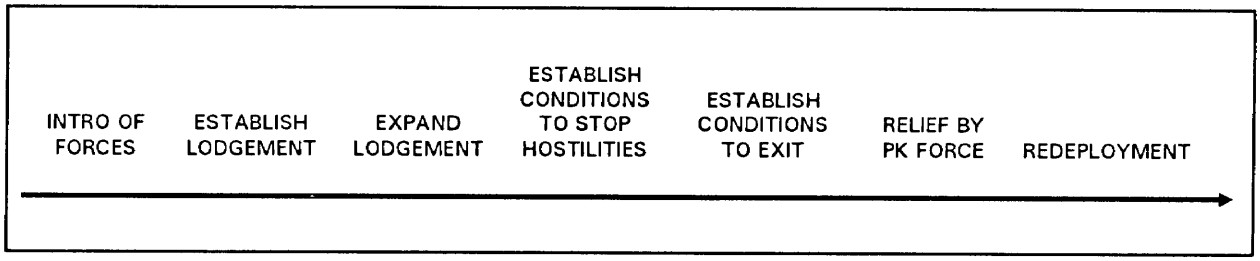


Figure H-1. Sequence of peace enforcement operations.

a. Peace enforcement is a form of combat, armed intervention, or the physical threat of armed intervention. It is pursuant to international license, authorizing the coercive use of military power to compel compliance with international sanctions or resolutions. The purpose of peace enforcement is to maintain or restore peace under conditions broadly defined by the international community.

b. Army forces may be employed under these circumstances to separate hostile factions or belligerent parties forcibly. Such operations involve a high probability of combat, involving combat multipliers from PSYOPS and civil affairs to mechanized infantry and armored forces.

c. Other peace enforcement operations may include the following:

- Enforcement of sanctions.
- Protection of the human rights of minorities.
- Protection of humanitarian relief efforts.
- Guarantee or limitation of freedom of movement (ground, air, sea).
- Restoration of territorial integrity.

d. The US may participate in peace operations under the auspices of an international organization such as the UN, in cooperation with other countries, or unilaterally.

e. Peace enforcement forces create the conditions for peace. The forces cannot solve the underlying problems that cause peaceful relations to dissolve. Inserting the forces to stop combat is the essential first step in setting the conditions for peace, but military operations cannot be the basis of a hasting peace. Settlement, not victory, is the goal of all peace enforcement operations. The measure of success is always political, not military.

f. Conflict, violence, disorder, and possibly chaos, rather than peace, describe the environment surrounding enforcement operations. Moreover, one or more of the belligerent parties to the conflict prefers it that way.

g. The consent of one or both belligerent parties to peace enforcement may not exist. Peace enforcement operations are likely to disregard state sovereignty, especially if the mission takes place on the soil of the combatant who opposes peace and has not invited the peace enforcers into its territory.

h. Methods of coercion may be the rule rather than the exception for peace enforcement forces and operations. Such coercion involves activities or objectives that make the political embrace of peace more attractive than continuance of the conflict.

i. Peace enforcement forces may fight their way into the conflict area and use force to separate the combatants physically. Under these conditions, they should consider certain factors. First, the peace enforcement force usually retains the right to use the appropriate force first. However, the threat of overwhelming forces, while not proportional to the requirement for protecting the peace enforcement units, may be the best means of coercing the belligerent parties into separating. Commanders must not allow a gradual escalation of force to be perceived by the belligerent parties as a weakness. The area of operations is normally characterized by some density of civilians. This situation poses special considerations for threat identification collateral damage, civilian casualties, and displaced civilians.

j. If the threat of force fails, the peace enforcement force may have to engage in offensive actions. However, commanders must be aware that inappropriate use of force could worsen the overall situation. Such use of force may involve inflicting and suffering casualties, possibly undercutting international and US domestic

support and the legitimacy of the force in the eyes of the populace and others in the area of operations.

k. The peace enforcement force is not well-suited to transition to a peacekeeping force. Because of its previous use of force, it would not be considered neutral by both of the belligerent partics.

1. Modern arms and the training to use them are readily available to most of the world's political belligerents. Therefore, US forces must be prepared to deal with a determined, well-armed, and well-trained foe.

m. In accordance with the principle of objective, the commander focuses on an end state. This end state is abroad description of what the legitimizing authority wants the theater to look like following the application of the various elements of power. These elements include political, economic, informational, and military. An example of a possible end state is as follows:

- Lines of communication secured.
- All combatants separated.
- A cease fire implemented.
- A UN peacekeeping force in place.
- International humanitarian relief operations ongoing.

n. As seen in Figure H-3, peace enforcement operations follow a natural sequence or phasing that can be used as an execution framework for staff planning: introduction of forces, establishment of the lodgement of the conditions for the exit of peace enforcement forces, and the relief by peacekeeping forces and redeployment. The following discussion assumes that the the national command authority decision to deploy peace enforcement forces and interagency force tailoring have taken place.

(1) ***Introduce forces into the area of operations.***

(a) *Preparation of the area of operations by SOFs.* The SOFs prepare the AO through normal SOF activities designed to gain intelligence updates on key and local personalities and facilities. The SOFs make contact with local agencies and friendly authorities. The PYOPS effort must begin early in the operation. The SOFs establish surveillance over the planned points of entry. The SOFs might also conduct operations to prevent the synchronized defense or counterattack by threat forces in the vicinity of the point of entry. Finally, the SOFs provide up-to-the-minute weather and intelligence before the leading forces enter.

(b) *Entry.* The tactical environment within the AO dictates the nature of the initial entry of forces. The objective is normally an airfield and or port facilities. An unopposed entry is preferred and should be attempted through diplomatic coordination with host nation authorities. However, the initial-entry forces may have to conduct a forced entry to gain a lodgement for the entry of follow-on forces. In either case, ROE and other characteristics of peace enforcement operations influence the conduct of the operation.

(2) ***Establish the lodgement*** Once force leaders have secured the entry point, actions to establish the lodgement include security patrolling; fundamental force protection measures, the establishment of command, control, and communications facilities; logistics build-up; and the posting of checkpoints and roadblocks to control entry into the lodgement area. This posting of checkpoints and roadblocks may include the link up with and the relief of SOF elements posted at key choke points, allowing them to prepare the AO for the expansion of operations. Finally, installation security measures are established (for example, the establishment of perimeters and the posting of guards). The technique of base clustering logistics, command and control, and maneuver elements are considered as a means of force protection, concentration, and flexibility. The use of this technique is measured against the risk of enemy targeting. The establishment of the lodgement is executed as a normal combat operation under the constraint of the ROE.

(3) ***Expand the lodgement.*** In addition to security patrolling, reconnaissance patrolling begins the effort to expand the lodgement. Commanders and leaders need to orient themselves and their so soldiers to the area through contact with local authorities and the populace. Staffs continue to update their information on the area and revise their assessments for operational requirements. Combat, CS, and CSS elements continue to arrive, increasing combat power and improving logistics facilities and other required infrastructure.

(4) ***Establish conditions to stop hostilities.***

(a) *Separate the belligerent parties.* The first step in stopping hostilities is the separation of belligerent parties. This may involve combat operations that range from show-of-force to movements-to-contact or limited objective attacks to seize key terrain. The intent of ground commanders is to separate belligerents and affect their withdrawal from the designated buffer or demilitarized zone. The boundaries of this zone must be easy to recognize.

(b) *Support mediation and negotiation efforts.* All military operations work toward supporting the political efforts at mediation. These efforts involve monitoring the activities that both sides undertake "in good faith" to ensure that good faith is maintained. The military may find itself involved in mediation and

negotiation efforts, and the following is a checklist to help guide in the effort:

- Highlight arms of agreement.
- Summarize points of disagreement.
- Hear arguments without interruption.
- Tackle easy issues first.
- Use two interpreters if you are concerned that one interpreter may give inaccurate translation.
- Consider having a subordinate conduct initial sessions so that any faux paus can later be corrected by a senior official.
- Have a signal made up so that an assistant can call you away for a phone call or bring in refreshments if a break is needed.

Support civil affairs operations. Military personnel can expect to become involved in civil affairs operations. Soldiers are an integral part of the coordination of civil affairs activities. They are also used to take part in civil affairs projects to promote good will.

(d) *Report progress.* As the belligerent parties disengage, through coercion or combat, the peace enforcement unit assumes the tactical positions of the displaced forces. The commander considers informing all parties of the unit's progress. Though this violates OPSEC, it does preclude unintentional engagements and lessens the risk of fratricide.

(e) *Establish buffer and demilitarized zones.* As the belligerent parties withdraw, the buffer or demilitarized zone begin to take shape. A buffer zone is defined as the space controlled by the peace operations force, which gives the desired assurance that the specified parameters and the degree of risk are not exceeded. The specified parameters are determined by METT-T; ROE; range of the belligerent parties direct, indirect weapons systems; and the commander's intent. In contrast to buffer zones, DMZs are not normally occupied by third party presence but are patrolled by observer teams or surveyed from OPs. The DMZs are created to neutralize certain areas from military occupation and activity. In general, these are areas that are claimed by both sides, and the control by one could constitute a direct threat to the other.

(f) *Maintain separation of the belligerent parties.* With the establishment of a buffer or demilitarized zone, certain missions are conducted to maintain the separation of the belligerents. (Consideration sgould be given to conducting nonpermissive noncombatant evacuation operations.)

(5) *Establish conditioins for the exit of forces.* Once belligerent parties separate, operations are conducted to keep them apart Security operations, such as screening, combat and reconnaissance patrolling, cordon and search, search and attack, and establishment of checkpoints and roadblocks to control movement into and within the buffer zone are normally conducted to maintain the separation of belligerent parties. Peace enforcement forces may not be able to exit the area until the mission has been accomplished. This involves formalizing the cessation of hostilities. At the local level, this may include public ceremonies mirroring national or regional ceremonies or agreements to end hostilities. The agreement of both belligerent parties to remain separated is the goal.

(6) ***Relief by peacekeeping forces/redeployment.*** Peace enforcement forces plan to exit the area when the agreements and buffer zones are formalized and should not attempt to transition to peacekeeping roles. The handover of operations and facilities occur much like a relief in place operation. The establishment of liaison, linguistic assistance, the sequencing of incoming and outgoing forces (combat, combat support, and service support), and the coordination of logistics and equipment left in place are of prime important. Given this framework, commanders and staffs can begin to plan and prepare for peace enforcement operations.

H-6. HUMANITARIAN ASSISTANCE AND DISASTER RELIEF

Disaster relief operations provide emergency assistance to victims of natural or man-made disasters. Brigade elements involved in disaster relief operations have various tasks; they include refugee assistance, food programs, medical care, and other civilian welfare programs. Army CS and CSS units are key players in these operations, but combat arms units provide the added support. If the operation is conducted inn hostile area the unit involved may have a force protection o r security mission. The operation is discontinued when the host country gains enough control to continue on its own; it is reduced activity by activity. This process is accomplished by phases until call military units have departed. The military provides the logistic support to move supplies to remote areas, extract or evacuate victims, provide emergency communications, and conduct direct medical support operations.

H-7. PEACEKEEPING OPERATIONS

A peacekeeping force facilitates a negotiated truce and political settlement of disputes by assuring each side that the other is not taking advantage of the terms to its own benefit. The peacekeeping force differs from internal security in that the force does not act in

support of a government. The peacekeeping force remains entirely neutral. Once the force loses its reputation for impartiality, the usefulness of the force is destroyed. The following conditions must be present in order for peacekeeping operations (PKOs) to work well:

- Consent of the belligerents.
- The political recognition of the PKO by most if not all of the internaltional community.
- A clear, restricted, and realistic mandate or mission.
- Sufficient freedom of movement for the force, or observers, to carry out their responsibilities.
- An effective, command, control, and communications (C3) system.
- Well-trained, balanced, impartial, noncoercive forces.
- An effective and responsive all-source intelligence capability.

a. **Political Factors.** Political factors influence the tactical execution of PKOs. Specifically, the political process mandates ROE, freedom of movement and area of operations. Often, political restrictions limit the military commander in the conduct of the mission. The tactical commander complies with instructions and informs the chain of command of the tactical implications of a political decision. Political and military leaders must understand each other's perceptions and problems. The peacekeeping mission operates with a mandate that describes the scope of operations for the mission. The sponsoring bodies usually consist of several countries. Although these countries are supposed to be impartial, each may have its own idea of what the peacekeeping force should do. Also, the agreement frames the mandate for the peacekeeping force in such a way that it gives advantage to no side. For these reasons, the agreement is imprecise and susceptible to different interpretations by the belligerent parties and all countries contributing to the force as well.

b. **Guidelines.** To plan a PKO, the planner considers political factors, force structure, command and control, reinforcement/rotation, maintenance and supply of equipment, emergency withdrawal plans, weapons policy and ROE, public affairs policy, morale and welfare support, the use of technology, and force protection.

(1) The difficulties of joining a multinational force in a hostile environment, in unfamiliar territory, and with restrictions on one's freedom of action are overcome if commanders study the history and lessons of previous PKOs. They can anticipate the kinds of problems that may occur in a new operation. Force mandates, which lay down the principles governing the conduct of operations, vary to meet the circumstances peculiar to each operation. A number of guidelines apply to the conduct of a peacekeeping force in all situations:

(a) All members must be fully briefed on the political and military situation, the customs and religions of the people, and be kept up-to-date as the situation changes. Every effort must be made to know the people and to understand their problems with the aim of achieving a reputation for sympathy and impartiality.

(b) Peacekeeping personnel maintain a high profile, and consequently, their lives are continualy at risk. Commanders need to maintain a confident presence with due provision for the safety of their troops. An officer should be present when a detachment is likely to face a difficult situation.

(c) All units must enforce the policy on ROE and the action to be taken with regard to infringements and violations of agreements. In operations where units have used different standards in executing the ROE, there has been trouble with the parties to the dispute and constant friction as well as recrimination between the national contingents of the peacekeeping force.

(2) In peacekeeping, small incidents have serious political results. Trivial events can increase rapidly into major crises and calls for emergency meetings of the security council. Although there are great advantages in dealing with problems at the lowest possible level, senior commanders and force headquarters must follow the smallest incident with interest. They may also have to intervene at an earlier stage than is customary in normal military operations.

(3) Centralized control ensures a uniformity of reaction to incidents and may prevent sudden action by inexperienced peacekeepers. However, no superior commander can foresee every eventuality or predict how incidents may develop. The commander allows a measure of initiative to junior leaders within the general framework of force policy directives and SOPs.

(4) Subordinates ensure their superiors are informed of situations as they develop. They suggest possible courses of action in enough time for their leaders to evaluate them and give directions. If a subordinate anticipates a serious crisis in time, a superior commander, even the force commander, goes to the scene and takes charge. However, there are occasions when an incident develops so fast that the subordinate must immediately decide the most sensible

course of action. The subordinate must report what he has done and the reasons for his actions as quickly as possible.

c. **Technology.** Technology assists substantially in the conduct of PKOs. The missions can involve extended distances or restrictions that can be reduced by technology. Useful systems are as follows:

- Intelligence fusion systems.
- Effective countermine equipment.
- Effective night vision equipment.
- Communications systems.
- Surveillance systems.
- Lightweight body armor.
- Accurate ground maps.
- Modular tactical force protection equipment.

Early in the planning process, commanders give consideration to the use of such technology as sensors to provide better surveillance or perform other key peacekeeping roles. For example, the Sinai field mission successfully incorporated a wide range of sensors to continuously monitor key terrain.

d. **Peacekeeping Tasks.** Each PKO is unique; however, a PKO may be one of the following or a combination thereof: withdrawal and disengagement, cease fire, prisoner-of-war exchange, or demilitarization and demobilization. Accomplishment of PKOs often includes obscure situations; the peacekeeping force may have to deaf with extreme tension without becoming involved. Tasks normally assigned to a peacekeeping force can be listed under the following headings: supervise a truce or cease-fire agreement or contribute to the maintenance of law and order and a return to normal conditions. To accomplish these tasks, leaders may need to establish and deploy military peacekeeping units and observer groups in a demilitarized zone or a buffer zone between the opposing forces. This enables a force to do the following:

- Exercise control and surveillance of an area or boundary and demarcation line between the opposing parties.
- Prevent infiltration or a confrontation between the opposing forces.
- Direct local negotiations between the parties concerned.

(1) The tasks may also involve a survey of the opposing forces' military and paramilitary units to ensure the following:

(a) Permitted units are not increased above the strength stated by the parties involved.

(b) Existing fortifications are not reinforced or enlarged.

(c) Arms and supplies are not increased from those agreed upon.

(d) Armistice demarcation line or buffer zone are not overflown by aircraft from the opposing sides.

(2) The methods used to accomplish a mission may include the following:

- Observing.
- Patrolling.
- Traffic controlling.
- Surveying of sensitive areas.
- Preventing or dispersing prohibited demonstrations.
- Checking on transportation of goods.
- Searching for missing persons.
- Negotiating with local authorities.
- Providing logistic support to isolated ethnic groups.
- Gathering information.
- Clearing mines.
- Marking forward limits of each side's military forces.
- Receiving the remains of KIAs.

H-8. SHOW OF FORCE

Forces deployed abroad lend credibility to a nation's promises and commitments; these operations are meant to reassure a friend orally. They influence other nations by displaying a viable military force. These operations also influence other government or political-military organizations to respect US interests. Operations develop by deploying forces forward, using aircraft and ship visits, and by introducing forces as a show of force. The presence of a credible military force highlight policy interests and commitment; the force must be able to conduct a combat operation if the psychological effect proves insufficient for the purpose.

a. Deployment of strategic or rapid deployment forces provide show of force either in response to certain threats or as part of a routine exercise. The following elements are important for planning:

- Timeliness.
- Location.
- Tasks.
- Force composition and size.
- Means of entry and withdrawal.
- Purpose.

- Duration.
- Sustainment.

b. As with all operations other than war, the political nature of the operation prevails, mainly in the use of military forces. Since the object is not the use of force, legal and political constraints may apply. The operation is coordinated with the related country teams. Forces must understand the objectives; they must have the will to complete the operation without a clear military success. Before commitment, the chain of command ensures that the force understands the purpose, ROE, and inherent risks of the operation.

c. The first element vital to a show of force is the forward deployment or basing of forces. Also, the availability of required logistics and infrastructure is crucial. The force must be sustainable, which requires the following:

- Host nation support.
- Appropriate mobility assets.
- Sufficient liaison.
- Accurate intelligence.
- Clear lines of command and control.
- Adequate communications ability.
- Ready and responsive forces.

H-9. SUPPORT TO INSURGENCY AND COUNTERINSURGENCY

Support to insurgency or counterinsurgency includes all assistance the US can provide to help a friendly nation or group to combat or prosecute an insurgency.

a. When US armed forces are directed to assist, they provide equipment, training, and services to the insurgent force. An infantry brigade would probably not be committed to support an insurgency, but if it is, the brigade could perform a variety of combat and related tasks.

b. The US support to counterinsurgency rests on the IDAD concept. This concept uses all the leadership, organizational, and material resources available to the host government. If the host nation requests support and US interests are involved the US National Command Authority directs the US Army to participate. This assistance includes economic, political, and military assets. Brigade operations include civil affairs, population, and resources control; psychological operations; intelligence; tactical operations; and training assistance. Intelligence, PSYOP, and EAD/EAC signal assets; civil affairs teams; and medical, engineer, supply, transportation and maintenance units may be required to enhance these capabilities.

c. The brigade's most common combat role in counterinsurgency is executing counterguerrilla missions, such as search and attack operations. Usually, the brigade operates as part of a JTF or division. (See FM 90-8 for more information on counterguerrilla operations.)

H-10. COMBATTING TERRORISM

Combatting terrorism includes actions taken to protect installations, units, and individuals from the threat of terrorism. Antiterrorism focuses on defensive measures. Counterterrorism encompasses a full range of offensive measures to prevent, deter, and respond to terrorism. In operations other than war, antiterrorism countermeasures are a continuous requirement. The measures taken depend on the threat; they are included in al the categories of operations other than war. (See JP 3-07.2 for more information.)

H-11. RAIDS

In operations other than war, raids include the rescue of US or friendly foreign nationals, and the location, identification, and recovery of sensitive equipment. They also support political and diplomatic measures. These attacks are made for purposes other than gaining or holding terrain. Such operations are deliberate responses or quick reactions; they are either direct or indirect in nature. Raids aid cooperation; they create situations that let friendly nations seize and maintain the political initiative.

a. Raids can succeed if performed by organizations skilled in basic warfighting techniques. Such a force (rangers, special forces, or light infantry) acts alone or with special operations elements or allied forces. Elements are inserted by ship or aircraft. They strike strategic objectives, targets of high psychological profile, time-sensitive targets, or key personnel and bases.

b. Successful raids are characterized by the following:

- A start time and location not known by the enemy.
- Covert planning rehearsal, and deployment.
- Swift, violent, precise, and audacious actions that focus full combat power at the decisive time and place.
- Use of all available combat power assets.
- Precise timing.
- Swift disengagement when the mission is complete.
- Planned and swift withdrawal that includes deception plans.

c. Raids are normally conducted in five phases.

