FM 7-30

DEPARTMENT OF THE ARMY FIELD MANUAL

THE INFANTRY BRIGADES

HEADQUARTERS, DEPARTMENT OF THE ARMY
MARCH 1969

TAGO 7069A

FIELD MANUAL
No. 7–30

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., *28 March 1969*

THE INFANTRY BRIGADES

*This manual supersedes FM 7–30, 19 May 1965.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1–1. Purpose

This manual provides doctrinal guidance for the employment of the infantry, airborne, airmobile, light, and mechanized-type brigades.

1–2. Scope

a. The doctrine herein is applicable generally to all five infantry brigades, both divisional and separate. The portions of the text that pertain exclusively to one type brigade are so specified.

(1) The divisional brigade is basically a tactical echelon of command. The brigade commander or his designated representative enters the administrative chain of command in a control, coordinating, and supervisory role only. Maneuver and combat support units attached to the brigade receive combat service support directly from the division support command, although units of the support command may be attached to, or placed in support of, the brigade for this purpose. Maneuver units (infantry, airborne infantry, airmobile infantry, light infantry, mechanized infantry, cavalry, and armor units) normally are attached to the brigade for operations, and when the divisional brigade is employed in a separate or independent role, combat support and combat service support elements normally are attached.

(2) The separate (nondivisional) brigade is both a tactical and an administrative organization. Its structure is composed of standard TOE combat, combat support, and combat service support elements. Additional combat support and combat service support units may be assigned or attached depending upon the brigade's mission and strength, and the proximity of required support.

b. This manual is a brigade level manual; however, the fundamentals of tactical operations of the division generally apply to the brigade.

c. The material in this manual is applicable to:

(1) General war, to include a consideration of the employment of and protection from nuclear munitions and chemical, biological, and radiological agents; and operations in nuclear, chemical, or biological environments.

(2) Limited war.

(3) Cold war, to include stability operations.

d. Currently, there are only four types of divisional brigades and only four types of separate brigades. There is no divisional light brigade nor separate airmobile brigade. The TOE for each type should be examined for specific details on organization and equipment:

(1) Headquarters and Headquarters Company, Infantry Division Brigade, TOE 7–42.

(2) Headquarters and Headquarters Company, Infantry Division (Mechanized) Brigade, TOE 37–42.

(3) Headquarters and Headquarters Company, Airborne Division Brigade, TOE 57–42.

(4) Headquarters and Headquarters Company, Airmobile Division Brigade, TOE 67–42.

(5) Headquarters and Headquarters Company, Separate Infantry Brigade, TOE 7–102.

(6) Headquarters and Headquarters Company, Separate Infantry Brigade (Mechanized), TOE 37–102.

(7) Headquarters and Headquarters Company, Separate Airborne Brigade, TOE 57–102.

(8) Headquarters and Headquarters Company, Separate Light Infantry Brigade, TOE 77–102.

e. For convenience of reference, brigades are

referred to in this manual as infantry brigade, airborne brigade, airbmobile brigade, light brigade, or mechanized brigade. The term *brigade* refers to both divisional and separate brigades, unless otherwise specified.

f. Users of this manual are encouraged to submit recommendations to improve its clarity or accuracy. Comments should be keyed to the specific page, paragraph, and line of the text in which the change is recommended. Reasons should be provided for each comment to insure understanding and complete evaluation. Comments should be forwarded direct to Commanding Officer, Army Combat Developments Command Infantry Agency, Fort Benning, Georgia 31905. Originators of proposed changes which could constitute a significant modification of approved Army doctrine may send an information copy, through channels, to the Commanding General, U.S. Army Combat Developments Command, Fort Belvoir, Virginia 22060, to facilitate review and followup.

g. This manual is in consonance with the international standardization agreements listed below. Applicable agreements are listed, by type of agreement and number, at the beginning of each chapter.

TITLE	NATO STANAG	CENTO STANAG	SEATO SEASTAG	ABCA SOLOG
Intelligence Reports	2022	2022	2022	2R2
Proforma for Artillery Fire Plan	2031	2031	2031	43
Rear Area Security and Rear Area Damage Control	2079	2079	2079	48R
Relief of Combat Troops	2082	2082	2082	49R
Battlefield Illumination	2088	2088	----	108
Fire Coordination in the Land/Air Battle	2099	2099	2099	---
Principles and Procedures for Establishing Liaison	2101	2101	2101	104
Withdrawal in Nuclear Operations	----	----	----	82

Section II. MISSIONS OF THE DIVISIONAL BRIGADES

1–3. The Brigade

The brigade mission is to close with the enemy by means of fire and maneuver in order to destroy or capture him, or to repel his assault by fire, close combat, and counterattack. As a major subordinate command element within the division, the brigade, with attached combat, combat support, and combat service support units, executes the division's combat mission.

1–4. The Brigade Headquarters and Headquarters Company

The mission of the brigade headquarters and headquarters company is to command and/or control attached combat, combat support, and combat service support elements in both training and operations.

Section III. ORGANIZATION FOR COMBAT

1–5. General

a. Organization for combat and command relationships are dictated by the brigade mission, the friendly and enemy situation, weather, terrain, and the most effective employment.

(1) *Attachment* represents the firmest control of a supporting unit by a supported commander but may impose an administrative or logistical burden on the unit to which the attachment is made. Generally, attachment is preferred when the commander designating this role is unable to otherwise provide effective control and combat service support for a subordinate unit which requires support. It is imperative that the unit to which another unit is attached has the capability to provide combat service support to the attached unit.

(2) *Operational control* provides a relationship in which full use of the attached unit or element is devoted to the unit or element to which it is attached without the burden of additional combat service support requirements being placed on the supported unit. Operational control is preferred when outside resources are available for combat service support, and effective control can be maintained.

(3) The role of *support* makes a supporting element generally available to a supported unit but does not limit strictly the application of its resources to only that supported unit. The supporting role is preferred when effective control can be exercised by the supporting commander.

b. Units of the brigade may be formed into task forces for employment either as a temporary grouping of units (under one commander) to perform a specific but limited operation, or as a semi-permanent organization of units (under one commander) to perform a continuing task.

1–6. Factors Bearing on Organization for Combat

a. General.

(1) The organization of the headquarters and headquarters companies of the infantry divisional brigades is the same except for minor differences in equipment and personnel.

(2) Attachments to, and detachments from, the brigade are made by division to provide the brigade the means to accomplish assigned missions. In rapidly moving situations, changes in the organizational structure of the brigade may be made frequently and on short notice. The brigade commander and his staff develop SOP and operational techniques which permit attachments and detachments to be made expeditiously and efficiently.

b. Conditions of Employment. The order attaching or placing a unit in support should specify the expected duration of the attachment or support and any limitations or conditions for employment of the unit.

c. Timing. Changes in task organization must be planned and timed carefully to avoid unnecessary interference with combat operations. Detachment of a unit should not be made while it is engaged with the enemy or under conditions where its detachment would jeopardize the accomplishment of the mission of the unit to which it is attached. Whenever possible, major changes required in the task organization should be made while the brigade or elements concerned are in reserve or during a lull in activities.

d. Administration. When attached or placed in support, units report ready to perform their mission. This readiness includes having the prescribed basic load of ammunition and other supplies as required, and having equipment and weapons in operable condition.

e. Coordination. The commander of an attached or supporting unit, or his representative, should report immediately to the headquarters of the supported unit for necessary orders and coordination. After reporting to the supported commander, he should contact appropriate staff sections for additional guidance and instructions and to arrange for combat service support which may be required.

f. Communication. In making attachments or assigning support missions, consideration must be given to communication. Radios of the attached or supporting unit must operate in the nets of the supported unit(s); in some cases, additional radios must be provided to accomplish this requirement.