PHASE I: The force inserts into the objective area.

PHASE II: The objective area is scaled off from outside enemy support or reinforcement to include enemy air.

PHASE III: All available combat firepower is used to overcome the enemy force at or near the objective by surprise and violent attack.

PHASE IV: The mission is accomplished quickly before any surviving enemy can recover or be reinforced.

PHASE V: The force withdrawals from the objective area and is extracted.

H-12. SUPPORT TO COUNTERDRUG OPERATIONS

The armed services may be involved in many actions taken to disrupt, interdict, or destroy illicit drugs and the infrastructure (personnel, materiel, and distribution system) of illicit drug entities. Such action is always in conjunction with another governmental agency. Some of these agencies are the Coast Guard, Customs Service, Border Patrol of the Immigration and Naturalization Service, Department of State's Bureau of International Narcotics Matters, and the Drug Enforcement Administration. Military support to drug interdiction operations can include mobile training teams, offshore training, advisory personnel, logistic support (materiel, maintenance, resupply, and transportation), communications, and intelligence support. Using special aircraft, ships, and personnel, military forces help the US Coast Guard and other US law enforcement agencies track and interdict illegal drug shipments. As directed by the NCA, US military forces also help foreign governments to stop the processing of illicit drugs. Military training activities often adapt to support both combat readiness and the US counterdrug effort.

H-13. ARMS CONTROL, SECURITY ASSISTANCE, AND NATION ASSISTANCE

The infantry brigades have minimal involvement with the three remaining activities. There may be some short-term, high-impact involvement working with the allied nation's military under nation assistance. Arms control and security assistance activities may require temporary assignment of the brigade's senior leadership to support these missions.

Section III
LOGISTIC SUPPORT

This section provides general guidelines that apply to all categories of operations other than war. Logistic support in operations other than war involves providing material and supplies to US and host nation combat forces. It can also involve developing logistic systems, infrastructure, and procedures for the host nation, and training host nation logistic personnel. In operations other than war, logistic elements often precede other mil itary forces into the area of operation, or they may be the only forces deployed. Logistic systems supporting either US or host nation forces must operate within the environmental, legal, and political constraints governing US involvement. Therefore, such systems must be flexible to tailor support to the situation.

H-14. PRINCIPLES OF SUPPORT

The principles of support apply in all political-military environments. The logistician must apply and adapt these principles to the operations other than war environment, which presents unique challenges. The following are characteristics of logistic systems in operations other than war:

- Greatest economy of resources.
- Flexible task force composition
- Ability to operate in any theater or country.
- Routine use of host nation support to include local services, supplies, facilities, and transportation. It must not be used so extensively that it causes dislocation in domestic supplies, industries, services, or prices.
- Best use of existing fixed facilities such as lines of communication, ports, and airfields.

- Best handling of supplies.
- Greatest reliance on CONUS supply activities or, when appropriate, existing regional support bases.
- Provisions for self-protection and passive protection measures for logistic units.
- Routine use of both strategic and theater airlift until surface transportation can accommodate the deployment.
- Elimination of duplicate facilities and of overlapping functions.
- Short-duration conflicts (less than 90 days) should be supported by carefully tailored, preplanned resupply packages.

H-15. PLANNING

Planning for support of operations other than war is a continuous process. Although OPSEC may limit access to plans in the early stages, inclusion of the logistician at the outset during mission planning and force development is vital to the success of any operation. Once the concept of operation is determined, detailed logistics planning can proceed. Supporting plans should be as detailed as planning time permits. However, since operations other than war requirements arise with little warning and may occur in any theater of operation, leaders should be familar with operations other than war and their characteristics.

H-16. SECURITY CONSIDERATIONS

Once units are deployed, the wide dispersal of forces, the need to protect all bases and installations, the need to provide security for ground and air movement, and the problems of acquiring local resources can hinder logistic support in operations other than war. Due to these concerns, logistic facilities and stock levels should be kept low to reduce security requirements; this action lowers the risk of supplies being taken by an opposing force. While local resources should be used to the fullest, such use should not adversely affect the local security forces or population.

H-17. TAILORING OF LOGISTIC SUPPORT

The structure of most logistic organizations allows brigade to be tailored to the assigned mission and situation. This flexibility enables logistic organizations to meet the wide range of deployment situations in operations other than war. The conventional echelons of logistic functions are often not responsive enough to sustain operations other than war force in an austere area of the world. Direct contact by units in the area of operations with the wholesale logistic community is vital for responsive support to remote areas. Therefore, procedures must be established early on how to accomplish such direct contact. Simplicity allows the required flexibility for effective support under demanding and adverse conditions. Logistics support must be tailored to the force mixture and conditions of METT-T.

a. Normally, light battalions are attached to a heavy brigade and heavy battalions are OPCON to a light brigade. In operations other than war, the meaning of OPCON might include the OPCON unit bringing extended support assets on deployment. As the situation develops, the unit could become attached, and the support assets may be under the control of the higher headquarters.

b. The light brigade focuses on replacing parts, but the heavy unit focuses on repairing equipment.

c. Light units can use transportation assets of the heavy force.

Section IV
TRAINING

Training and preparation for operations other than war should not detract from a unit's primary mission of training soldiers to fight and win in combat. The foremost requirement for success in operations other than war is the successful application of warfighting skills. Operations other than war are not new missions and should not be treated as separate tasks for adding to a unit's METL. However, units selected for these duties do require time to train and prepare. The amount of training required, and when the training is given, depends on the specific operations other than war mission.

Most facets of normal military operations and training apply to operations other than war, especially personal discipline. Operations other than war require an adjustment of attitude and approach. To accomplish operations other than war, individuals and units need training in various skills and techniques before deployment to change the focus from combat-warriors to soldiers who may only use force in self-defense. The urgent need to deploy forces often precludes a complete and long training program. However, with prior training, a training program can assist the commanders in preparing for these missions.

H-18. UNIT TRAINING

Time required to train units for operations other than war varies according to the mission and unit. To be effective, the unit must tailor its entire training methodology toward the tasks required. Many of the combat METL are directly applicable, with slight modification, to operations other than war. The execution of certain tasks is adjusted to account for ROE and other considerations. Table H-4 lists the tasks and the skills that are required for specific operations other than war activity.

	NONCOMBATANT EVACUATION	ARMS CONTROL	SUPPORT TO DOMESTIC CIVIL AUTHORITY	HUMANITARIAN ASSIST DISASTER RELIEF	SECURITY ASSISTANCE	NATION ASSISTANCE	SUPPORT TO COUNTERDRUG OPERATIONS	COMBATTING TERRORISM	PEACEKEEPING OPERATIONS	PEACE ENFORCEMENT	SHOW OF FORCE	INSURGENCY AND COUNTERINSURGENCY	ATTACKS AND RAIDS
OPERATIONS													
CHECKPOINT OPERATIONS	X	X	X	X		X	X	X	X	X	X	X	
CORDON AND SEARCH OPERATIONS	X	X					X	X		X		X	
CONVOY OPERATIONS	X		X	X	X			X	X	X	X	X	X
SNIPER/COUNTERSNIPER OPERATIONS	X							X	X	X	X	X	X
FORCE PROTECTION	X		X				X	X	X	X	X	X	X
CLOSE QUARTER BATTLE							X	X	X	X	X	X	X
RULES OF ENGAGEMENT APPLICATIONS	X	X	X	X	X	X	X	X	X	X	X	X	X
CIVIL MILITARY OPERATIONS	X	X	X	X	X	X	X	X	X	X	X	X	X
PSYCHOLOGICAL OPERATIONS	X	X	X	X	X	X	X	X	X	X	X	X	X
SKILLS													
NEGOTIATION SKILLS	X	X				X		X	X	X		X	
MEDIA STRATEGY	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE SUPPORT IN OPERATIONS OTHER THAN WAR	X							X	X	X	X	X	X
IPB IN OPERATIONS OTHER THAN WAR	X	X	X	X	X	X	X	X	X	X	X	X	X
LOGISTICS IN IPB	X	X	X	X	X	X	X	X	X	X	X	X	X
MOBILITY/SURVIVABILITY	X			X	X	X	X	X	X	X	X	X	X
AIR DEFENSE ARTILLERY	X			X	X	X	X	X	X	X	X	X	X

Table H-4. Operations other than war tasks and skills.

H-19. LEADER DEVELOPMENT AND INDIVIDUAL TRAINING

Good leadership is important at every level—from the unit commander to the junior leader,

a. **Leader Development.** Leader development is most important in achieving success. Operations other than war require skill, imagination, flexibility, adaptability, and patience. Emphasis during training must be to develop these skills.

b. **Individual Training.** Individual training for operations other than war duties should emphasize the personal characteristics of patience, professionalism, impartiality, and inquisitiveness. These characteristics have unique meaning in an operations other than war environment.

(1) ***Patience.*** Except for the infrequent serious incident, nothing happens quickly. An attempt to hasten the pace in negotiations may prejudice the outcome. This is true, not only at the higher levels, but also at the lower levels where local difficulties are often resolved by company grade officers and senior NCOs.

(2) ***Professionalism.*** The credibility of a force involved in operations other than war is damaged by unprofessional activities during off-duty status, which in turn, affects its relationship with the parties in the conflict. All members of the force must be knowledgeable and trained in all aspects of the mission.

(3) ***Impartiality.*** A force must guard against unequal treatment and avoid controversial, off-the-record remarks that can reach unintended audiences. These comments can lead to a demand for the offender's removal and, if reflecting a prejudice, to pressure for the withdrawal of the entire national contingent.

(4) ***Inquisitiveness.*** The normal routine of daily life should become so familiar that soldiers notice even small events that could be of importance if matched with information from other observers. All personnel involved in operations other than war must receive training on the customs of the local population and coalition partners.

H-20. COMMON MILITARY SKILLS

Many of the skills that enable a unit to accomplish its primary mission apply in operations other than war. Training to enhance these skills should be a part of the predeployment training program. This training program should at least include the following common military skills: intelligence; observation and reporting; communications; patrolling; navigation; explosive ordnance safety precautions; locating, identifying, and marking mines; and NBC defense; convoy procedures and sustainment operations.

a. **Intelligence.** An important aspect of training for the mission of operations other than war is to understand that the force is a potential target of foreign intelligence and terrorist activities.

b. **Observation and Reporting.** Observing and reporting are the primary functions of a force involved specifically with peacekeeping. Individuals must be familiar with the standard reporting formats that include the following reports: situation, shooting, overflight, and aircraft sighting. Personnel should learn to recognize the aircraft, vessels, vehicles, dress, and equipment of all sides.

(1) Learning to function in an OP is essential. Small units must learn the typical layout of an OP and checkpoint as well as the general daily duty routine at an OP. A unit can live and work at an OP for days at a time, isolated from its parent organization.

(2) Training should emphasize security and patrolling, and the ROE that apply to operations. ROE applications are trained using the dilemma and vignette methods. Individuals who staff the checkpoints that stride major roads must be taught to slow and observe traffic without stopping it. This procedure allows them to observe and report traffic passing from one zone to another.

(3) Vehicles and personnel entering and exiting installations are stopped and searched for contraband and explosives. Personnel must learn not only how to search but also how to search courteously without undue force.

H-21. SUSTAINMENT TRAINING

Once deployed, the force can continue its mission training. If time permits, the force can also train in items that require recurring emphasis such as common task training. Training can be restricted by an agreement between the parties in the conflict. However, once the force is firmed, a schedule can be established that enables the force to train on METL requirements regularly.

a. Unit commanders plan to conduct unit training so that it can conduct its primary mission when not actively involved in operations other than war.

b. For a multinational or multilingual force to operate effectively, it must periodically train together. Although the commander and subordinate officers, regardless of nationality, must reconnoiter likely crisis points with discretion, they should perform training where it is unlikely to alarm the local population and the parties in the conflict.

H-22. POSTOPERATIONS TRAINING

Operations other than war require a major change in orientation for military personnel. Before operations other than war, training transitioned the combat-ready individual to one constrained in most actions. At the conclusion of operations other than war, certain actions are necessary to orient the soldier to the unit's wartime METL. Commanders must allocate sufficient resources and time for training in order to achieve collective and individual standards required to meet the unit's primary warfighting mission.

Unit commanders must allow time and resources after operations other than war for refresher training. The refresher training develops skills and abilities that have been affected by the nature of operations other than war. A training program must hone skills necessary to return the unit to a combat-ready status.

Appendix I
DECISION MAKING

Military decision making revolves around an established proven and analytical procedure called the deliberate decision-making process. The relationship among the TLPs, decision making, and the estimate of the situation is depicted in Figure I-1. A technique also used to incorporate the TLPs into the decision-making process is shown in Figure 1-2, page 1-2. Notice the use of multiple warning orders.

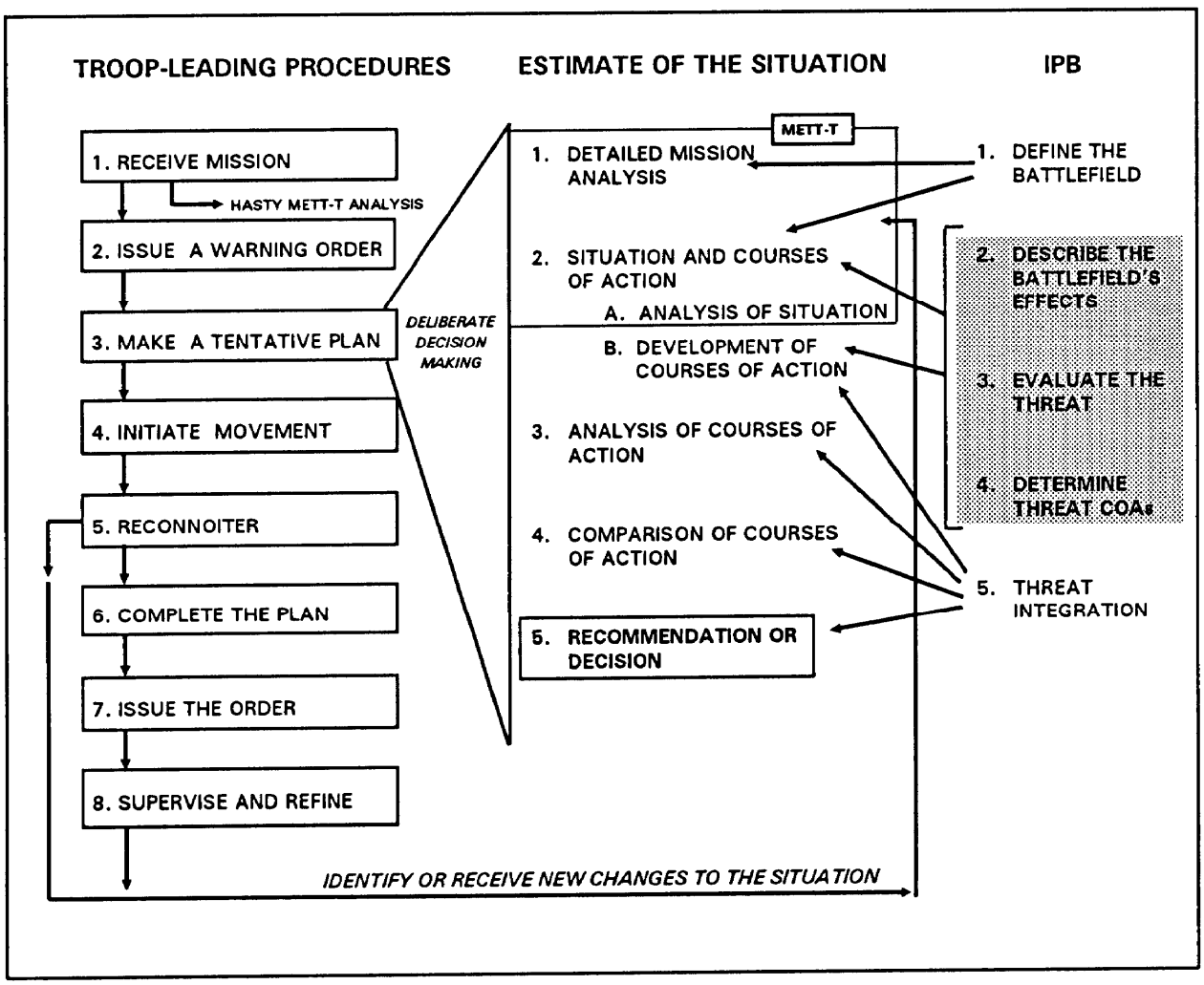


Figure I-1. Relationship of TLPs, decision-making, and estimate of the situation.

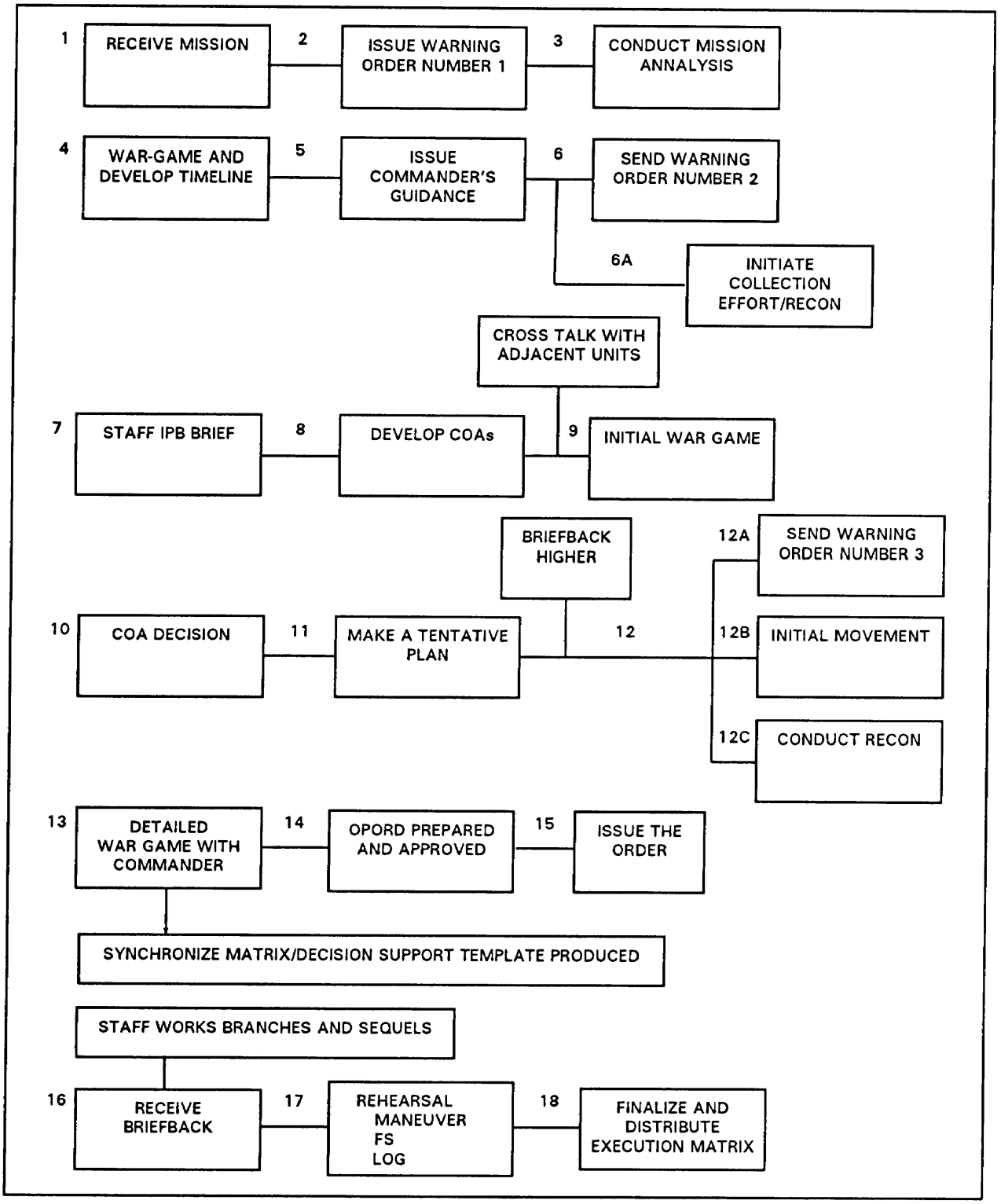


Figure I-2. Tactical decision-making process.