Section IV. CAPABILITIES AND LIMITATIONS

1–7. General

a. The capabilities and limitations of the brigade are determined by the type, number, and personnel and equipment status of maneuver battalions and combat support and combat service support units attached to or in support of it.

b. All types of infantry brigade headquarters have the following capabilities regardless of the units attached to or in support of them:

(1) Command and control up to five maneuver battalions, plus elements required for combat support and combat service support in combat operations.

(2) Accept or release assigned, attached, or supporting elements on short notice.

(3) Conduct sustained operations.

(4) Supervise the movement and security of attached or supporting elements.

(5) Supervise tactical training of attached elements.

(6) Act as an alternate operational headquarters for the division.

(7) Establish liaison with higher and adjacent headquarters.

1–8. Infantry Brigade

The infantry brigade has a capability to:

a. Close with and destroy or capture the enemy by means of fire and maneuver and to seize and hold terrain.

b. Conduct ground operations under all conditions of weather, terrain, and visibility, with or without nuclear support.

c. Conduct airmobile/airlanded assault operations when provided adequate aircraft.

d. Conduct independent and semi-independent operations when appropriately reinforced.

e. Participate in joint operations.

f. Exploit the effects of CBR weapons.

g. Provide limited defense against air attack.

h. Conduct riverine operations when provided adequate support.

1–9. Mechanized Brigade

In addition to the capabilities listed in paragraph 1–8, the mechanized brigade has a capability to:

a. Maneuver with a high degree of cross-country mobility, coupled with light armor protection for infantry.

b. Provide a highly mobile maneuver force.

c. Act as a mobile counterattack force for the division.

d. Traverse inland waterways, within limitation, while mounted.

1–10. Airborne Brigade

In addition to the capabilities listed in paragraph 1–8, the airborne brigade is capable of conducting parachute operations.

1–11. Airmobile Brigade

In addition to the capabilities listed in paragraph 1–8, the airmobile brigade habitually moves combat forces and their equipment about the battlefield with aircraft, primarily helicopters, under the control of the ground force commander to engage in ground combat.

1–12. Light Infantry Brigade

The light infantry brigade has basically the same capabilities as the infantry brigade (para 1–8).

1–13. Independent and Semi-Independent Brigades

In addition to the capabilities listed in paragraphs 1–8 through 1–12, brigades which are reinforced appropriately (combat, combat support, and combat service support) for independent and semi-independent employment have the capability to sustain themselves in combat for extended periods of time.

1–14. Limitations

a. The infantry, airborne, airmobile, and light infantry brigades have ground mobility limited to walking speed and have limited armor protection.

b. The mechanized brigade loses its mechanized capabilities in the initial or assault phase when it engages in airmobile and/or joint airborne operations. Its ground mobility is restricted by jungle, mountain, and other difficult terrain. The capability of carriers to cross

water obstacles is limited by steep banks or water currents. The mechanized brigade's logistical requirements are greater than those of other brigades.

c. The airborne/airmobile brigade is sensitive to adverse weather conditions and aircraft availability when employed in an airborne/airmobile role.

CHAPTER 2

DIVISIONAL BRIGADES

(NATO STANAG 2101, ABCA SOLOG 104, CENTO STANAG 2101, SEASTAG 2101)

Section I. ORGANIZATON

2–1. Headquarters and Headquarters Company

The divisional brigade headquarters (fig. 2–1) is organized to provide command and control for training and employment of attached units. The headquarters company of all brigades provides personnel and equipment to operate and support the brigade headquarters.

2–2. Brigade Headquarters and Staff

The brigade headquarters section consists of the brigade commander, the executive officer and other unit staff officers, the special staff officers, and the sergeant major (fig. 2–2). The headquarters is organized for sustained operations.