I-1. MISSION ANALYSIS

Mission analysis consists of the following steps:

- Mission and intent two levels up.
- Specified and implied tasks.
- Limitations.
- Mission-essential task.
- Restated mission.

a. **Mission and Intent Two Levels Up.** The brigade commander analyzes the mission and intent two levels up to fully understand his roles and responsibilities within the overall context of the operation. This analysis allows him to understand who is supporting him, who he is supporting, what the purpose of the operation is, and what the desired end state is.

b. **Specified and Implied Tasks.** Specified tasks are clearly stated in the order. Implied tasks must be deduced through analysis. Routine or SOP type tasks are not included as implied tasks. A good technique is to have an assistant list all specified and implied tasks, and use this as a checklist when writing the OPORD to ensure all tasks have been assigned to subordinates.

c. **Limitations.** Limitations are restrictions on a commander's freedom of action. They include time, rules of engagement, and control measures.

d. **Mission-Essential Task.** After reviewing all the above factors, the commander identifies his mission-essential task. Failure to accomplish the mission-essential task results in failure to accomplish the unit's primary purpose for the operation. Tasks should be definable, attainable, and measurable. Mission tasks require a common vocabulary. They are not to be confused with the operations that are groups of similar missions. For example, offensive is an operation. Seize, destroy, and neutralize are examples of tasks associated with an offensive operation.

e. **Mission.** The restated mission contains the mission-essential task and purpose, and it is put in the form of the five Ws: who, what, when, where, and why, This becomes the basis of the rest of the estimate process. In forming the restated mission, commanders must use mission-oriented command and control to rnaximize subordinate initiative. Each concept must fit within the confines of the larger and accommodate the smaller. In this way, the top commander's intentions are carried to the lowest level. Of these two components, the purpose is the more important. The mission statement consists of a task and a purpose. The task should be definable, attainable, and measurable. Mission tasks require a common vocabulary and are not to be confused with operations, which are groups of similar missions. For example, defend is an operation, but retain, destroy, and block are examples of tasks associated with a defensive operation. (See Figure I-3, page I-4.) For clarity, the commander may include the operation along with the task in the mission statement but never the operation alone. An example would be 2d Brigade (who) conducts movement to contact (operation) commencing at 25 Feb 1994 (when) to clear (what/task) enemy forces from AO Zack (where) to allow its use for division rear area operations (why/purpose).

f. **Situation Analysis and Courses of Action.** Once the mission is analyzed, the staff analyzes the situation using the remaining factors of METT-T. Planners may want to reorder the mnemonic to be MTET-T. By analyzing terrain before enemy, the staff can then analyze the enemy in light of the effects the terrain will impose. Terrain is analyzed using the mnemonic OKOCA Again, planners may want to reorder the mnemonic to be OAKOC: obstacles, avenues of approach, key terrain, observation and fields of fire, and cover and concealment, which allows the terrain to be analyzed in a more logical sequence. During this step, the staff should also consider the effects of weather and produce a combined obstacle overlay (COO) and modified combined obstacle overlay (MCOO).

(1) After analyzing the terrain, the staff can now analyze the enemy with an understanding of how the terrain will affect the enemy. This analysis includes composition disposition, strength, significant activities, peculiarities and we(knesses, capabilities (possible courses of action), probable course of action, and most dangerous course of action. The enemy probable course of action will be used later in the war gaming process.

(2) The staff then analyzes the friendly troops to determine composition, disposition, strength, significant activities, and peculiarities and weaknesses.

(3) The last step in METT-T is time, but it is a factor that must be considered throughout the analysis. The staff uses the one-thirds/two-thirds rule to ensure subordinates have sufficient planning time. However, the staff must consider not only the time required to prepare and issue the order in its one-third allocation, but also other time limitations imposed on the subordinate headquarters such as brigade briefbacks and rehearsals. To help subordinates increase their time, brigade commanders issue multiple warning orders. The first warning order should be upon receipt of the mission from higher headquarters. Additional warning orders may be issued after the commander's guidance has been announced, after the COA has been selected, and after any other important decision. The brigade XO usually serves as the time manager to ensure the staff adheres to the time schedule.

TACTICAL TASKS			
ENEMY	**TERRAIN**	**FRIENDLY**	**COMBINATION**
BLOCK	RECONNOITER	COVER	RECONNOITER
BREACH	RETAIN	GUARD	CONTAIN
BYPASS	SECURE	OVERWATCH	ISOLATE
CANALIZE	SEIZE	SCREEN	CLEAR
DESTROY			
FIX			
INTERDICT			
NEUTRALIZE			
PENETRATE			
REFCONNOITER			
SUPPRESS			
PURPOSE (IN ORDER TO)			
PREVENT	OPEN	ALLOW	
DIVERT	ENVELOP	CREATE	
ENABLE	SURPRISE	INFLUENCE	
DECEIVE	CAUSE	SUPPORT	
DENY	PROTECT		
TYPES OF OPERATIONS			
ATTACK	RETROGRADE	DEFEND	
MOVE TO CONTACT	SURVIVABILITY	MOBILITY	
RELIEF IN PLACE	RAID	RIVER CROSSING	
EXPLOITATION	BREAKOUT	PURSUIT	
		DELAY	

Figure I-3. Example of tasks, purposes, and operations.

(4) In many cases, the time schedule is compressed. Table I-1 is a sample schedule for producing and issuing an order in seven hours.

METT-T ANALYSIS	1 HOUR
COMMANDER'S GUIDANCE	5 MINUTES
COA DEVELOPMENT	1 HOUR
BRIEF COAs TO COMMANDER	25 MINUTES
ANALYZE (WAR GAME) AND COMPARE COAs	1 1/2 HOURS
COA DECISION BRIEF	30 MINUTES
PRODUCE/REHEARSE ORDER	1 1/2 HOURS
ISSUE ORDER	1 HOUR

NOTE: WHENEVER POSSIBLE, INSERT AN ADDITIONAL WAR GAMING SESSION OF THE SELECTED COA. THIS TECHNIQUE ADDS AN HOUR TO THE PROCESS.

Table I-1. Example of a schedule for producing and issuing an order in seven hours.

(5) Once the METT-T analysis is complete, the staff can record the information about friendly and enemy forces on a relative combat power analysis matrix (Table 1-2). This matrix uses the dynamics of combat power, firepower, maneuver, protection, and leadership as a basis of comparison for enemy and friendly strengths and weaknesses. This analysis provides a general background for formulating feasible COAs and may indicate the basic nature and characteristics of the COAs. These conclusions assist in speeding up the estimate process by providing an indication of COAs that would not be feasible and, therefore, should not be considered.

DYNAMICS OF COMBAT POWER	ENEMY	FRIENDLY	CONCLUSIONS
MANEUVER FIREPOWER PROTECTION LEADERSHIP			

Table I-2. Example of a relative combat power analysis matrix.

(6) The decisive point provides focus for the brigade's planning, preparing, and execution. Decisive points are enemy-, terrain-, or event-oriented actions that, if accomplished, will lead directly to achievement of the mission's purpose. To maintain focus, each COA should have only one decisive point. At the brigade level and below, the decisive point action is almost always the responsibility of the main effort.

(a) The decisive point method employs the following steps:

- Determine the decisive point and the results to be achieved there.
- Determine the purposes to be achieved by the main and supporting efforts. The supporting efforts' purposes must be clearly linked with the main effort's purpose.
- Determine the essential tasks to be achieved for subordinate units that achieve these purposes.
- Task organize to accomplish each mission that has been determined.
- Assign C2 headquarters.
- Establish control measures.
- Prepare a COA statement and sketch.

(b) A COA statement should contain the following:

- A statement by the *commander* expanding on his purpose in a way that ties it to the higher commander's purpose.
- A statement of the array of forces. This includes the form of maneuver in the offense or the defensive pattern or the technique used in the defense and a general explanation of how the commander plans to accomplish the purpose with the force as a whole.
- A designation of the decisive point.
- If desired, a brief statement of the most critical of the significant factors.

(c) The concept sketch should depict prominent terrain, essential control measures, major subordinate units with their tasks and purposes, task organization, and the decisive point. Planners should consider making a sketch of the enemy situation template on acetate and laying it over each concept sketch.

g. **Course of Action Analysis.** The next step in the estimate process is to analyze the COAs. This is accomplished through war gaming. If time permits, each possible enemy COA will be war-gamed. The S2 should, at critical points on the battlefield, identify what would happen if the enemy chooses his most dangerous COA. At a minimum however, the enemy probable COA will be war-gamed. The COA may be modified or a new COA developed as a result of the war-gaming process. The war game must be an integrated staff process, which includes role-playing enemy forces. The war gaming sequence has eight steps:

- Gather the tools.
- List all friendly forces.
- List the assumptions.

- List known critical events and decision points.
- List significant factors.
- Select the war gaming method.
- Select a technique to record and display the results.
- War-game the battle and assess results.

The information gained from the wargaming will be incorporated into the decision support template. Refer to FM 101-5 for a complete discussion on war gaming.

h. **Course of Action Comparison.** After each COA has been analyzed, the staff begins the comparison step. A quick and effective means of doing this is through the decision matrix. Significant factors identified during war gaming are used in the decision matrix. The staff may weigh certain factors that are considered to be more important than others.

i. **Decision or Recommendation.** After comparing the COAs, the XO or S3 recommends a COA to the commander. This recommendation includes the types of forces to be employed but not the specific units. Although all COAs under consideration were war-gamed during Step 3 of the estimate, if time permits, the staff conducts a second war game of the selected COA. This serves as a final check before the order is written. If enough time is available, the commander and staff war-game the entire operation. If time is short, they only war-game critical events. The synchronization matrix is an effective tool for the war gaming session. Again, this is an excellent opportunity to transfer information into the form of a decision support template with operational matrix. If the commander has major changes in a COA or creates a new one by combining parts of several COAs, the staff must war-game the new COA.

j. **Parallel and Concurrent Planning.** Like the steps of the TLPs, the steps of the estimate process may be conducted parallel. For example, in the formal procedures, the mission analysis is completed first. Information may be available about the terrain or the enemy, if so those situation analyses may be conducted during mission analysis or before it is completed. The staff must issue multiple warning orders which key phases of the estimate process are completed in order to facilitate the flow of information. Subordinate headquarters should not be kept waiting for a final product. They should be issued the information as it becomes available to help optimize planning time.

I-2. REHEARSALS

After the order has been issued the brigade conducts briefbacks and rehearsals. Briefbacks focus on planning rehearsals focus on execution. Whenever possible, briefbacks and rehearsals should be conducted chronologically rather than by unit. This ensures the brigade has one synchronized task force plan instead of three independent battalion plans.

a. **Briefbacks.** The commander conducts an initial briefback immediately after the issuance of the OPORD. It is designed to ensure that the subordinates clearly understand the order. After the subordinate commanders have had time to develop their tentative plans, the brigade commander has an additional brief designed to ensure the commander concurs with the subordinate leaders' concepts. This must occur before the subordinate issues his OPORD. Commanders should establish a format for these briefs. One technique used is to have each subordinate begin with his understanding of the enemy situation in his area of interest. This helps provide synchronization, but moreover it gives the brigade commander a more in-depth analysis of the enemy than he had from just the brigade level analysis. To ensure all items are covered, the brigade TACSOP should include a format for briefbacks. (Figures I-4 and I-5 are examples of briefbacks.)

- UNDERSTANDING OF ENEMY FORCES.
- UNDERSTANDING OF HIGHER COMMANDER'S INTENT.
- HIGHER COMMANDER'S CONCEPT OF THE OPERATION.
- SPECIFIED TASKS.
- TENTATIVE MISSION STATEMENT (MISSION-ESSENTIAL TASKS AND PURPOSE).
- CURRENT COMBAT POWER.
- CONCERNS/REQUIRED ASSISTANCE.
- TENTATIVE OPORD DTG/LOCATION.

Figure I-4. Example of a briefback (Part 1).

b. **Rehearsals.** The rehearsal is the final event to emphasize and conduct to ensure subordinates understand the plan. Types of rehearsals include: full, key leader, briefback, terrain model, sketch map, map, and radio. The most effective rehearsals are conducted under conditions that replicate as closely as possible those expected to be encountered during the actual mission. The rehearsal must not become a war-gaming session. War gaming should be conducted before issuing the order. If the rehearsal reveals serious flaws in the

plan, the commander stops the rehearsal and develops a new COA. He establishes a priority of rehearsals beginning with actions on the objective. Staff officers role play enemy forces or other actors on the battlefield.

- ENEMY FORCES.
  - TERRAIN/WEATHER IMPACT.
  - STRENGTH AND DISPOSITION.
  - MOST PROBABLE COA.
  - WEAKNESS TO EXPLOT.
- SPECIFIED TASKS.
- IMPLIED TASKS.
- MISSION.
- INTENT.
- TASK ORGANIZATION.
- CONCEPT OF THE OPERATION.
  - MANEUVER.
  - FIRE SUPPORT.
  - ENGINEER.
- SERVICE SUPPORT.
  - PERSONNEL/EQUIPMENT STATUS.
  - CASUALTY EVACUATION.
  - RESUPPLY STATUS.
- COMMAND AND SIGNAL.
  - CP LOCATIONS.
  - COMMUNICATIONS PLAN.
- COORDINATION TO BE CONDUCTED.
- CONCERNS.
- OPORD DTG/LOCATION.

Figure I-5. Example of a briefback (Part 2).

*Appendix J

URBAN OPERATIONS

"The rapid growth of the number and size of urban centers, especially in regions of political instability, increases the likelihood that U.S. forces will be called upon to conduct MOUT."

Defense Science Board, October 1996

Section I. INTRODUCTION

Urban operations (UO) are operations planned and conducted in an area of operations (AO) that includes one or more urban areas. An urban area is a topographical complex where man-made construction or high population density are the dominant features. The increasing world population and accelerated growth of cities means that UO in future conflicts will be very likely. The infantry brigade will be the primary headquarters around which units will be task organized to perform UO. Combat operations in urban areas usually occur when—

- The brigade's assigned objective lays within an urban area.
- The urban area is key (or decisive) in setting and or shaping the conditions for current or future operations.
- The urban area is in the path of a general advance and cannot be surrounded or bypassed.
- Political or humanitarian concerns require the control of an urban area or necessitate operations within it.
- Defending from urban areas supports a more effective overall defense or cannot be avoided.
- Occupation, seizure, and control of the urban area will deny the threat control of the urban area and the ability to impose its influence on both friendly military forces and the local civilian population; therefore, allowing friendly forces to retain the initiative and dictate the conditions for future operations.

UO are often conducted against enemy forces that may be mixed in with the civilian population. Therefore, the ROE and the use of combat power can often be more restrictive than in other conditions of combat.

J-1. FULL SPECTRUM OPERATIONS/UO CONCEPT

UO will be conducted within the operational framework of decisive, shaping, and sustainment operations (FM 3-0 [100-5]). Army units will conduct offensive, defensive, stability, and support (ODSS) operations within the operational framework shown in Figure J-1. These operations comprise the spectrum of UO that a brigade must be prepared to conduct (Figure J-2).

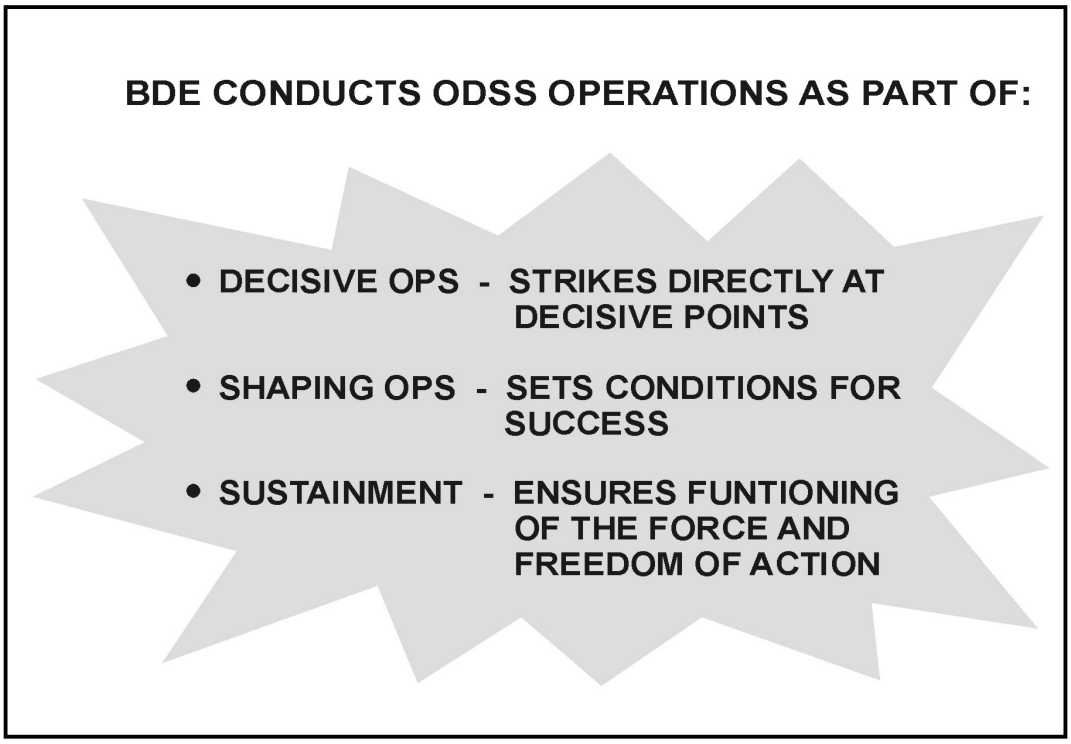


Figure J-1. Operational framework.

a. Army operational commanders assigned to conduct UO will—

- Continually *assess* the urban environment to determine effects on operations.
- Conduct *shaping* operations that emphasize isolation and set the conditions for decisive operations.
- *Dominate* through simultaneous and or sequential operations that establish and maintain preeminent military control over the enemy, geographical area, or population.
- Plan for and execute *transitions* between mission types and forces, and ultimately to the control of a non-Army agency.

b. Brigades must plan for and be prepared to conduct UO within the operational concept shown in Figure J-2, which depicts the potential simultaneity of UO. Brigades must be prepared to transition from one type of ODSS operation to another. How brigades prepare for and execute ODSS operations will be determined by the factors of METT-TC. (Within mission considerations, the ROE will have significant importance.)

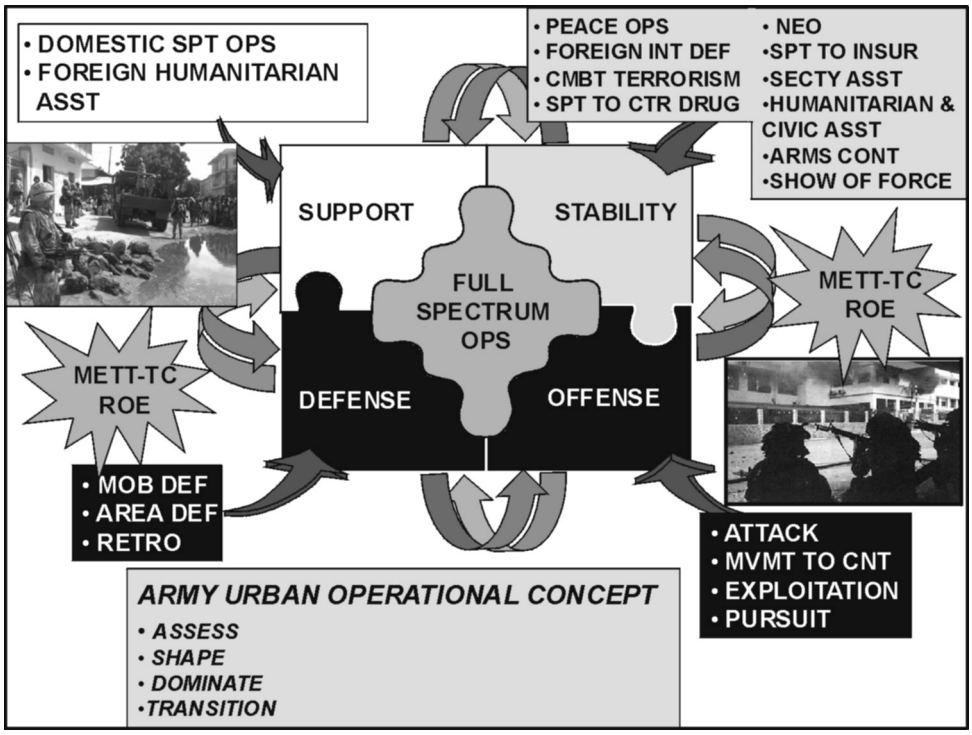


Figure J-2. UO spectrum of operations/operational concept.

J-2. TACTICAL CHALLENGES

The brigade will face a number of challenges during the planning and execution of UO. The most likely challenges are discussed below.

a. **Contiguous/Noncontiguous Areas of Operations.** Contiguous operations are military operations that the brigade conducts in an area of operations that facilitates mutual support of combat, CS, and CSS elements. Contiguous operations have traditional linear features including identifiable, contiguous frontages and shared boundaries between forces. For brigades, 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 CSS elements because of extended distances between subordinate units and elements. The brigade must be prepared to conduct ODSS operations in both types of situations. The brigade may be required to command and control subordinate battalions and elements over extended distances, which may include deploying battalions individually in support of operations in the brigade's area of influence or interest outside of the brigade's AO.

b. **Symmetrical/Asymmetrical Threats.** In addition to being required to face symmetrical threats, the brigade 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 brigade's combat power and capabilities. Examples of symmetrical threats include conventional enemy forces conducting offensive or defensive operations against friendly forces. Asymmetrical threats are those that are specifically designed to avoid confrontation with the brigade's combat power and capabilities. These threats may use the civilian population and infrastructure to shield their capabilities from fires. Asymmetrical threats may also attack the brigade and civilian population with weapons of mass destruction (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; EW, to include computer-based systems; criminal activity; guerilla warfare; and environmental attacks.

c. **Minimization of Collateral Damage and Noncombatant Casualties.** During urban operations, brigade commanders may be required to minimize unnecessary collateral damage and noncombatant casualties. This must be balanced with mission accomplishment and the requirement to provide force protection. Brigade commanders must be aware of the ROE and be prepared to request modifications when the tactical situation requires them. Changes in ROE must be rapidly disseminated throughout the brigade. Commanders and leaders must ensure that changes to the ROE are clearly understood by all soldiers within the brigade.

d. **Quick Transition from Stability or Support Operations to Combat Operations and Back.** Brigade commanders must ensure that contingencies are planned to transition quickly from stability and support 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 and support operations that may deteriorate. Subordinate commanders and leaders must be fully trained to recognize activities that would initiate this transition.

Section II. MISSION, ENEMY, TERRAIN AND WEATHER, TROOPS AND TIME AVAILABLE, AND CIVIL CONSIDERATIONS (METT-TC)

Planning, preparation, and conduct of combat operations in urban areas are generally the same as any other operation. However, the commander and staff must take into account special considerations when operating in this environment.

J-3. MISSION

During operations within large cities, a brigade would probably participate as part of a division level operation. In offensive operations, the brigade may have to assist with isolating the objective, dominating (securing footholds, seizing and/or clearing buildings) an objective(s) within the city, and transitioning from combat to stability and support operations. In defensive operations, the brigade may be assigned the task to defend from a large urban area or the brigade may integrate smaller urban areas into its defensive scheme.

a. **Objective.** The commander and staff must clearly understand the objective of the operation. The brigade's objective may be terrain or force oriented. The commander must consider if committing his force to combat in urban areas is required or beneficial to achieving his assigned objective.

b. **Intent.** During planning for offensive operations, the commander and staff must consider the overall intent of the operation and define what is required to clear the urban area(s). The commander must determine if clearing means every building, block by block, or seizure of a key objective, which may only require clearing along the axis of advance. During planning for defensive operations, the commander and staff must determine if retention of urban areas within the AO is necessary to support accomplishing the mission or directed by higher headquarters. Often, the brigade can integrate urban areas into the defensive scheme to develop a stronger defense.

J-4. ENEMY

The commander and staff must consider the strength, composition, disposition, and activities of the threat. They must consider both conventional and unconventional enemy forces and the tactics they may employ. Threat tactics may range from ambushes and snipers to large-scale conventional operations conducted by heavy forces. The IPB must address the known and potential tactics of all enemy forces and threats operating within and outside the urban area and their vulnerabilities. The IPB must consider the three-dimensional environment of urban areas: airspace, supersurface, surface, and subsurface. Also, the IPB should consider the political, racial, ethnic, tribal, and religious factors that influence the threat. (See Appendix D, FM 34-130 for a detailed discussion of urban IPB.)

a. The increasing availability of sophisticated technology has created unorthodox operational approaches that can be exploited by potential opponents. These threats seek to counter the technological and numerical advantages of US joint systems and forces, and to exploit constraints placed on US forces due to cultural bias, media presence, ROE, and distance from the crisis location.

b. Offsetting their inherent weaknesses, enemy forces seek an advantage in urban terrain to remain dispersed and decentralized, adapting their tactics to provide them the best success in countering a US response. Threats, in addition to conventional forces, may consist of:

- Unconventional forces.
- Paramilitary forces.
- Militia and special police organizations.
- Organized criminal organizations.

These forces range from units equipped with small arms, mortars, machine guns, antiarmor weapons, and mines to very capable mechanized and armor forces equipped with current generation equipment. Urban environments also provide many passive dangers such as disease from unsanitary conditions and psychological illnesses. While active threats vary widely, many techniques will be common to all. Figure J-3 provides a set of tactics available to threat forces opposing mission accomplishment in urban areas.



Figure J-3. Urban threat tactics.

(1) ***Use the Population to an Advantage.*** The populace of a given urban area represents key terrain; the side that manages it best has a distinct advantage. Future urban battles may see large segments of the populace remain in place as they did in Budapest and Grozny. Brigades involved in urban stability operations and support operations will certainly conduct missions in and amongst the residents of the area.

(a) Threat forces may use the population to provide camouflage, concealment, and deception for their operations. Guerilla and terrorist elements may look no different from any other member of the community. Even conventional and paramilitary troops may often have a "civilian" look. Western military forces adopted the clean-shaven, close-cut hair standard at the end of the nineteenth century to combat disease and infection, but twenty-first century opponents might very well sport beards as well as civilian clothing and other "nonmilitary" characteristics.

(b) The populace may also provide cover for threat forces, enhancing their mobility in proximity to friendly positions. Threat forces may take advantage of US moral responsibilities and attempt to make the civil population a burden on the Army's logistical and force protection resources. They may herd refugees into friendly controlled sectors, steal from US-paid local nationals, and hide among civilians during offensive operations.

(c) The civil population may also serve as an important intelligence source for the threat. Local hires serving among US soldiers, civilians with access to base camp perimeters, and refugees moving through friendly controlled sectors may be manipulated by threat forces to provide information on friendly dispositions, readiness, and intent. In addition, threat special purpose forces and hostile intelligence service assets may move among well-placed civilian groups.

(2) ***Win the Information War.*** Threat forces may try to win the information war as much as they may directly oppose the brigade's operations. Portable video cameras, Internet access, commercial radios, and cellular telephones are all tools that permit threat forces to tell their story.

(a) American "atrocities" may be staged and broadcast. Electronic mail may be transmitted to sympathetic groups to help undermine resolve. Internet websites provide easy worldwide dissemination of threat propaganda and misinformation. Hackers may gain access to US sites to manipulate information to the threat's advantage.

(b) The threat may make skillful use of the news media. Insurgent campaigns, for example, need not be tactical military successes; they need only make the opposition's campaign appear unpalatable to domestic and world support. The media coverage of the Tet Offensive of 1968 affected the will of both the American people and their political leadership. Although the battle for Hue was a tactical victory for the US, the North Vietnamese clearly achieved strategic success by searing the American consciousness with the high costs of urban warfare.

(3) ***Manipulate Key Facilities.*** Threat forces may identify and quickly seize control of critical components of the urban area to help them shape the battlespace to their advantage. Telephone exchanges provide simple and reliable communications that can be easily secured with off-the-shelf technologies. Sewage treatment plants and flood control machinery can be used to implement weapons of mass destruction (WMD) strategies or to make sections of the urban area uninhabitable. Media stations significantly improve the information operations position of the controlling force. Power generation and transmission sites provide means to control significant aspects of civilian society over a large area.

(4) ***Use the Three Dimensions of Urban Terrain.*** Upper floors and roofs provide the urban threat excellent observation points and battle positions above the maximum elevation of many weapons. Shots from upper floors strike armored vehicles in vulnerable points. Basements also provide firing points below many weapons' minimum depressions and strike at weaker armor. Sewers and subways provide covered and concealed access throughout the area of operations. The threat will think and operate throughout all dimensions of the urban environment. Conventional lateral boundaries will often not apply if friendly forces and threat forces control different floors of the same building.

(5) ***Employ Urban Oriented Weapons.*** 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 J-4 lists examples of threat weapons favored in UO.

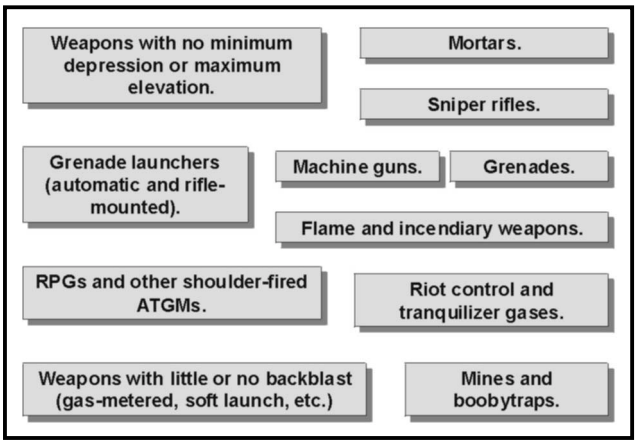


Figure J-4. Favored threat weapons.

(6) ***Engage the Entire Enemy Force.*** Threat forces may "hug" brigades operating in an urban area to avoid the effects of high-firepower standoff weapon systems. They may also try to keep all or significant portions of the brigade 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. The threat may maintain a large reserve to minimize the impact of this on their own forces.

(7) ***Focus Attacks on Service Support and Unprotected Soldiers.*** Threat forces may prey on soldiers poorly trained in basic infantry skills. Ambushes may focus on these soldiers while they are conducting resupply operations or moving in poorly guarded convoys. Urban operations 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.

J-5. TERRAIN AND WEATHER

An urban area is a concentration of structures, facilities, and people that form the economic and cultural focus for the surrounding area. Brigade operations are affected by all five categories of urban areas. Cities, metropolises, and megalopolises with associated urban sprawl cover hundreds of square kilometers. Brigades normally operate in these urban areas as part of a larger force. Extensive combat in these urban areas involves units of division level and above.

- *Villages (population of 3,000 or less).* The brigade's AO may contain many villages. Battalions and companies bypass, move through, defend from, and attack objectives within villages as a normal part of brigade operations.
- *Towns and small cities (population up to 100,000 and not part of a major urban complex).* Operations in such areas normally involve brigades or divisions. Brigades may bypass, move through, defend in, or attack enemy forces in towns and small cities as part of division operations.
- *City (population over 100,000 to 1 million inhabitants).*
- *Metropolis (population over 1 million to 10 million inhabitants).*
- *Megalopolis (population over 10 million inhabitants).*

a. **Terrain.** A detailed analysis of the urban area and surrounding terrain is vital to the success of any operation in an urban area. (See Appendix D, FM 34-130.) The brigade commander must understand the elements of the urban infrastructure that are necessary for achieving the intent and end-state of the brigade's mission. Military maps normally do not provide sufficient detail for terrain analysis of an urban area. Recent aerial photographs and other current intelligence products are critical. Maps and diagrams of the city from other sources, such as those from local governments, tourist activities, or law enforcement services, can be useful. Products that can be developed by the National Imagery Mapping Agency (NIMA) can be specifically tailored for the brigade area of operations. Also, the S2 should obtain blueprints, maps, or diagrams of the following:

- Subway systems, railways, and mass transit routes.
- Underground water, sewer, and utility systems.
- Electrical power stations and emergency services.
- Fuel supply and storage facilities.
- Mass communications facilities such as cellular phones, computer hubs, radio, and telephone.
- Public administration buildings, hospitals, and clinics.

(1) The terrain analysis should also identify the following:

- Structural characteristics of buildings, bridges, and transportation networks.
- Roads/highways, rivers/streams, or other waterways that may be used as high speed avenues of approach.
- Analysis of the natural terrain surrounding the urban area (OAKOC).
- Analysis of urban area itself to include street pattern, type structures and available maneuver space. (See FMs 34-130 and 90-10-1.)
- Covered and concealed approaches to the urban area.
- Key and decisive terrain inside and outside of the urban area.
- Identification of buildings, areas, or facilities protected by the law of land warfare and or restricted by current ROE such as churches, hospitals, historic monuments, and other facilities dedicated to arts and sciences, provided they are not being used for military purposes. (See FM 27-10.)
- Areas and facilities restricted by current ROE, such as religious buildings, hospitals, and so forth.
- Stadiums, parks, open fields, playgrounds, and other open areas that may be used for landing zones or holding areas.
- Location of prisons and jails.
- Potential host nation support facilities such as quarries, lumber yards/major building supply companies, and warehouses.
- Power lines, telephone lines, and raised cables that may be hazards to helicopters.
- Significant fire hazards and locations of other toxic industrial materials (TIM).
- Weather effect products from topographic models or historical sources; for example, effects of heavy rains on local areas.

Note: Recent incidental or intentional destruction of structures or new construction can change the topography of an urban area.

(2) A close relationship with the local government and military forces can be very beneficial. They can provide information about the population, fire fighting capabilities, locations of hazardous materials, police and security capabilities, civil evacuation plans, location of key facilities, and possibly current enemy activities. They may also be able to provide translators.

(3) A logistics infrastructure analysis of the urban area is also important. Because urban infrastructures vary greatly, a comprehensive list cannot be provided. However, common characteristics include:

- Urban street patterns and trafficability.
- Sources of potable water.
- Bulk fuel and transport systems.
- Canals and waterways.
- Communications systems.
- Rail networks, airfields, canals and waterways, and other transportation systems.
- Industries.
- Power (to include nuclear) and chemical production facilities and public utilities.

b. **Weather.** Weather analyses include visibility, winds, precipitation, and temperature and humidity.

(1) ***Visibility***. Light data have special significance during urban operations. Night and periods of reduced visibility, to include periods of fog, favor surprise, infiltration, detailed reconnaissance, attacks across open areas, seizure of defended strong points, and reduction of defended obstacles. However, the difficulties of night navigation in restrictive terrain, without reference points and near the threat, forces reliance on simple maneuver plans with easily recognizable objectives. Many major cities are located along canals or rivers, which often create a potential for fog in low-lying areas. Industrial and transportation areas are the most affected by fog due to their proximity to waterways. In heavy industrial areas, smog can also limit observation under all light conditions.

(2) ***Winds***. Wind chill is not as pronounced in urban areas. However, the configuration of streets, especially in close-orderly block and high-rise areas, can cause wind canalization. This increases the effects of the wind on streets that parallel the wind direction, while cross-streets remain relatively well protected. Because of these factors, swirling winds occur and the wind speed and direction may constantly change. This factor also affects the use of smoke for both friendly and threat forces. Downwind predictions for NBC and toxic industrial materials (TIM) will also be difficult.

(3) ***Precipitation***. Rain or melting snow often floods basements and subsurface areas, such as subways. This is especially true when automatic pumping facilities that normally handle rising water levels are deprived of power. Rain also makes storm and other sewer systems hazardous or impassable. Chemical agents and other TIM are washed into underground systems by precipitation. As a result, these systems may contain toxic concentrations much higher than surface areas and become contaminated “hot spots.” These effects become more pronounced as chemical agents or TIM are absorbed by brick or unsealed concrete sewer walls.

(4) ***Temperature and Humidity.*** Air inversion layers are common over cities, especially cities located in low-lying "bowls" or in river valleys. Inversion layers trap dust, chemical agents, and other pollutants, reducing visibility, and often creating a greenhouse effect, which causes a rise in ground and air temperature. The heating of buildings during the winter and the reflection and absorption of summer heat make urban areas warmer than surrounding open areas during both summer and winter. This difference can be as great as 10 to 20 degrees, and can add to the already high logistics requirements of urban combat. Summer heat, combined with the very physical requirements of urban combat, can cause severe heat-related injuries. Changes in temperature as a result of air inversions can also affect thermal sights during crossover periods of warm to cold and vice-versa. This period needs to identified as it may differ from urban area to urban area.

J-6. TROOPS

During UO, the brigade is often augmented with additional assets, which may include aviation, engineers, signal, smoke and or decontamination, ADA, MI, counterintelligence, MP, public affairs, PSYOP, civil affairs, translators, and LRS assets, when available. The brigade may also receive additional mechanized infantry or armor. A sample infantry brigade task organization is shown at Figure J-5. Actual task organizations are METT-TC dependent. How the brigade commander task organizes so that the BOS can be synchronized is of critical importance to tactical success. (See Appendix E for light/mechanized/special operations considerations.)

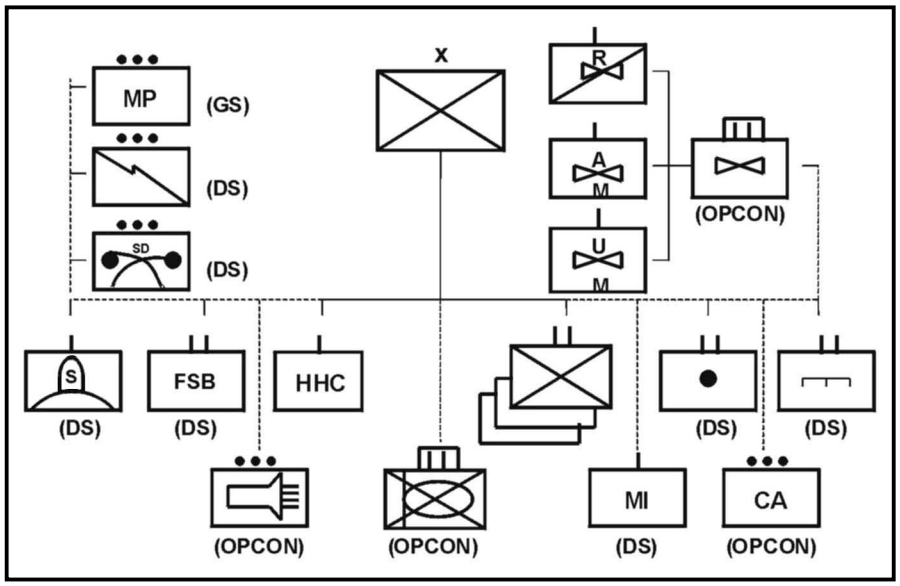


Figure J-5. Sample UO task organization for an infantry brigade.

Note: The task organization shown in Figure J-5 would be essentially the same for light, airborne, and air assault infantry brigades.

a. **Troop Density, Ammunition, and Equipment.** Troop density for offensive missions in urban areas can be as much as three to five times greater than for similar missions in open terrain. Troops require additional equipment such as ladders, ropes, grappling hooks, and other entry equipment. The ammunition consumption rates for small arms, grenades (all types), Claymore mines, handheld recoillesss weapons (light antitank weapons [LAWs] and AT4s), 25-mm and 120-mm HE, and explosives can be four times the normal rate. The staff must ensure the continuous supply of Classes I, III, V, and VIII supplies and water to forward units. Supplies should be configured for use and delivered as far forward as possible to supported units.

b. **Stress.** The commander and staff must consider the effects of prolonged combat on soldiers. Continuous close combat produces high psychological stress and physical fatigue. Rotating units that have been committed to combat for long periods can reduce stress. This may require the brigade to maintain a large reserve to assume the mission of committed forces, or the brigade may need to employ units in a follow and support role to reduce the strain on lead units. Extra effort and time should be taken to train and psychologically prepare soldiers for this type of combat. Ensuring that the proper support systems are in place and functional also reduces potential causes of stress (for example, medical/psychological, resupply, and so forth).

J-7. TIME

Combat in urban areas has a slower tempo and an increased use of methodical, synchronized missions. Additionally, the brigade may find itself planning different operations simultaneously. For example, a task force may have the mission to conduct offensive missions in one part of the brigade's AO and another battalion may be conducting stability missions in yet another part of the brigade's AO. In planning UO, the commander and staff must take these factors into account. Plans must also take into account that troops will tire more quickly because of stress and additional physical exertion caused by the environment. More time must be allowed for thorough reconnaissance and subordinate unit rehearsals. Mission-specific in-country training may be required to orient soldiers on how to deal with civilians and provide them cultural awareness. Other key skills include sniper/countersniper operations, demolitions, breaching, fire fighting, entry and movement techniques, fighting position construction, booby trap recognition/neutralization skills, combat lifesaver training, and crowd control.