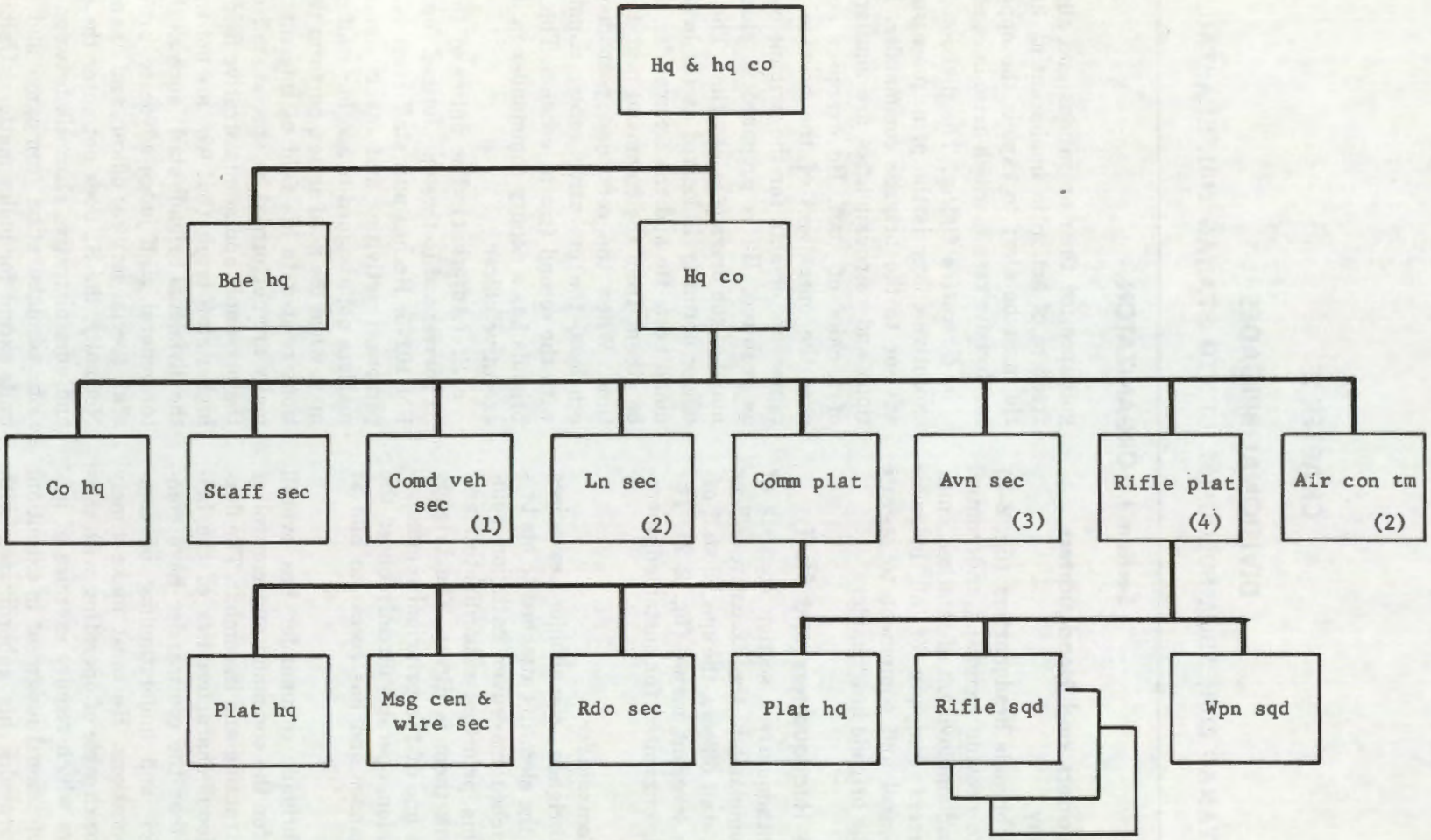
a. Brigade Commander.

(1) The brigade commander exercises command over the elements attached to his brigade. The attached maneuver battalion commanders are his principal subordinates, and his contact with them is direct. The brigade commander, as one of the principal commanders of the division, operates directly under the division commander and has access to him at all times.

(2) The brigade commander has overall responsibility for the command and control of his brigade in training and in combat. The flexible organizational characteristics of the brigade demand that the commander have complete knowledge and understanding of combined-arms operations. He must make timely decisions and be capable of operating with mission-type orders which require exercise of initiative and professional judgment in execution. In turn, he provides his subordinates with guidance for their operations and allows them freedom of action in implementing his orders. He must be alert to exploit the opportunities for decisive results which arise in combat.

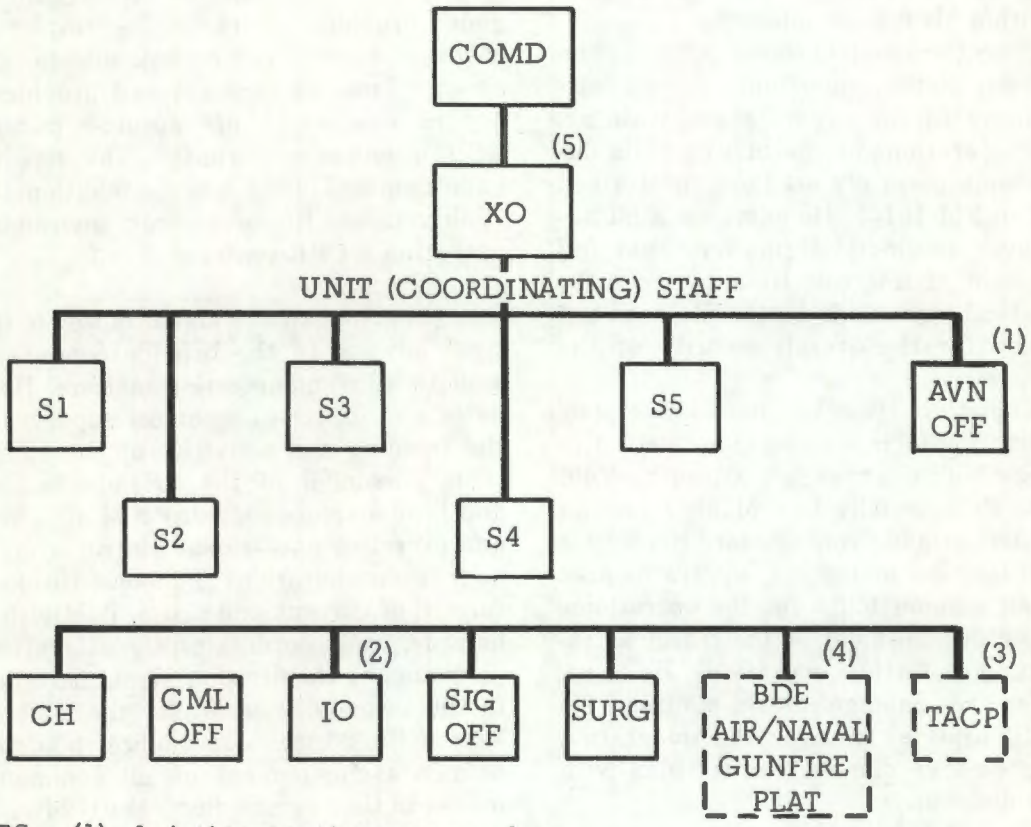
b. Executive Officer. The divisional brigade executive officer is the principal assistant and advisor to the brigade commander. His functions and responsibilities are similar to those of a chief of staff. He exercises supervision over the operations of the brigade staff and represents or acts for the brigade commander as required. He is prepared to assume command of the brigade at any time. The executive officer normally is located at the brigade command post. He and the commander should not be absent from the command post at the same time. When the command post displaces by echelons, the executive officer usually moves with the second (main) echelon. The airmobile brigade has a deputy commander in lieu of the executive officer.

c. S1 (Adjutant). The duties of the brigade S1 correspond to those prescribed for the G1 in FM 101–5. He has unit staff responsibility for personnel activities and other administrative matters not assigned to another staff officer. He may, when the need arises, perform those functions related to his field of interest that normally are performed by special staff officers in the personnel and administrative field found at higher staff levels (but who are not included in the divisional brigade staff) such as the inspector general, staff judge advocate, provost marshal, special services officer, and finance officer. Normally, the S1 does not enter the personnel and administrative channels between the division administration company and attached units except for policy matters. Units attached



NOTES: (1) Organic to mechanized brigade only.
(2) Not organic to airmobile brigade.
(3) Aviation platoon in airmobile brigade.
(4) Security platoon in airmobile brigade.