J-8. CIVIL CONSIDERATIONS

The commander and staff must understand the composition, activities, and attitudes of the civilian population, to include the political infrastructure, within the urban area. Various options are available to the commander to control the impact of civilians on the operation such as screening civilians, prohibiting unauthorized movement, diverting or controlling refugee movements, and evacuating. Understanding the urban society requires comprehension of:

- Living conditions.
- Cultural distinctions.
- Ethnicity.
- Factions.
- Religious beliefs.

- Political affiliation and grievances.
- Attitude toward US forces (friendly, hostile, neutral).

a. **Curfew and Evacuation.** A commander with the mission of defending an urban area may need to establish a curfew to maintain security or to aid in control of military traffic. (Curfews are not imposed as punishment. They are normally established to reduce noncombatant casualties and provide a measure of force protection.) A commander can require civilians to evacuate towns or buildings if the purpose of the evacuation is to use the town or building for imperative military purposes, to enhance security, or to safeguard those civilians being evacuated. If the commander takes this action, he must specify and safeguard the evacuation routes. Food, clothing, medical, and sanitary facilities should be provided or available at the destination until the evacuees can care for themselves. Evacuated civilians must be transferred back to their homes as soon as hostilities in the area have ceased. The staff must plan for and coordinate the movement and evacuation of civilians to ensure their actions do not interfere with the military operation. The S5, brigade JAG, S3, S2, and supporting civil affairs units working with local officials coordinate the movements of civilians.

b. **Resistance Groups.** The brigade may encounter civilian resistance groups whose actions may range from lending supplies, services, and noncombat support to the enemy to actively fighting against friendly forces. Members of such resistance groups should be dealt with in accordance with applicable provisions of the law of war. Commanders should seek guidance from the JAG concerning the detention and disposition of persons participating in acts harmful to friendly forces. The S2, brigade JAG, PSYOP, MP, and civil affairs units must work together to identify these threats and recommend, within the ROE, the appropriate preemptive action or response, when required. The activities of resistance groups may also benefit friendly forces. They may provide HUMINT; act as guides, liaisons or translators; and provide subject matter expertise on local public facilities such as refineries, power plants, and water works. They may also provide active resistance against the threat.

Section III. COMMAND AND CONTROL

Urban operations will require centralized planning and decentralized execution. Therefore the staff must develop a detailed plan that synchronizes the BOS in order to meet the commander's intent and also provide subordinate units with the means to accomplish the mission.

J-9. FOCUS ON THE THREAT

During the mission analysis, the plan should focus on the factors of METT-TC. Make the plan enemy-oriented instead of terrain-oriented. Use terrain factors to defeat the threat. Considerations include, but are not limited to, the following:

- Thorough evaluation of the urban area's related terrain and threat may take much longer than other environments. This time factor will also impact friendly planning efforts.
- Determine the threat's location, strength, and capabilities. Develop a plan that defeats his direct and indirect fire systems.

- Focus the axis of advance on the threat's weaknesses while maintaining adequate force protection measures. When possible employ multiple and supporting axes of advance.
- Divide the objective area into manageable smaller areas that facilitate battalion TF maneuver.
- Isolate the objective area and establish a foothold at the point of entry. The location chosen for the foothold must allow for expansion.
- The brigade and battalion maneuver plans directly affect the company schemes of maneuver. Every company within the brigade must know what enemy targets will be engaged by brigade and battalion assets.

J-10. COMMANDER'S CRITICAL INFORMATION REQUIREMENTS (CCIR)

This is information required by the commander that directly affects his decisions and dictates the successful execution of tactical operations. The brigade staff must develop the components of CCIR that facilitate the commander's ability to make decisions that impact the plan during urban operations. Logical deductions are that essential elements of friendly information (EEFI) should address the enemy commander's priority intelligence requirements (PIR) and friendly forces information requirements (FFIR) should be items that cause the commander to make decisions that impact the plan. The following are examples of PIR, EEFI, and FFIR that would be more likely to help the commander in an urban environment.

a. **PIR.** These are intelligence requirements that a commander has anticipated and have stated priority in task planning and decision making. Examples include:

- Where are the threat battalion and company command posts?
- What are the most likely threat infiltration routes into the brigade area of operations?
- What streets and alleys restrict movement of friendly armored and wheeled vehicles?
- Where are the likely threat strong points and engagement areas?
- What is the threat air defense capability against Army aviation assets?

b. **EEFI.** These are critical aspects of a friendly operation that, if known by the threat, would subsequently compromise, lead to failure, or limit success of the operation and, therefore, must be protected from detection. Examples include:

- Is the brigade command net vulnerable to intercept, direction finding, and electronic attack?
- Is the brigade vulnerable to HUMINT collection and sabotage by local nationals?
- Where are the brigade supply routes/LOC most vulnerable to ambush and snipers?
- Are friendly troop concentrations and movement under threat observation?

c. **FFIR.** This is information the commander and staff need about the friendly forces available for the operation. Examples include:

- Scouts captured or compromised.
- Main bridge locations along ground route that have been blown.

- OPORD compromised.
- Loss of cryptographic equipment.
- Expected personnel and equipment replacements that did not arrive.

J-11. TASK-ORGANIZE UNITS TO ACCOMPLISH SPECIFIC TASKS

Urban operations may require unique task organizations. Figure J-6 depicts a sample brigade task organization for offensive operations, showing units under brigade control, and subordinate task forces necessary to accomplish decisive and shaping operations, specifically, the main and supporting efforts and the brigade reserve. Commanders must consider providing assets where they will be needed to accomplish specific tasks. All phases of mission execution must be considered when developing task organization. Changes in task organization may be required to accomplish different tasks during mission execution. Task organizations could very well change from shape through transition.

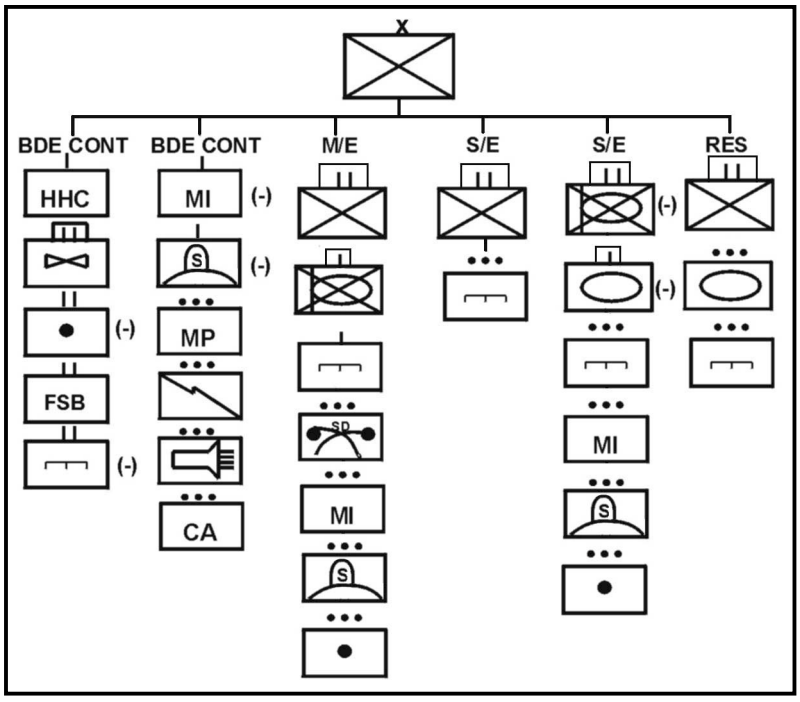


Figure J-6. Sample brigade task organization for offensive UO.

Note: Figure J-6 also depicts two field artillery platoons that have been given DS missions to provide direct fire support to the main and the supporting attacks.

J-12. REHEARSALS

After developing a thorough, well-synchronized plan, brigade commanders should require subordinate units to conduct combined arms rehearsals and include all phases of the operation. When conducted properly, combined arms rehearsals identify potential problems in the synchronization of the plan between maneuver, combat support, and

combat service support elements. Rehearsals provide a means for units that seldom operate together to train collective skills. Carefully consider where rehearsals will be conducted within the brigade AO. It is preferable to conduct rehearsals on urban terrain similar to the objective area.

J-13. FIRE SUPPORT

Often, the role of fires in UO is to get the maneuver force into or around the urban area with minimal casualties, so the commander has the maximum combat power to close with the enemy and finish the fight. The fire support officer can use the acronym SOSR (suppress, obscure, secure, reduce) as a reference to assist the commander in developing his intent for fires. History has shown that short, violent preparatory fires are much more effective than fires of long duration. Fires of shorter duration also produce less rubble and collateral damage. If available, the smoke decontamination platoon should be considered as a fire support asset for obscuration. Nonlethal capabilities are also planned and coordinated by the fire support officer for the brigade commander. Civil affairs and PSYOP assets should be coordinated with the appropriate command and control warfare/information operations planning headquarters.

Section IV. OFFENSIVE OPERATIONS

> "*From 1942 to the present, shock units or special assault teams have been used by attackers (and often by defenders) with great success. These assault teams are characterized by integration of combined arms. Assault teams typically contain infantry with variable combinations of armor, artillery, or engineers."*
>
> Technical Memorandum 5-87
> Modern Experience in City Combat
> U.S. Army Human Engineering Laboratory
> March, 1987

The brigade may be assigned an objective that lies within an urban area. The brigade may conduct the full range of offensive operations within a single large city or in an AO that contains several small towns and cities. Given the nature of urban terrain, an attack in an area is similar to the techniques employed in attacking a strongpoint. Attacking the enemy's main strength is avoided and combat power is massed on the weakest portion of his defense.

J-14. OFFENSIVE FRAMEWORK

Figure J-7 depicts the operational framework of brigade urban offensive operations. The brigade commander's primary responsibility is to set the conditions for tactical success for his subordinate units. Whenever possible, close combat by maneuver units is minimized and brigades attempt to move from assess to transition. The tactical tasks of subordinate units during offensive operations are also shown in Figure J-5. The elements of offensive operations are not phases. There is no clear line of distinction that delineates when the brigade 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 brigade commander seeks to—

- Synchronize precision fires (lethal and non-lethal effects) and information operations.
- Isolate decisive points.
- Use superior combat power to destroy high pay-off targets.
- Use close combat, when necessary, against decisive points.

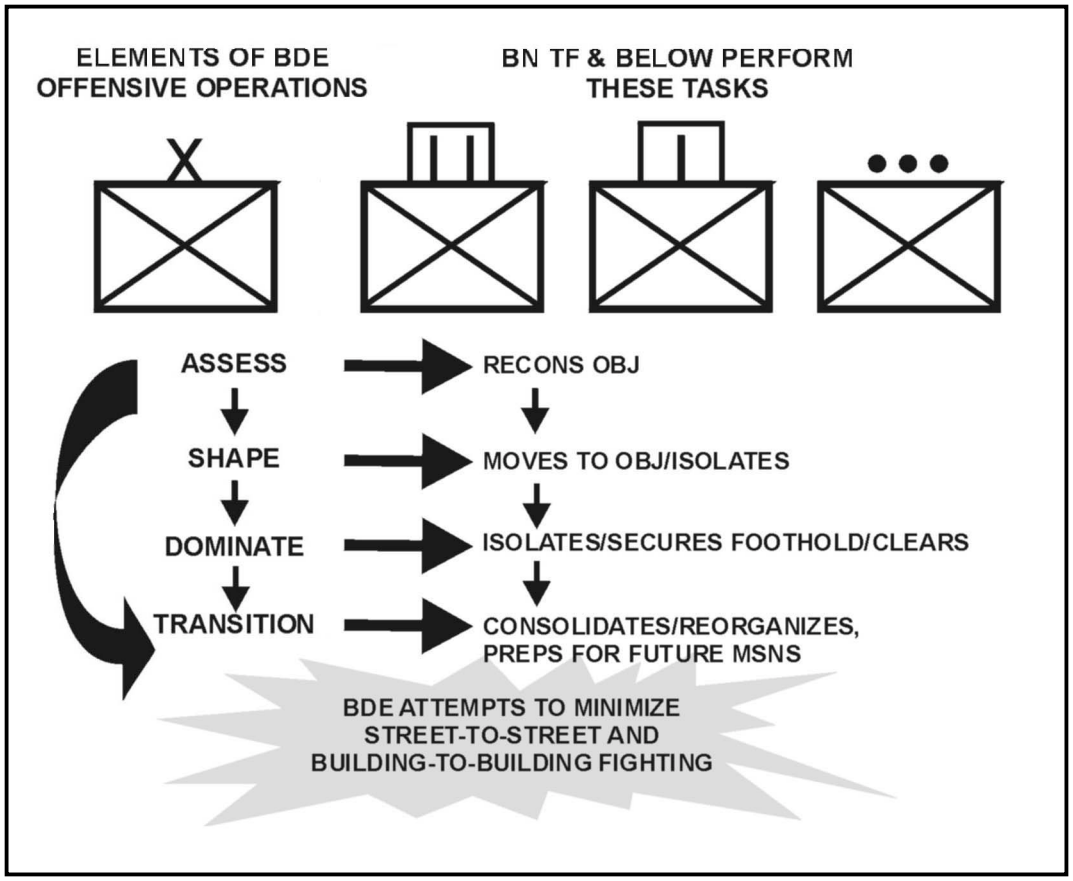


Figure J-7. Offensive urban operational framework.

J-15. ASSESS

Brigades primarily assess the urban environment using the military decision-making process (MDMP); intelligence preparation of the battlefield (IPB) acts as a key tool in that process. IPB is combined with the following:

- Division or joint task force (JTF) reconnaissance efforts and other shaping operations.
- Reconnaissance efforts of brigade units.
- Results of previous operations that impact current operations.

a. An important step in mission analysis is to determine the essential tasks. Combat power is applied precisely at decisive points, and other portions of the urban area are

isolated to the extent necessary to ensure they do not adversely influence the UO. Operations will be conducted both sequentially and simultaneously, as appropriate. Specific tasks to subordinates may address the full spectrum of Army operations, and the command will likely be conducting support, stability, and combat operations simultaneously. The complexity of UO may require simultaneous full spectrum operations down to company level.

b. The brigade commander and staff must determine, during assessment, whether the shaping efforts of higher headquarters are sufficient for the brigade to accomplish its mission(s) or whether additional shaping efforts are required-for example, isolation of nodes or other key terrain. Additionally, the brigade commander and staff must assess whether the shaping efforts of higher headquarters permit them to move directly to domination and or transition.

J-16. SHAPE

Brigades normally shape the area of operations 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. During isolation, the brigade commander sets the conditions for tactical success. Implied in this step are the thorough reconnaissance of the objective(s) and movement of subordinate units to positions of tactical advantage. The brigade commander must carefully determine the extent and the manner in which his forces can isolate the objective(s). The factors of METT-TC will determine how the brigade will isolate the objective psychologically and physically. Only areas essential to mission success are isolated.

a. **Psychological Isolation of the Objective.** Isolation begins with the efforts of the division and corps psychological and civil affairs operations to influence enemy and civilian actions. The brigade commander should consider using PSYOP teams to broadcast appropriate messages to the threat and to deliver leaflets directing the civilian population to move to a designated safe area. These actions must be coordinated with the overall PSYOP plan for the theater and must not sacrifice surprise. By themselves, PSYOP are 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.

b. **Sensors and Reconnaissance Units.** 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 objective area. The brigade 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 objective. To be successful, this technique requires skillful reconnaissance units and responsive fires. It may not be possible for the brigade to observe all avenues of approach, and enemy units may escape detection by infiltrating or exfiltrating. It may be difficult to distinguish between enemy and friendly personnel and noncombatants moving

in and out of the urban area. Indirect fires may cause unacceptable damage to key parts of the urban area.

c. **Snipers.** In certain situations that require precise fire, snipers can provide an excellent method of assisting in isolating key areas. Skillful application of snipers can provide lethal fire while simultaneously minimizing collateral damage and noncombatant casualties. Snipers can also be used to observe and report enemy activity and to call for and adjust indirect fire.

d. **Combination of Assets.** The most effective method of isolating an urban objective(s) will probably be the use of a combination of sensors, reconnaissance elements, and maneuver forces. The brigade can 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.

e. **Use of Fires and Smoke.** 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. Brigade fire planners can improve the effectiveness of this technique by careful selection of high pay-off targets 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, thereby rendering some weapon systems useless. 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.

J-17. DOMINATE

The brigade will use all combined arms available, consistent with the ROE, to defeat or destroy the enemy at decisive points and achieve the desired end-state of the mission. The brigade seeks to dominate the enemy through well-planned isolation and skillful use of combined arms. The brigade commander seeks to minimize the amount of street to street and house to house fighting that must be performed by battalions.

J-18. TYPES OF OFFENSIVE OPERATIONS

The brigade will conduct the same types of offensive operations as it would on open terrain. (See Chapter 5, Sections II, III, and IV.) Techniques that may be more applicable during urban offensive operations are discussed in the following paragraphs. These

techniques are applicable to all forms of offensive maneuver and would be determined by METT-TC factors.

a. **Movement to Contact, Search and Attack Technique.** Figure J-8 depicts a brigade conducting a movement to contact in an urban area using the search and attack technique. This technique is used when knowledge of the enemy is unclear and contact is required. It is normally employed against a weak enemy force that is disorganized and incapable of massing strength against task forces (for example, urban insurgents or gangs). The brigade divides the AO into smaller areas and coordinates the movement of battalions through the brigade AO. In the example shown at Figure J-6, the enemy is found and fixed during isolation and finished during domination. During a mission of this type, the urban environment makes it difficult for conventional infantry forces to find, fix, and finish the enemy. For example, movement of units may become canalized due to streets and urban "canyons" created by tall buildings. The application of fire power may become highly restricted based on the ROE. The use of HUMINT in this type of action becomes increasingly more important and can be of great assistance during the "find" portion of the mission. (Table J-1 shows the advantages and disadvantages of search and attack.)

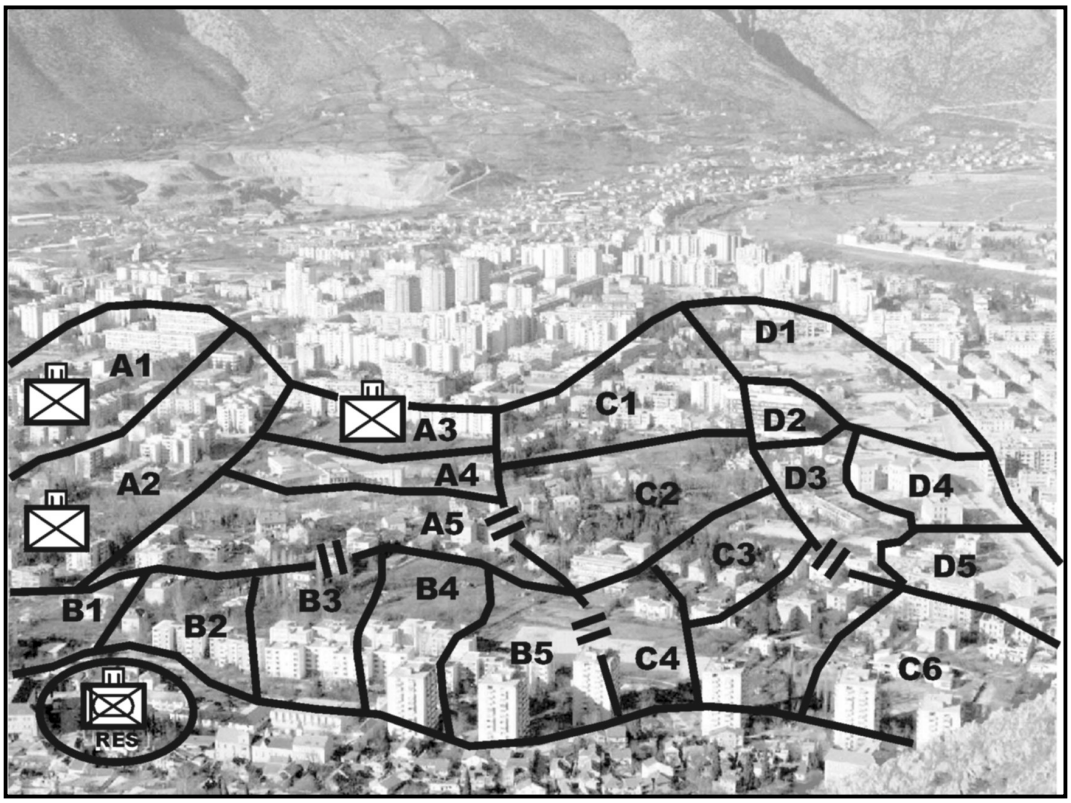


Figure J-8. Search and attack technique.