Figure 2-1. Divisional brigade headquarters and headquarters company.



NOTES: (1) Aviation section commander.
(2) Airborne division only.
(3) Personnel furnished by Air Force.
(4) Personnel furnished by Fleet Marine Force air/naval gunfire liaison company when naval gunfire and naval (marine) air are supporting the division.
(5) Airmobile brigade has deputy commander.

Indicates normal attachment.

Figure 2–2. Brigade staff.

to the brigade normally communicate directly with the division adjutant general section. The S1 has staff responsibility for the movement, internal arrangement, organization, and operation of the headquarters and the allocation of space within the brigade headquarters. His principal assistant for this function is the headquarters commandant. The S1 also exercises staff supervision over those activities of the special staff that fall within his field of interest.

d. S2 (Intelligence Officer). The duties of the brigade S2 are similar to those prescribed for the G2 in FM 101–5. He has staff responsibility for all matters pertaining to combat intelligence and counterintelligence, and he coordinates surveillance and reconnaissance activities of attached units. He exercises staff super-

vision over the activities of the special staff that fall within his field of interest.

e. S3 (Operations and Training Officer). The brigade S3 has staff responsibility for all matters pertaining to the organization, training, and combat operations of the brigade. His duties correspond generally to those prescribed for the G3 in FM 101–5. He exercises staff supervision over special staff matters that fall within his field of interest. He supervises the brigade tactical operations center. He has staff responsibility for the overall security of the command.

f. S4 (Logistics Officer). The S4 has staff responsibility for logistics and those activities of special staff officers that fall within his field of interest. He primarily is a planner and an advisor to the brigade commander. He selects the general location of the brigade trains area and has staff responsibility for the operations, security, and displacement of the trains as required to support tactical operations. He is responsible for area damage control planning (to include CBR aspects) and for the integration of the brigade area damage control plan with that of the division.

g. S5 (Civil Affairs Officer). The duties of the brigade S5 are similar to those prescribed for the G5 in FM 101–5. He has staff responsibility in all matters pertaining to the relationship of a brigade with the civilian environment and the civilian population, government, economy, and institutions in the area of operations, and to military civic action.

h. Chaplain. The brigade chaplain is the senior chaplain assigned to the brigade headquarters and headquarters company. He will coordinate activities and provide assistance and supervision necessary to insure adequate religious coverage of all organic or attached units.

i. Chemical Officer. The brigade chemical officer is the advisor to the commander and staff on chemical, biological, and radiological operations and training and defense against CBR and nuclear attacks. He plans and supervises CBR training of the brigade, provides chemical staff personnel of subordinate units with technical assistance, inspects CBR protective equipment for operational readiness, plans CBR decontamination operations, plans the employment of smoke for security of the brigade; provides advice on the employment of chemical agents, riot-control agents, defoliant agents, flame and smoke; and provides advice on the evacuation of captured materiel for CBR intelligence purposes. The separate brigade chemical officer has the additional responsibility in a CBR or nuclear environment for operating a CBR center.

j. Signal Officer.

(1) The brigade signal officer is the principal advisor to the brigade commander and staff in all communication matters. He coordinates and exercises technical supervision over the training and activities of the communications personnel in the brigade headquarters and headquarters company and attached units, and exercises operational control over the brigade communications platoon. He keeps informed of current and planned activities of the brigade, and coordinates signal matters with personnel of the division signal battalion units in the brigade area. Under the staff supervision of the S3, the signal officer plans and recommends employment of all communications means in the brigade. See FM 61–24.

(2) An effective communications system, responsive to the momentum of brigade operations, is essential. The brigade communications system, when properly established, provides the commander with the capability to control the actions of his unit; to coordinate his supporting fires; to receive and transmit orders and information; to maintain contact with higher, lower, attached, supporting, and adjacent units; and to coordinate logistical and personnel matters (fig. 2–3).

(3) Radio, the principal means of communication within the brigade, is susceptible to jamming and interception by the enemy and is affected by terrain and atmospheric conditions. Therefore, wire and messenger (both ground and air) are used extensively whenever the tactical situation allows. Reliance is not placed on any one system; rather, each means complements the other, thus achieving maximum reliability, security, flexibility, and responsiveness from the available communications means.

k. Surgeon. The brigade surgeon advises the commander on all matters affecting the mental

Units	Brigade Command Net (FM) Voice	Brigade Log Net (FM) Voice[2]	Brigade RATT Net Opn, Intel Net[3]	Division Command Net (FM) Voice[4]	Division Warning Net (AM) Voice	Division RATT Net Opn, Intel	Division RATT Net Admin Log	Air Force Air Req Net (AM/Voice/CW)	Division Air Req Net (AM/Voice/CW)	Spot Report Rcvr Net UHF	Air Force Tactical Air Direction Net UHF
Brigade CP	X[5]	X	X[5]	X	X	X		X[6] (TACP)	X	X	X[6] (TACP)
Brigade Trains	X	X[5]					X				
Maneuver Bn	X	X	X		X			X[6] (TACP)	X	X	X[6] (TACP)
Engineer Bn	X[1]	X[1]		X	X						
Cavalry Sqd	X[1]	X[1]		X	X	X	X	X[6] (TACP)	X	X	X[6] (TACP)
Division Main				X[5]	X[5]	X[5]	X	X[6] (TACP)			
Division Arty	X[1]	X[1]		X	X	X	X				
Support Command		X[1]		X	X		X[5]				

NOTES: (1) Unit supporting brigade enters brigade nets as required.
(2) Brigade logistic net established as required. Used to establish communication in brigade trains as required.
(3) May be used for other type traffic as required.
(4) Other nets may be established as required, e.g., brigade intelligence net (FM) voice. Equipment for this net would be obtained by reducing stations in brigade command net and with similar adjustment at battalion.
(5) NCS - net control station.
(6) Radio set provided by Air Force.

Figure 2–3. Type of brigade communication.

and physical health of the command. He effects liaison with the medical company in support of the brigade. The surgeon normally exercises operational control of medical units attached from division or higher level. Overall medical activities are coordinated by the brigade S1. However, the surgeon deals directly with the brigade commander on medical matters affecting the health of the brigade and with the entire staff in their respective areas of responsibility.

l. Sergeant Major. The sergeant major is the senior NCO in the brigade headquarters. He serves as the principal enlisted assistant and advisor to the commander. He accompanies the commander on inspections and visits to elements of the command in garrison and establishes liaison with the sergeants major of attached battalions.

2–3. Company Headquarters

The company headquarters is composed of the personnel and equipment required for support of the brigade headquarters and headquarters company. It includes the company commander (who also is the headquarters commandant), company executive officer, first sergeant, company clerk, mess steward, motor sergeant, supply sergeant, armorer, powerman, mechanics, cooks, and drivers.

2–4. Liaison Section

The duties of the liaison officers correspond to those discussed in FM 101–15. The section operates under the supervision of the brigade executive officer. One liaison officer maintains liaison with division or higher headquarters, and one may be assigned to an adjacent brigade. When not engaged in liaison duties, the liaison officers may be assigned duties in the brigade S3 section.

2–5. Command Vehicle Section

The command vehicle section provides tracked vehicles with operators and equipment for use as command vehicles by the brigade commander and staff. It is organic to the mechanized brigades only.