TECHNIQUE	ADVANTAGES	DISADVANTAGES
Search and Attack	Requires enemy to fight in multiple directions. Increases maneuver space and flexibility.	Difficult to command and control. Difficult to provide CS and CSS. Difficult to provide for mutual support of maneuver forces. Find/fix/finish forces are challenged/limited.

Table J-1. Advantages and disadvantages of search and attack.

b. **Attack on a Single Axis.** If the brigade must mass combat power in order to conduct a deliberate attack against an enemy strongpoint, an attack on a single axis may be considered. This technique would be used when the axis of advance is not well defended by the enemy. Figure J-9 depicts a brigade conducting an attack on a single axis on OBJ GOLD. In the example shown, the lead task force(TF) has the mission of conducting a supporting attack to seize OBJ 22 and facilitate passage of the second the TF through OBJ 22. The second TF conducts the main attack to seize and clear OBJ 21 with an on order mission to seize OBJ 23. A third TF follows in reserve. In the example shown below, the brigade would normally receive assistance in isolating the objective. (Table J-2 shows the advantages and disadvantages of an attack on a single axis.)

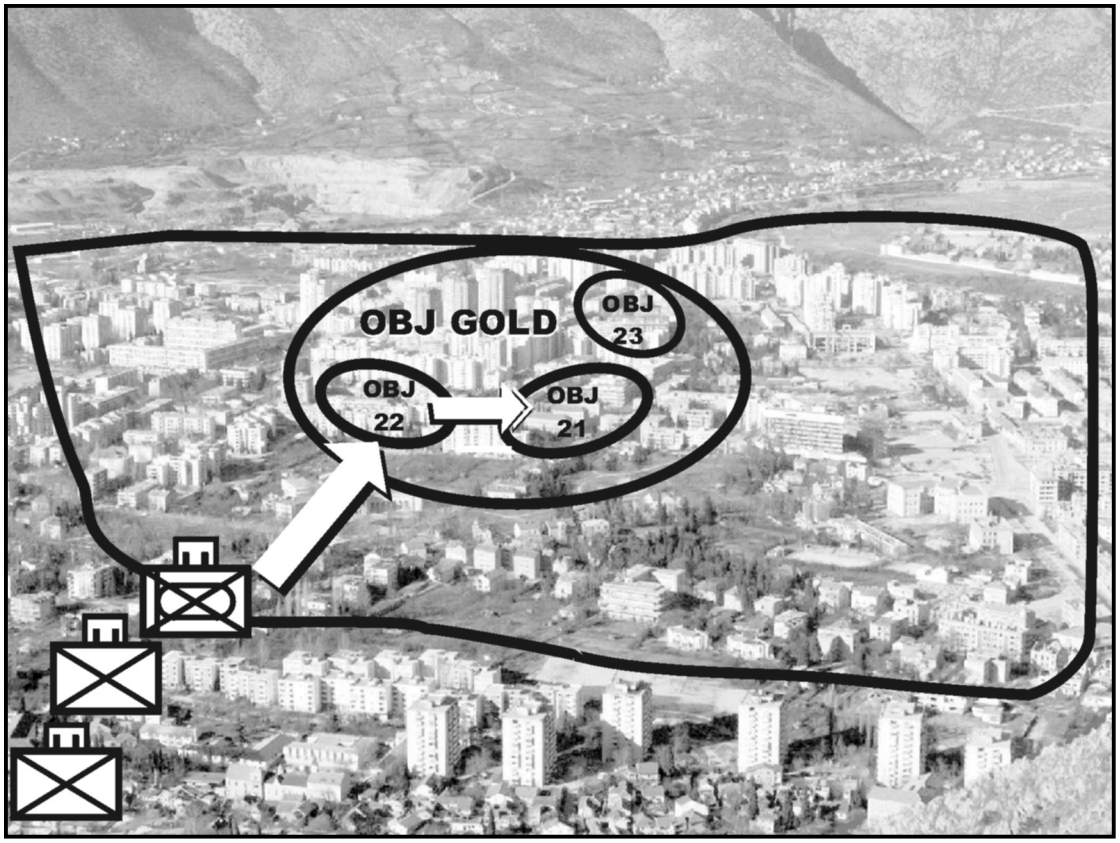


Figure J-9. Attack on a single axis.

TECHNIQUE	ADVANTAGES	DISADVANTAGES
Attack on a Single Axis	Facilitates command and control. Limited combat power to the front. Concentrates combat power at a critical point.	Limits manuever. Presents denser target to the enemy. Presents a single threat to the enemy. Reduces flexibility.

Table J-2. Advantages and disadvantages of an attack on a single axis.

c. **Attack on Multiple Axes.** If enemy defenses are more robust and the brigade commander wishes to force the enemy to fight in multiple directions, an attack on multiple axes can be considered. Figure J-10 depicts a brigade conducting the same attack on OBJ GOLD using multiple axes. In this case a battalion task force (air assault) conducts an air assault on OBJ C and then conducts a supporting attack to seize OBJ D. A second task force conducts a supporting attack to seize OBJ B, with a third conducting the main attack to seize and clear OBJ A. The supporting attacks isolate OBJ A. (Table

J-3 shows the advantages and disadvantages of an attack on multiple axes.) Synchronization of BOS is crucial to ensure the massing of effects at the critical points and to prevent the isolation and piecemeal destruction of smaller elements separated by the structures in the urban area.

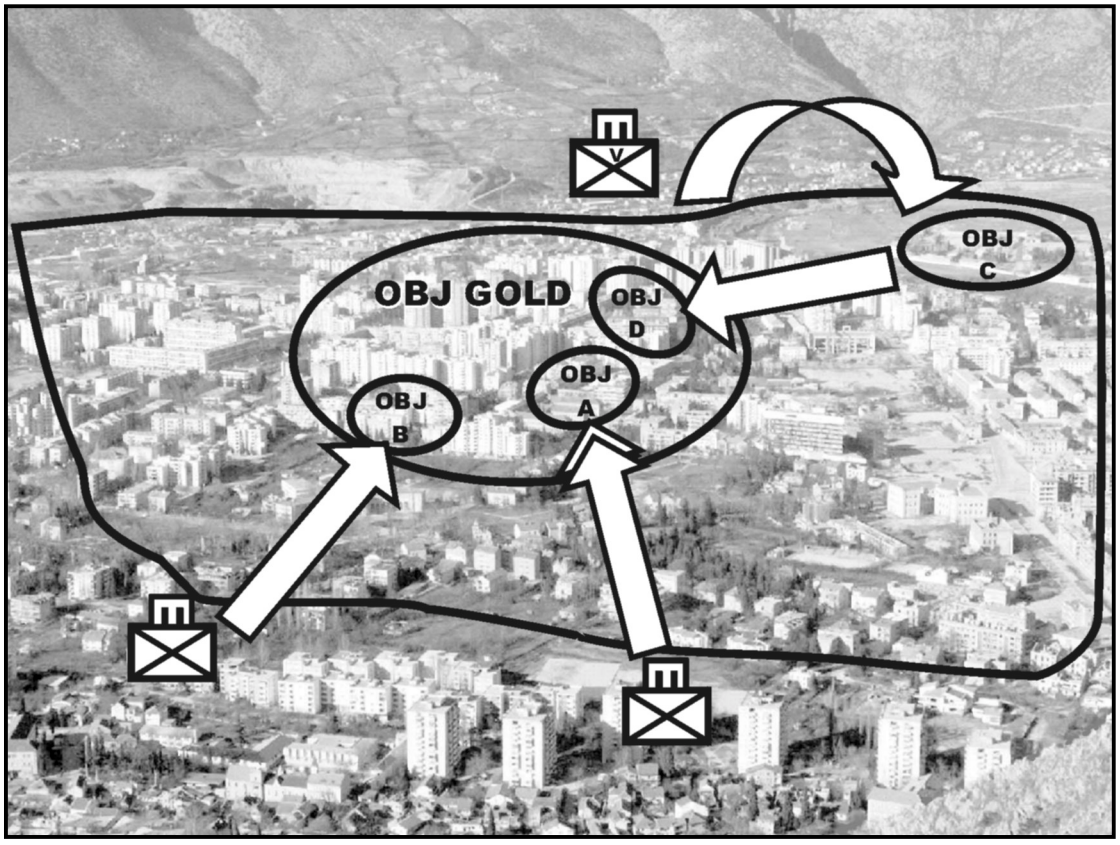


Figure J-10. Attack on multiple axes.

TECHNIQUE	ADVANTAGES	DISADVANTAGES
Attack on Multiple Axes	Better distributes combat power. Requires the enemy to fight in multiple directions. Increases maneuver space and flexibility.	More difficult to command and control. More difficult to provide CS and CSS.

Table J-3. Advantages and disadvantages of an attack on multiple axes.

Figure J-11 depicts an attack on multiple axes on different terrain. In this situation the brigade has the mission to seize OBJ ZULU (OBJs DOG, RAT, and CAT). The brigade

commander has decided to attack on multiple axes with two battalion task forces conducting supporting attacks to seize OBJs DOG and RAT in order to isolate OBJ CAT. The brigade main attack will seize and clear OBJ CAT.

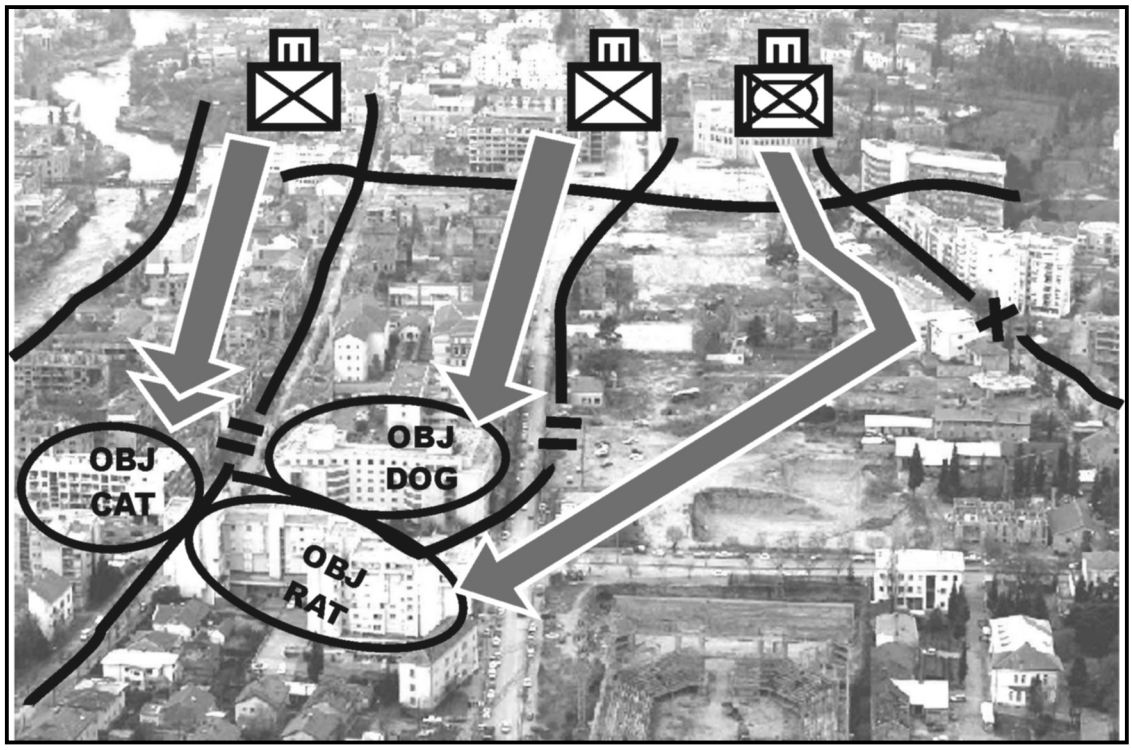


Figure J-11. Attack on multiple axes, different terrain.

d. **Cordon and Attack.** The brigade may find itself in a position where it may physically isolate a large portion of an urban objective. The brigade commander may also determine that he can force the enemy out of his position(s) and out into more open areas where he can be engaged by direct and indirect fires. In this case, the cordon and attack technique may be considered. A cordon is a type of isolation. Cordon is a tactical task given to a unit to prevent withdrawal from or reinforcement of a position. Cordon implies seizing or controlling key terrain and or mounted and dismounted avenues of approach. Figure J-12 depicts a brigade attacking to seize and clear OBJ EAGLE using the cordon and attack technique. One task force (four company teams) cordons OBJ EAGLE by occupying battle positions. (A cordon may also be accomplished using ambushes, roadblocks, checkpoints, OPs, and patrols.) The example in Figure J-12 shows one TF seizing and clearing OBJ EAGLE and another as the brigade reserve. Skillful application of fires and other combat multipliers may also defeat the enemy when this technique is used and minimize or preclude close combat. (Table J-4 lists the advantages and disadvantages of cordon and attack.

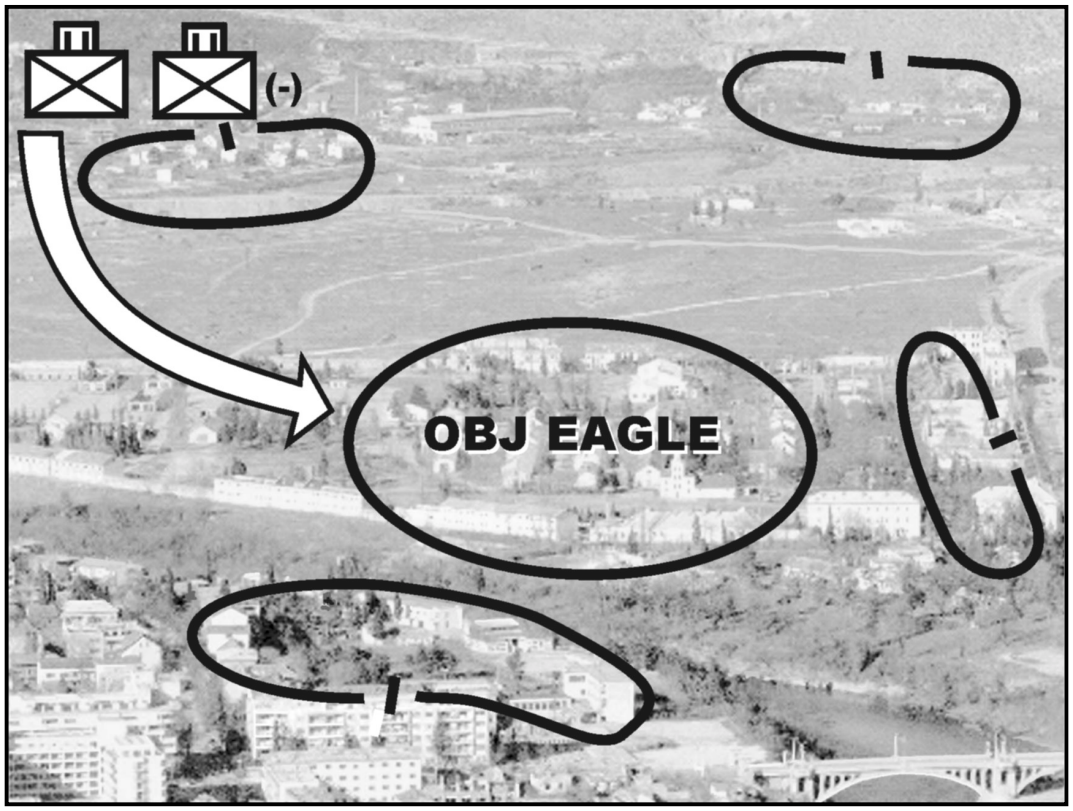


Figure J-12. Cordon and attack.

Note: In the example shown in Figure J-12, the battle positions are oriented to place fires on the enemy leaving OBJ EAGLE and to prevent his withdrawal from the objective area. The factors of METT-TC will determine how the battle positions are oriented and what the mission end-state will be. Additional direct fire control measures, such as TRPs and engagement areas, as well as indirect fire control measures can focus fires and assist in canalizing the enemy into desired areas.

TECHNIQUE	ADVANTAGES	DISADVANTAGES
Cordon and Attack	Concentrates combat power. Provides mutual support of maneuver forces.	Sequencing the cordon can be difficult. Considerable combat power can be committed to the cordon.

Table J-4. Advantages and disadvantages of cordon and attack.

e. **Fix and Bypass.** A brigade may find itself in a position where it is conducting operations near an urban area that needs to be bypassed. In certain situations the enemy may have to be fixed prior to the brigade's bypassing the urban area. Figure J-13 depicts a brigade conducting a limited offensive action to fix the enemy with a small force and

bypass the urban area with the bulk of the brigade's combat power. If entering the urban area is unavoidable or force protection requirements force the brigade to attack the urban area, the fix and bypass technique may be considered. (Table J-5 lists the advantages and disadvantages of fix and bypass.) It is preferable to completely avoid the urban area if it will eventually be bypassed. During the planning process, routes should be chosen so that close combat in the urban area can be avoided. Also, the brigade may be able to fix the enemy with fires and avoid having to enter the urban area.

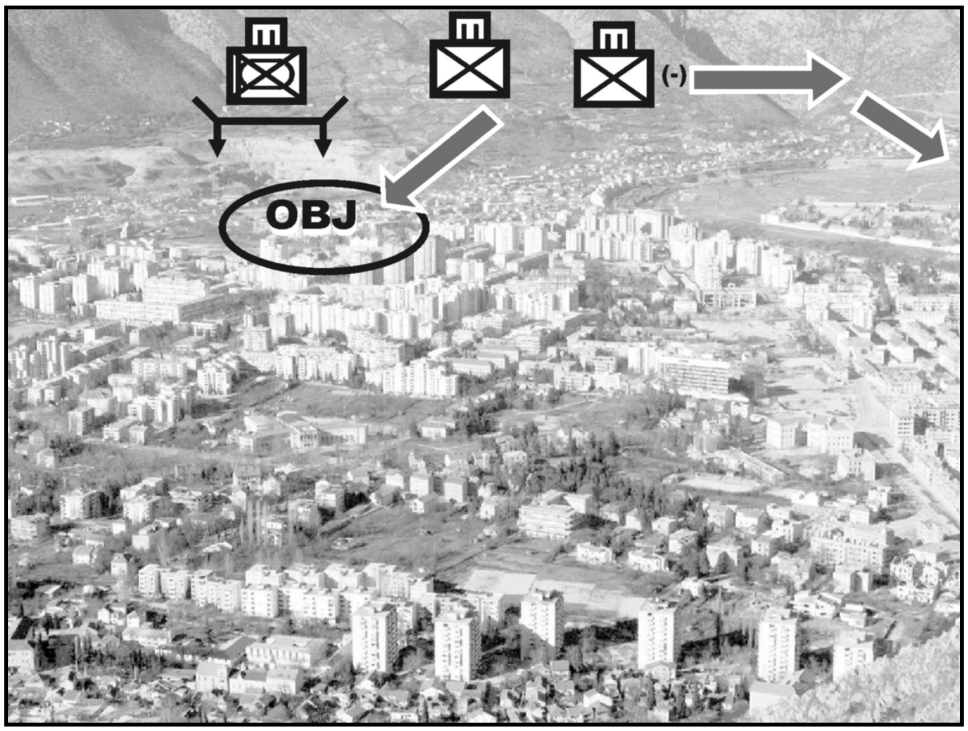


Figure J-13. Fix and bypass.

TECHNIQUE	ADVANTAGES	DISADVANTAGES
Fix and Bypass	Avoids urban area. Facilitates freedom of action.	Requires the brigade to separate, commit, and support part of its force. Fixing force may become isolated and cut off.

Table J-5. Advantages and disadvantages of fix and bypass.

f. **Multiple Nodal Attacks.** The brigade may be given the mission to attack multiple nodes either simultaneously or sequentially. This mission is characterized by rapid attacks followed by defensive operations. The enemy situation must permit the brigade to divide its forces and seize key nodes. Multiple attacks such as this will require precise maneuver and supporting fires. This mission may be given to a brigade before an

anticipated stability operation, or to isolate an urban area for other units that will be conducting offensive operations inside the urban area. Figure J-14 depicts a brigade conducting multiple nodal attacks. This technique is used to deny the enemy the use of key infrastructure. Use of this technique may also require a designated rapid response element(s) in reserve in the event that enemy forces mass and quickly overwhelm an attacking battalion. The duration of this attack should not exceed the brigade's self-sustainment capability. (Table J-6 lists the advantages and disadvantages of multiple nodal attacks.)

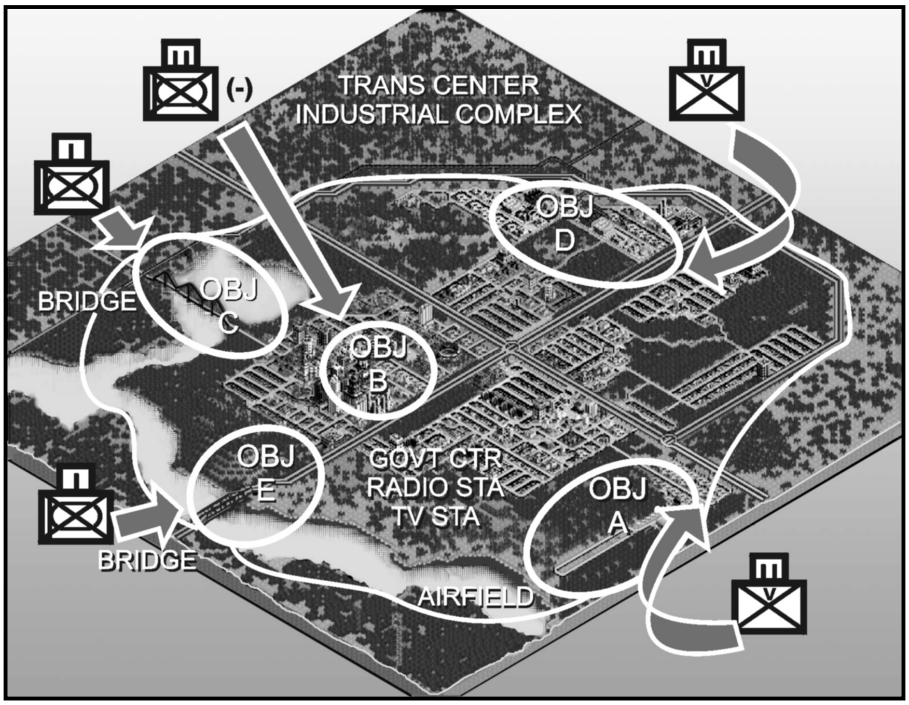


Figure J-14. Multiple nodal attacks.

TECHNIQUE	ADVANTAGES	DISADVANTAGES
Multiple Nodal Attacks	Presents multiple threats to the enemy. Increases maneuver space and flexibility.	Difficult to command and control. Difficult to provide CS and CSS. Difficult to provide for mutual support of maneuver forces. Difficult to sequence.

Table J-6. Advantages and disadvantages of multiple nodal attacks.

J-19. TRANSITION

During transition, the brigade continues to use all CS and CSS 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 and CSS units, such as civil affairs (CA), PSYOP, medical, and MPs become more important with the requirements to maintain order and stabilize the urban area. Subordinate task forces and other brigade units will be consolidating, reorganizing, conducting area protection and logistical missions, and preparing for follow-on missions. The brigade staff must prepare to transition from being a "supported" force to being the "supporting" force. (See paragraph Section VI, Stability and Support Operations.)

Section V. DEFENSIVE OPERATIONS

Of the two types of defense, area and mobile, the area defense will probably be the type most used since most of the reasons for defending an urban area are focused on retaining terrain. The mobile defense pattern is more focused on the enemy and the commander may decide to use it based on his estimate of the situation. In a urban area, the defender must take advantage of the abundant cover and concealment. He must also consider restrictions to the attacker's ability to maneuver and observe. By using the terrain and fighting from well-prepared and mutually supporting positions, a defending force can inflict heavy losses upon, delay, block, or fix a much larger attacking force. A commander must decide whether defending an urban area is needed to successfully complete his mission. Before making his decision, the commander should consider the issues discussed in this paragraph.

J-20. DEFENSIVE FRAMEWORK

The brigade can conduct the full range of defensive operations within a single urban area or in an AO that contains several small towns and cities using the elements shown in the defensive urban operational framework in Figure J-15. The elements are similar to those in offensive operations in that the brigade commander attempts to set the conditions for tactical success. Isolation of the brigade by the enemy is avoided through security operations; defensive missions are assigned subordinate task forces in order to achieve the commander's intent and desired end-state; and then the brigade transitions to stability and or support operations. During urban defensive operations, the transition to stability and support operations may not be clear to the soldiers conducting the operations. Commanders must offset this tendency with clear mission type orders and updated ROE. Again, as in offensive operations, the elements are not phases. They may occur simultaneously or sequentially. Well planned and executed defensive operations will have all three elements present. During defensive operations the brigade commander seeks to—

- Avoid being isolated by the enemy.
- Defend only the decisive terrain, institutions, or infrastructure.
- Conduct counter or spoiling attacks to retain the initiative.

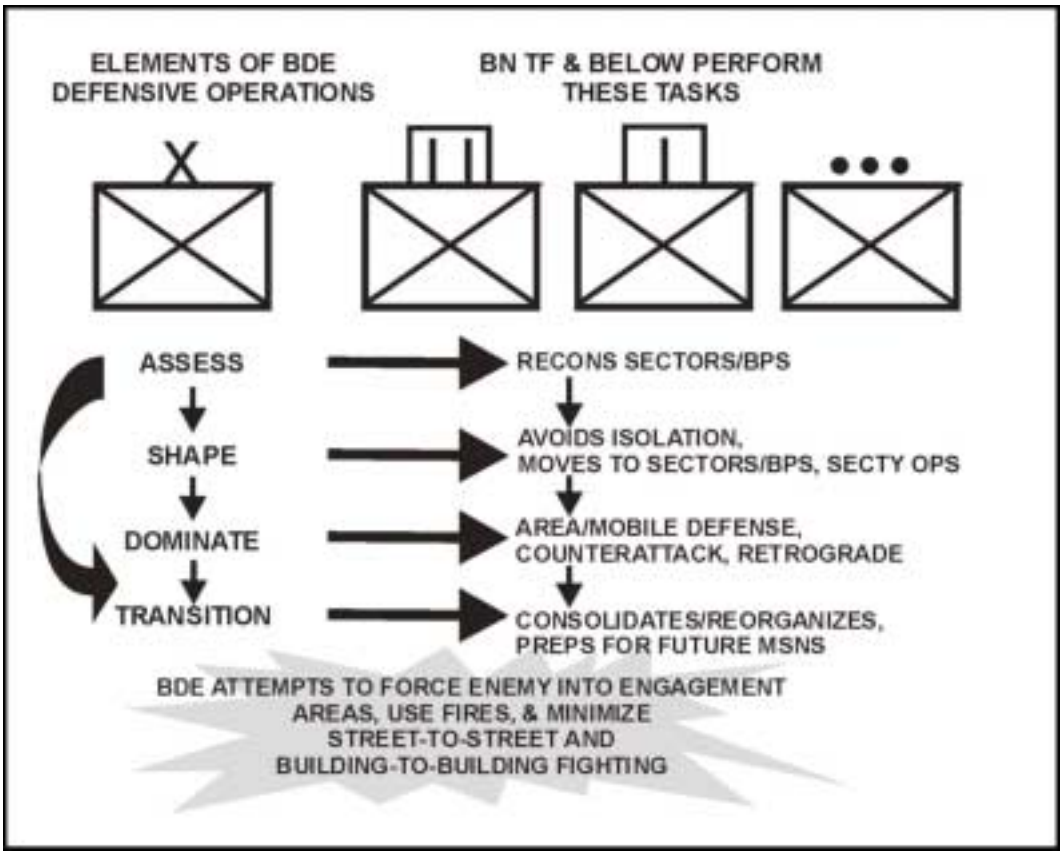


Figure J-15. Defensive urban operational framework.

J-21. INTEGRATING THE URBAN AREA INTO THE DEFENSE

The brigade may also integrate villages, strip areas, and small towns into the overall defense, based on higher headquarters' constraints and applicable ROE (Figure J-16.) A defense in an urban area or one that incorporates urban areas normally follows the same sequence of actions and is governed by the principles contained in Chapter 5, Defensive Operations and Chapter 6, Retrograde Operations. 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 brigade normally assigns task force AOs and may use phase lines, control measures, or other positions to position forces in depth.

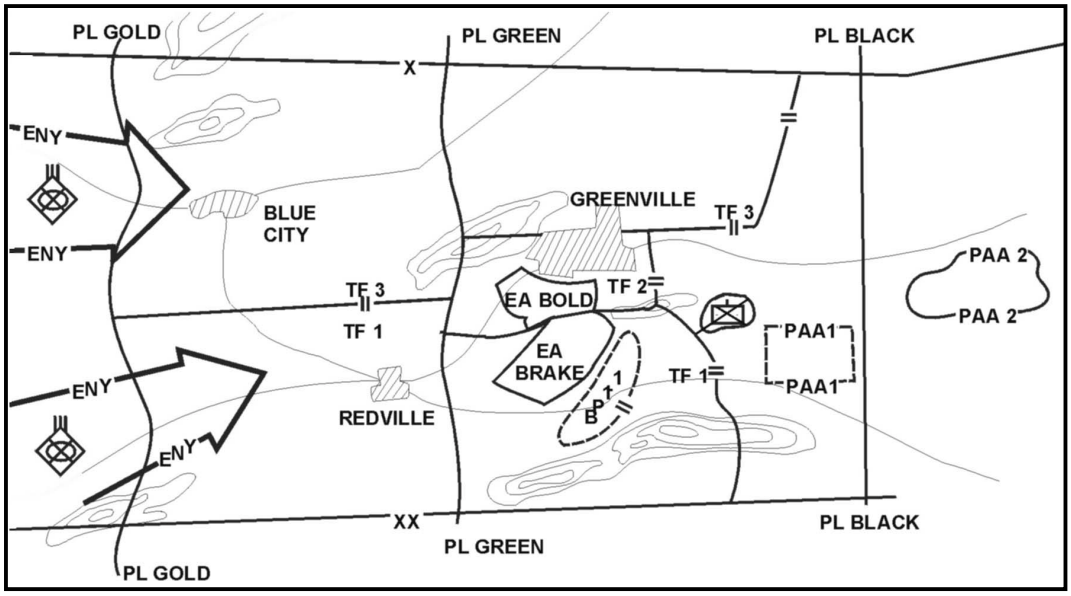


Figure J-16. Integrating urban areas into a defense.

J-22. NODAL DEFENSE

Figure J-17 depicts a transitional situation where the brigade moves from an offensive to a defensive or stability operation. The brigade mission may contain METT-TC factors that require varying defensive techniques by the subordinate battalion TFs under the brigade's control. Considerations in a situation such as this include:

a. **Task Organization.** TFs may very well have to be task organized differently to conduct the specific missions assigned by the brigade commander. The task organization required for the defensive or stability operation will probably be different from the task organization used in an offensive operation.

b. **Symmetrical/Asymmetrical Threats.** The brigade will likely respond to both symmetrical and asymmetrical threats within the area of operations. The defensive techniques chosen by subordinate battalion TFs should be capable of responding to the specific threats in their respective AOs.

c. **Boundary Changes.** Again, based on the commander's intent and the brigade's defensive scheme of maneuver, boundary changes may be required in order to give battalion's more or less maneuver space.

d. **ROE Modification.** The ROE may require modification based on the type of mission to be conducted. The ROE may become more or less restrictive based on METT-TC factors. Commanders and leaders must insure that the ROE are clearly stated and widely disseminated at the beginning and conclusion of each day.

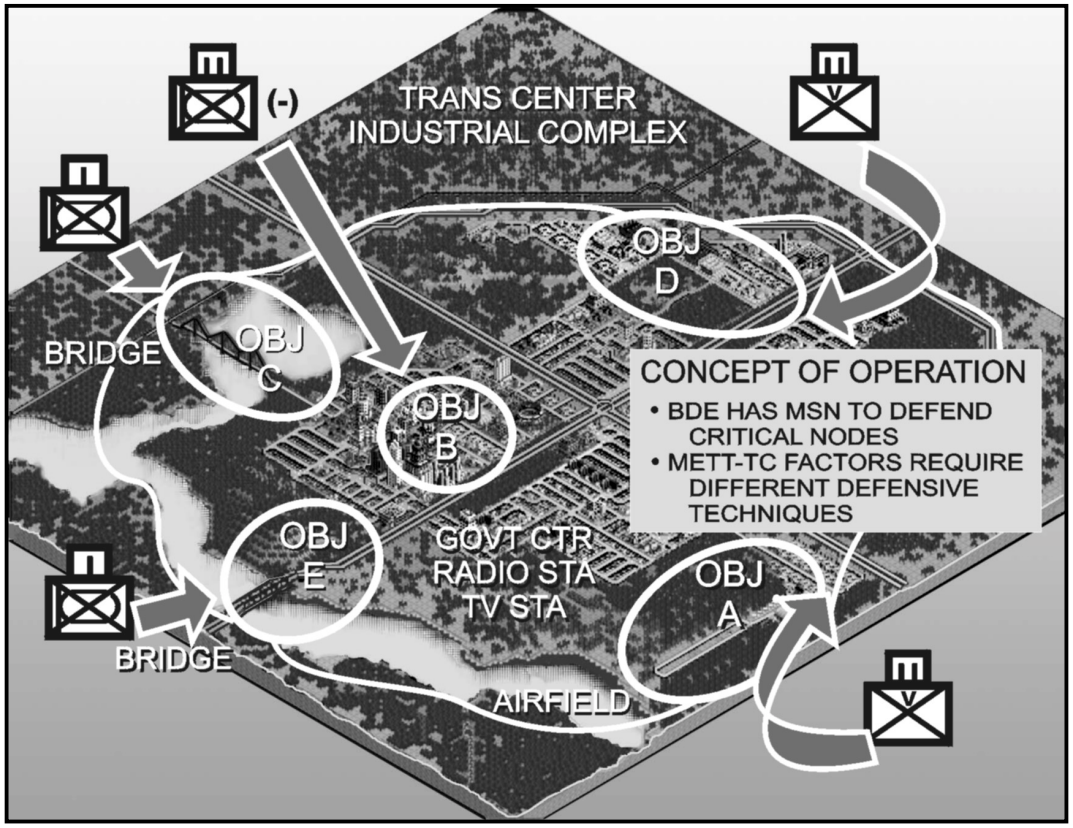


Figure J-17. Nodal defense, transitional situation.

Figure J-18 depicts a nodal defense where TFs employ varying defensive techniques in order to achieve the brigade commander's desired end-state. The brigade commander's intent is to safeguard the key nodes that were seized during the offensive action in order to eventually return the infrastructure of this particular urban area back to civilian control. A combination of sectors, battle positions, strong points, road-blocks, checkpoints, security patrols, and OPs could be employed throughout the brigade AO. Figure J-18 depicts the changed TF task organizations, the extended boundaries, and directed brigade OPs.

Note: TF operational graphics were drawn in order to provide an example of a possible technique that may be employed within the brigade AO in order to meet the brigade commander's intent. For example, the TF defending the transportation center has elected to use a perimeter defense for inner security and has assigned the attached mechanized infantry company team the mission to conduct outer security by means of a screen and manning the designated brigade OP.

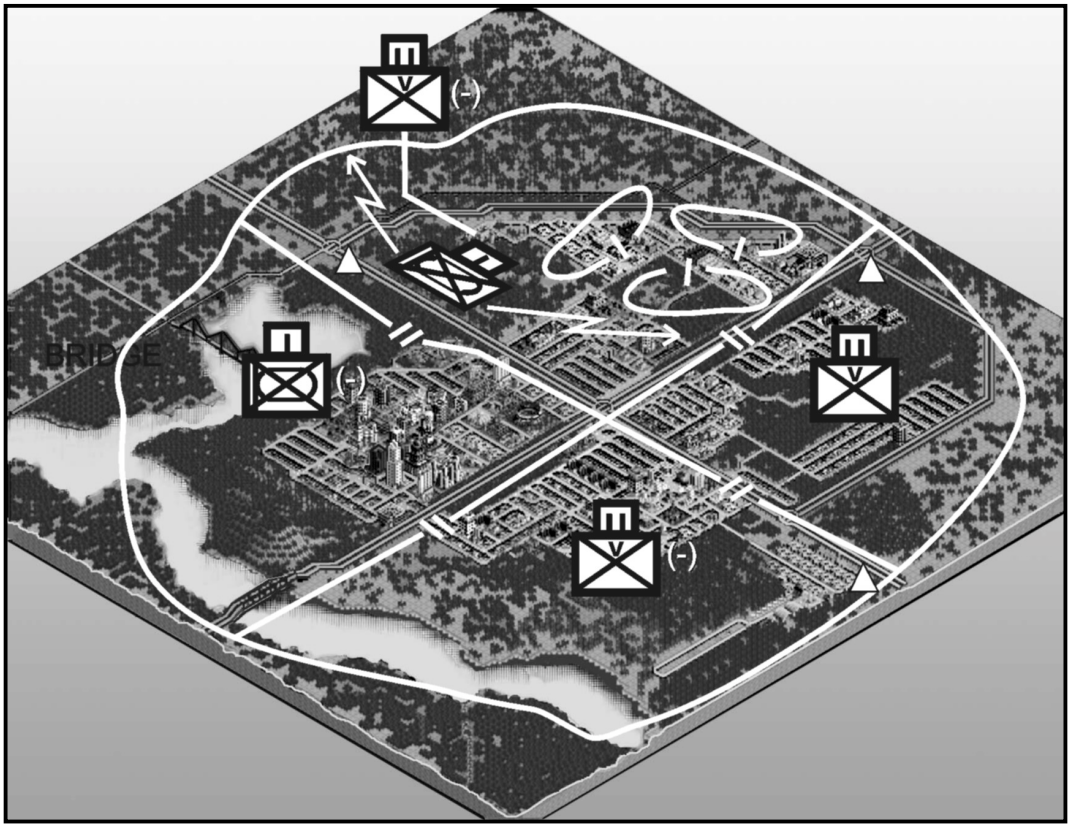


Figure J-18. Nodal defense, varying defensive techniques.

J-23. DEFENSIVE PLANNING

In planning a defense in 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 the urban area.
- Areas such as parks and broad streets that provide fields of fire for tanks and antiarmor weapons.
- Position areas for artillery assets.
- C2 locations.
- Protected areas for CSS activities.
- Suitable structures that are defensible and provide protection for defenders.
- Contingency plans in the event that the brigade must conduct breakout operations.
- Plans for rapid reinforcement.

a. Units defending in urban areas must prepare their positions for all around defense. Units must employ aggressive security operations that include surveillance of surface and subsurface approaches. Units must constantly patrol and use OPs and sensors to maintain effective security. Special measures must be taken to control possible civilian personnel who support the enemy or enemy combatants who have intermixed with the local

population. Consideration must also be given to the protection of non-combatants that remain in the AO, and contingency actions in the event that the situation deteriorates and requires their evacuation.

b. Defensive fire support in urban operations must take advantage of the impact of indirect fires on the enemy before he enters the protection of the urban area. Fire support officers at all levels must coordinate and rehearse contingencies that are inherent to nonlinear fire support coordination measures and clearance of fires. Mutually supporting observation plans for daylight and periods of limited visibility must account for the degradation of lasers in well-lit urban areas. The fire support officer also plans and coordinates nonlethal capabilities for the brigade. Civil affairs and PSYOP assets should be coordinated with the appropriate command and control warfare/information operations headquarters.

Section VI. STABILITY AND SUPPORT OPERATIONS

The brigade's primary purpose is to fight and win engagements. However, brigades are versatile and have the flexibility to transition into military operations other than war (MOOTW). They can operate in environments that may not involve traditional combat. The brigade will conduct MOOTW through the execution of stability and support operations. A brigade may be called upon to conduct a stability or support contingency operation and then have to quickly transition into offensive or defensive operations. The brigade may also be utilized in a stability or support operation at the successful conclusion of a combat operation. When assigned a stability or support mission, a well-trained brigade must be able to rapidly shift its focus from war fighting to stability and support and also from stability and support to war fighting. During a stability or support operation, the brigade performs numerous activities. Essentially, the brigade accomplishes these activities through execution of tactical missions. While stability and support operations can occur anywhere, they will most likely occur in an urban environment. (See Appendix H and FM 7-98 for additional planning considerations.)

J-24. STABILITY OPERATIONS

Stability operations encompass a range of actions that shape the strategic environment and respond to developing crises. The purposes of stability operations are to—

- Protect national interests.
- Promote peace or deter aggression.
- Satisfy treaty obligations or enforce agreements and policies.
- Reassure allies, friendly governments, and agencies.
- Encourage a weak or faltering government.
- Maintain or restore order.
- Protect life and property.
- Demonstrate resolve.
- Deter or respond to terrorism.
- Reduce the threat of conventional arms and WMD to regional security.
- Eliminate or contain subversion, lawlessness, and insurgency.

a. **Considerations for Stability Operations.** Conducting stability operations is fundamentally identical to conducting combat operations. While each stability operation

is different, the military decision-making process (MDMP) and troop-leading procedures methodologies apply. The considerations listed below supplement those processes and can help the brigade commander and staff in developing tailored concepts and schemes for stability operations.

- Leverage interagency, joint, and multinational cooperation.
- Enhance the capabilities and legitimacy of the host nation.
- Understand the potential for unintended consequences of individual and small unit actions.
- Display the capability to use force without threatening the population.
- Act decisively to prevent escalation.
- Apply force selectively and discriminately.
- Stress force protection.
- Emphasize information operations.

b. **Types of Stability Operations.** Table J-7 depicts the types of stability operations a brigade may be called upon to conduct, and the missions it will issue its subordinate battalions or TFs in order to execute its stability operation(s).

TYPE	MISSIONS
Peace Operations	***Peacekeeping*:** employ patrols, establish checkpoints, roadblocks, buffer zones, supervise truce, EPW exchange, reporting and monitoring, negotiation and mediation, liaison, investigation of complaints and violations, civil disturbance missions, and offensive and defensive missions. ***Peace Enforcement*:** separate belligerents; establish and supervise protected zones, sanction enforcement, movement denial and guarantee, restoration and maintenance of order, area security, humanitarian assistance, civil disturbance missions, and offensive and defensive missions. ***Operations in Support of Diplomatic Efforts*:** conduct military-to-military contacts, conduct exercises, provide security assistance, restore civil authority, rebuild physical infrastructure, provide structures and training for schools and hospitals, and reestablish commerce.
Foreign Internal Defense	***Indirect Support*:** military-to-military contacts, exercises, area security. ***Direct Support*:** civil-military operations, intelligence and communications sharing, and logistical support. ***Combat Operations*:** offensive and defensive missions.
Support to Insurgencies	Show of force, defensive missions, raids, area security, employ patrols, and provide CSS.
Counterdrug Operations	Liaison and advisor duty, civic action, intelligence support, surveillance support, reconnaissance, logistical support, and information support.
Combating Terrorism	Conduct force protection, offensive and defensive missions.
Noncombatant Evacuation Operations	Attack to seize terrain that secures evacuees or departure area, guard, convoy security, delay, and defend. (See FM 90-29.)
Arms Control	Seize and destroy weapons, convoy escort, assist and monitor inspection of arms, and conduct surveillance.
Show of Force	Perform tactical movement, demonstration, defensive operations, and perform training exercises.
Domestic Civil Disturbance Operations	Assist law enforcement activities and security operations.

Table J-7. Types of stability operations, missions.

J-25. SUPPORT OPERATIONS

Support operations provide essential supplies and services to assist designated groups. They are conducted to help foreign and civil authorities respond to crises. Brigades conduct support operations to save or protect lives, reduce suffering, recover essential

infrastructure, improve the quality of life, and restore situations to normal. Again, planning for support operations is fundamentally identical to planning for combat and stability operations. While each support operation is different, the military decision-making process and troop-leading procedures methodologies apply. Considerations that can assist the brigade commander and staff in developing plans for support operations are:

- Provide essential support to the largest number of people.
- Coordinate actions with other agencies.
- Establish measures of effectiveness.
- Hand over to civilian agencies as soon as feasible.
- Conduct robust information operations.
- Secure the force.

a. **Types of Support Operations.** The two types of support operations that brigades will conduct are domestic support operations (DSO) and foreign humanitarian assistance (FHA). Brigades conduct DSO in the US and its territories and FHA outside the US and its territories. Brigades normally conduct stand-alone FHA operations only in a permissive environment. In uncertain and hostile environments, brigades conduct FHA operations as part of larger stability or offensive and defensive operations.

b. **Forms of Support Operations.** During DSO brigades perform relief operations, provide support to incidents involving WMD, provide support to law enforcement, and perform community assistance. In FHA brigades most often conduct relief operations; however, FHA may also involve support to incidents involving WMD and community assistance. Missions and tasks assigned to subordinate battalions or TFs often overlap during the conduct of support operations. Table J-8 depicts the more common missions that will be assigned to subordinate battalions or TFs.

FORMS OF SUPPORT OPERATIONS	MISSIONS
Relief Operations	Search and rescue, food & water distribution, providing temporary shelter, transportation support, medical support, sanitation, area security.
Support to Incidents Involving WMD	Assisting law enforcement, area security, protection of critical assets (utilities, transportation, banking, telecommunications), responding to WMD casualties, establishing roadblocks/checkpoints.
Support to Civil Law Enforcement	Civil disturbance missions; support to counterterrorism and counterdrug operations; providing resources, training, and augmentation; assisting with cordon and search; security patrols; establish roadblocks and checkpoints.
Community Assistance	Search and rescue, firefighting, assistance in safety and traffic control, emergency snow removal, providing temporary shelter.

Table J-8. Forms of support operations, missions.

c. **Other Agencies.** Because of the nature support operations, the brigade can expect additional strains on its logistical system and other assets such as engineers, medical, and MPs. Support operations rely on a partnership with other government and non-government organizations. Liaison with these agencies and between local governments is critical. Regardless of the positive relationships built, force protection always remains a top priority.

J-26. TRANSITION TO COMBAT OPERATIONS

Stability, and to a lesser extent, support operations are missions that may transition to combat. The commander and staff must always keep in mind that the pendulum can also shift from a stability or support operation to combat. An escalation to combat is a clear indicator that the stability or support operation failed. The brigade must always retain the ability to conduct offensive and defensive operations. Preserving the ability to transition allows the brigade to maintain initiative while providing force protection.

a. **Perception of Power.** The knowledge that the brigade is a viable presence because of its combat power must be coupled with the perception that it will employ its power if necessary. This perception is the primary means by which the brigade deters escalation to hostile action. The commander must plan for contingency operations that factor in what actions the brigade will perform if combat cannot be averted. In addition, how the brigade is task organized and how the AO is designed must support an expeditious transition.

b. **Balanced Mindset.** Soldiers must be able to properly adjust and balance the mindset of peace operations with the mindset of war fighting. Soldiers cannot become too complacent in their warrior spirit, but also must not be too eager to rely on the use of force to resolve conflict. This balance is the essence of peace operations and the fundamental aspect that will enable the brigade to perform its mission successfully and avoid an escalation to combat.

c. **Combat Skills Training.** If the stability or support operation extends over prolonged periods of time, training should be planned that focuses on the individual and collective combat tasks that would be performed during transition to offensive and or defensive missions.

GLOSSARY

A2C2—Army airspace command and control

AA—assembly area; avenue of approach

AACG—arrival airfield control group

ABC2—airborne command and control

ABCC—airborne battlefield command and control center

ABMOC—air battle management operations center

AC—analyst console

ACA—airspace coordination area

ACE—analysis and control element

ADA—air defense artillery

ADALO—air defense artillery liaison officer

ADAM—area denial artillery munition

ADCT—air defense combat team

admin—administrative

ADO—air defense officer

ADP—automatic data processing

ADSO—assistant division signal officer

ADTOC—Air Defense Tactical Operations Center

ADW—air defense warning

affiliation—The process by which mobile and wire subscribers enter and identify their location in the MSE network. Affiliation can be compared to "logging on" a computer system or ham radio net.

AG—adjutant general

agg—aggregate

AGL—automatic grenade launcher

AH—attack helicopter

AHLO—attack helicopter liaison officer

AI—airborne intercept

AID—Agency for International Development

A/L—administration/logistics

ALB—AirLand Battle

ALO—air liaison officer

altn—alternate

AM—amplitude modulation

amb—ambulance

AMC—air mission commander

AN/GRA—Army Navy ground radio assembly

AN/GRC—Army Navy ground radio component

AN/PRC—Army Navy portable radio component

AN/PVS—Army Navy passive vision sight

AN/TAS—Army Navy thermal acquisition sight

AN/UXC—Army Navy utility fax communications

AN/VRC—Army Navy vehicular component

ANGLICO—air and naval gunfire liaison company

AO—area of operations

AOB—advanced operations base

AOR—area of responsibility

APC—armored personnel carrier

AR—armor

ARTEP—Army Training and Evaluation Program

arty—artillery

ASCC—Air Standardization Coordinating Committee

aslt—assault

asst—assistant

atch—attached

atk—attack

ATKHB—attack helicopter battalion

ATP—ammunition transfer point

ATSC—Army Training Support Center

attn—attention

ARSOTF—Army Special Operations Task Force

avn—aviation

BAI—battlefield air interdiction

BAR—Browning automatic rifle

BCC—battlefield circulation control

BDA—battle damage assessment

bde—brigade

BFV—Bradley fighting vehicle

BHL—battle handover line

BICC—battlefield information control center

BLPS—ballistics/laser eye protection system

BMNT—beginning morning nautical twilight

bn—battalion

BOMREP—bombing report

BOS—battlefield operating system

BP—battle position

BPSE—brigade psychological operations support element

BSA—brigade support area

C—Celsius

C2—command and control

C2V—command and control vehicle

C3—command, control, and communications

C3CM—command, control, and communications countermeasures

C3I—command, control, communications, and intelligence

C4I—command, control, communications, computer, and intelligence

C&J—collection and jamming

CA—counterair

CAB—combat aviation battalion

CAAD—combined arms air defense

cal—caliber

CAS—close air support

cav—cavalry

cbt—combat

CCF—Communist China Forces

CCIR—commander's critical information requirements

CCP—carrier command post

CCT—combat control team

cdr—commander

CFA—covering force area

CFL—coordinated fire line

ch—chaplain

chem—chemical

CHEMWARN—chemical warning

CI—counterintelligence

CIA—Central Intelligence Agency

CINC—commander in chief

cmd—command

CMF—career management field

CMO—civil-military operations

co—company

COA—course of action

COL—colonel

coll—collection

COLT—combat observation/lasing team

comdt—commandant

COMMEX—communications exercise

commo—communications

COMSEC—communications security

cont—contingency

CONUS—continental United States

COO—combined obstacles overlay

COSCOM—corps support command

CP—command post
CPHD—Copperhead
CPT—captain
CS—combat support
CSM—command sergeant major
CSS—combat service support
CTT—commander's tactical terminal
CV—commander's vehicle

DA—Department of the Army
DBC—deputy brigade commander
def—defense
DEW—directed-energy weapon
DIA—Defense Intelligence Agency
DISCOM—division support command
div—division
DLIC—detachment left in contact
DoD—Department of Defense
DP—decision point
DMZ—demilitarized zone
DNVT—digital nonsecure voice terminal
DS—direct support
DSCP—dual station command post
DST—decision support template
DSVT—digital secure voice terminal
DTOC—division tactical operations center
DVOD—direct-view optic device
dvr—driver
DZ—drop zone
DZST—drop zone safety team

EA—engagement area
EAC—echelon above corps
EAD—echelon above division
EEIF—essential elements of friendly information
ELINT—electronics intelligence
EM—enlisted men
EMP—electromagnetic pulse
engr—engineer
EO—electro-optical
EPW—enemy prisoner of war
EW—electronic warfare

F—Fahrenheit
FAA—forward alighting area
FA—field artillery
FAAD—forward area air defense
FAC—forward air controller
F&AO—finance and accounting officer
FARP—forward area rearm/refuel point
FASCAM—family of scatterable mines
FASCO—forward area support coordination officer
FAST—forward area support team
FCL—fire coordination line
FCT—fire control team
FD—fire direction
FEBA—forward edge of the battle area
FFIR—friendly forces information requirements
FH—frequency hopping
FIST—fire support team
fld—field
FLIR—forward-looking infrared radar
FLOT—forward line of own troops
FM—field manual; frequency modulation
FOB—forward operations base
FPF—final protective fires
FRAGO—fragmentary order
FS—fire support
FSB—forward support battalion
FSCOORD—fire support coordinator
FSCL—fire support coordination line

FSCM—fire support coordination measures

FSE—fire support element

FSNCO—fire support noncommissioned officer

FSO—fire support officer

fwd—forward

FY—fiscal year

G2—Assistant Chief of Staff, G2 (Intelligence)

G3—Assistant Chief of Staff, G3 (Operations and Plans)

G4—Assistant Chief of Staff, G4 (Logistics)

GBS—ground-based sensor

GEMSS—ground emplaced mine scattering system

GLLD—ground laster-location designator

gnd—ground

GP—general purpose

GS—general support

GSM—ground station module

GSR—ground surveillance radar

HEMTT—heavy expanded mobile tactical truck

HF—high frequency

HHC—headquarters and headquarters company

HIMAD—high-to-medium-altitude air defense

HMMWV—high-mobility, multi-purpose, wheeled vehicle

HN—host nation

HPT—high payoff

HQ—headquarters

hr—hour

HUMINT—human intelligence

hvy—heavy

IAW—in accordance with

IDAD—internal defense and development

IDP—initial delay position

IEW—intelligence and electronic warfare

IEWSE—intelligence and electronic warfare support element

IG—inspector general

IHFR—improved high frequency radio

IN—infantry

intel—intelligence

IPB—intelligence preparation of the battlefield

IR—information requirement

ISB—intermediate support base

ITV—improved TOW vehicle

JAAT—joint air attack team

JACKPOT—joint airborne communications center/command post

JCS—joint chiefs of staff

JFC—joint force commander

JM—joint munitions

JP—joint publication

JP5—fuel

JSEAD—joint suppression of enemy air defenses

JSOF—joint special operations force

JSOTF—joint special operations task force

JSTARS—joint surveillance target attack radar system

JTF—joint task force

KIA—killed in action

km—kilometer

kmph—kilometer per hour

LA—limit of advance

LAPES—low-altitude parachute extractor system

LAW—light antitank weapon

lbs—pounds

LC—line of contact

LD—line of departure

LIC—low-intensity conflict

LLVIlow-level voice intercept

LO—liaison officer

LOA—light observation aircraft

LOC—lines of communication

LOG—logistics

LOGPAC—logistics package

LOGSTAT—logistical status

LOS—line of sight

LRP——ogistical release point

LRSC—long-range surveillance company

LRSU—long-range surveillance unit

LSDIS—light and special division interim sensor

lt—light

LTC—lieutenant colonel

LZ—landing zone

m—meter

MAAG—military assistance advisory group

maint—maintenance

MAJ—major

MANPAD—man-portable air defense

MANPADS—man-portable air defense system

MBA—main battle area

MC—mobility corridor

MCO—movement and control officer

MCOO—modified combined obstacle overlay

MCS—maneuver control system

MDRT—mobile digital radio terminal

mech—mechanized

med—medical

MEDEVAC—medical evacuation

MEMTT—medium expanded mobility tactical truck

METL—mission-essential task list

METT-T—mission, enemy, terrain, troops and time available

MG—machine gun

MI—military intelligence

MIJI—meaconing, intrusion, jamming, and interference

MILGP—military group

min—minute

MKT—mobile kitchen trailer

MLRS—multiple-launch rocket system

mm—millimeter

mob—mobility

MOB—main operating base

MOPMS—modular pack mine system (XM133)

MOPP—mission-oriented protection posture

MORTREP—mortar report

MOS—military occupational specialty

MOUT—military operations on urban terrain

MP—military police

mph—miles per hour

MRE—meals ready-to-eat

MRR—motorized rifle regiment

MSB—main support battalion

MSE—mobile subscriber equipment

MSG—master sergeant

MSR—main supply route

MSRT—mobile subscriber radio telephone

MSRTS—mobile subscriber radio telephone system

MTET-T—mission, terrain, enemy, troops, and time available

MTOE—modification table of organization and equipment

MTP—mission training plan

mvr—maneuver

NAI—named area of interest

NATO—North Atlantic Treaty Organization

NBC—nuclear, biological, and chemical

NCA—national command authority

NCO—noncommissioned officer

NCOIC—noncommissioned officer in charge

NCS—net control station

NEO—noncombatant evacuation order

NFA—no-fire area

NGF—naval gunfire

NGO—nongovernment organization

NRI—net radio interface

NUCWARN—nuclear warning

NVD—night vision device

NVG—night vision goggles

OAKOC—obstacles, avenues of approach, key terrain, observation and fields of fire, and cover and concealment

obj—objective

OCOKA—observation and fields of fire, cover and concealment, obstacles and movement, key terrain, and avenues of approach

OCONUS—outside continental United States

O&I—operations and intelligence

O/O—on order

OFF—officer

OH—observation helicopter

OIC—officer in charge

OP—observation post

OPCON—operational control

OPLAN—operation plan

opns—operations

OPORD—operation order

OPSEC—operations security

OPSKED—operational schedule

ORP—objective rally point

OSB—operation support base

PAO—public affairs office

para—paragraph

PD—point of departure

pers—personnel

PERSTATREP—personnel status report

PFC—private first class

PIP—product improvement program

PIR—priority intelligence requirement

PKO—peacekeeping operation

PL—phase line

PLD—probable line of deployment

plt—platoon

PM—provost marshal

POD—port of debarkation

POE—port of embarkation

POL—petroleum, oils, and lubricants

PP—passage point

prep—preparation

pri—priority

PS—petroleum and supply

psn—position

PSNCO—personnel NCO

PSYOP—psychological operations

PZ—pickup zone

QSTAG—quadripartite standardization agreement

R&S—reconnaissance and surveillance

RAAMS—remote antiarmor mine system

RAG—regimental artillery group

RATT—radio teletypewriter

RAU—radio access unit

RDRD—return fire, deploy, report, and develop the situation

rec—recovery

recon—reconnaissance

regt—regiment

REMAB—remote marshaling base

REMBASS—remotely monitored battlefield sensor system

REMS—remotely employed sensors

rgr—ranger

res—reserve

RETRANS—retransmission

RFI—radio frequency interference

RFL—restrictive fire line

RIP—Ranger Indoctrination Program

RIST—Areconnaissance, intelligence, surveillance, and target acquisition

rmt—remote

ROE—rules of engagement

ROK—Republic of Korea

RP—release point

RR/EO—race relations/equal opportunity

rte—route

RTGT—ranger terminal guidance team

S1—Adjutant (U.S. Army)

S2—Intelligence Officer (U.S. Army)

S3—Operations and Training Officer (U.S. Army)

S4—Supply Officer (U.S. Army)

S5—Divil Affairs Officer (U.S. Army)

SALT—supporting arms liaison team

SALUTE—size, activity, location, unit, time, and equipment

SAO—security assistance office

SAT—systems approach training

SCC—system control center

sct—scout

SD—self-destruct

SEAD—suppression of enemy air defenses

sec—section

SEMA—special electronic mission aircraft

SEN—small extension node

SF—special forces

SFC—sergeant first class

SFOB—special forces operations base

SGM—sergeant major

SGT—sergeant

SHELREP—shelling report

SHORAD—short-range air defense

SICPS—standard integrated command post system

SIG—signal

SIGINT—signals intelligence

SIGSEC—signals security

SINCGARS—single-channel ground and airborne radio subsystem

SIR—specific information requirements

SITMAP—situation map

SITREP—situation report

SJA—staff judge advocate

smk—smoke

SOA—special operations aviation

SOC—special operations command

SOCCE—special operations command and control element

SOCOM—special operations command

SOF—special operations forces

SOI—signal operation instructions

SOP—standing operating procedure

SP—strongpoint

SPC—specialist (rank)

spec—specialist

spt—support

sqd—squad

sr—senior

SSB—single side band

SSG—staff sergeant

STANAG—standardization agreement

std—standard

sup—supply
surg—surgeon
surveil—surveillance
svc—service
SWO—staff weather officer

TA—tactical air
TAC—Tactical Air Command
TACAIR—tactical air
TACCS —actical Army combat computer system
TACON—tactical air control
TACP—tactical air control party
TAI—target area of interest
TBP—to be published
TC—training circular
TCF—tactical combat force
TCP—tactical computer processor
TCT—tactical computer terminal
TEK—traffic encryption key
TF—task force
tgts—targets
thru—through
TI—technical inspection
tk«—tank
TLP—troop-leading procedures
tm—team
TM—technical manual
tmt—treatment
TOC—tactical operations center
TOE—table of organization and equipment
topo—topographic
TOT—time on target
TOW—tube-launched, optically tracked, wire-guided missile
TPL—time phase line
TRADOC—Training and Doctrine Command
trans—transportation
TRP—target reference point
TRANSCOM—transportation commission
TSOP—tactical standing operating procedure
TSP—training support package
TTP—tactics, techniques, and procedures

UAV—unmanned aerial vehicle
UH—utility helicopter
UHF—ultra-high frequency
UN—United Nations
US—United States
USAF—United States Air Force
USASOC—US Army Special Operations Command
USIA—US Information Agency

VEESS——ehicle engine exhaust smoke system
VFMED—variable format message entry devices
VHF—very high frequency
VHS—video high speed
VIP—very important person
VOL—Volcano
VS—Vulcan Stinger

wpns—weapons
WIA—wounded in action
WO—warrant officer

XO—executive officer

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