2–6. Communications Platoon

a. The communications platoon in all infantry brigades is organized with a platoon headquarters, a message center and wire section, and a radio section. Personnel and equipment vary slightly with each type brigade, generally in number and types of vehicles, radios, and drivers. The platoon provides personnel and equipment to install, operate, and maintain communication within the headquarters and provides access to the division communication systems. The platoon performs organizational maintenance on signal equipment of the headquarters and headquarters company.

b. The platoon establishes and maintains communication between units, governed by the following rules:

(1) The brigade is responsible for establishing and maintaining communication with the subordinate units (including attached units).

(2) A unit supporting a brigade is responsible for establishing and maintaining communication with the brigade.

(3) The rule for establishing lateral communication from left to right is applicable for the brigade and its subordinate units.

c. For a detailed discussion of the duties and responsibilities of the communication platoon, refer to FM 61–24.

2–7. Aviation Section

a. The aviation section provides helicopters for command, control, liaison, reconnaissance, and security within the brigade. The commander of the section also serves as the brigade aviation officer, advising the commander on all matters pertaining to Army aviation support. He coordinates all aviation in support of the brigade.

b. The principle governing employment of the aviation section is that the organic helicopters will be employed in the performance of those aviation tasks which the brigade commander deems to be of greatest importance to the accomplishment of his mission. Operational missions for the section are assigned by the brigade S3, through the section commander, based on priorities and guidance established by the brigade commander.

c. Brigade units request Army aviation support through the brigade S3, except requests for support of logistical operations which are submitted through the brigade S4. For details on Army aviation, refer to FM 1–5, FM 1–15, FM 1–100, and FM 57–35.

2–8. Augmentation

The brigade force may be augmented by assignment or attachment of an information section, maintenance section (mechanized brigade), mess personnel, civil affairs, or other personnel that may be essential for operations.

Section II. COMMAND POSTS AND BRIGADE TRAINS

2–9. General

The brigade headquarters and headquarters company is staffed and equipped to both organize and operate the main command post, the command group, and the trains command post.

2–10. Brigade Command Post

a. General. The main command post is the principal command installation of the brigade. It operates from vehicles to the extent feasible, using organic vans, radio vehicles, or carriers. It is highly mobile and capable of rapid and frequent displacement, and operates on a sustained 24-hour basis.

b. Composition. The following normally are located at, or operate from, the main command post (fig. 2–4):

(1) Brigade commander.

(2) Brigade executive officer or deputy commander.

(3) Brigade unit staff members with their respective sections, except the S4 section. The S4 may operate from the main command post, but his section normally is located in the brigade trains area.

(4) Brigade special staff.

(5) Fire support coordinator (FSCOORD) and representatives of other combat support units.

(6) Company headquarters of the brigade headquarters and headquarters company.

(7) Brigade communications platoon.

c. Location. The brigade S3 recommends the general location of the command post after coordination with the signal officer and other appropriate staff officers. The S1, in conjunction with the headquarters commandant and the signal officer, selects the actual site and plans the internal arrangement of command post elements. The primary consideration in command post location is the ability to command and control the brigade. Additional desirable characteristics for the site include:

(1) Optimum conditions for efficient communication.

(2) Proximity to attached combat units and installations for added security.

(3) An area which has sufficient space for the proper dispersion of command post elements.

(4) Sufficient landing space in the vicinity for brigade aircraft.

(5) Adequate concealment, cover, firm and well-drained ground, access roads, and parking area.

(6) Terrain which facilitates both ground and air defense of the command post.

d. Security. The S1 has staff responsibility for local security of the command post. The headquarters commandant plans and implements the local command post security using the organic rifle platoon. Additional security is gained by siting the command post near combat units of the brigade, by using military police and all other personnel attached to the brigade, and in exceptional circumstances, by using elements from attached maneuver battalions.

e. Displacement. Displacement of the main command post is accomplished by:

(1) Brigade SOP for command post displacement.

(2) Command post organization to provide two operational groups, one to displace to establish the new command post and the other to continue operetion in the old area until the new site is opened. The brigade commander normally moves with the first echelon (forward) and the executive officer with the second echelon (main).

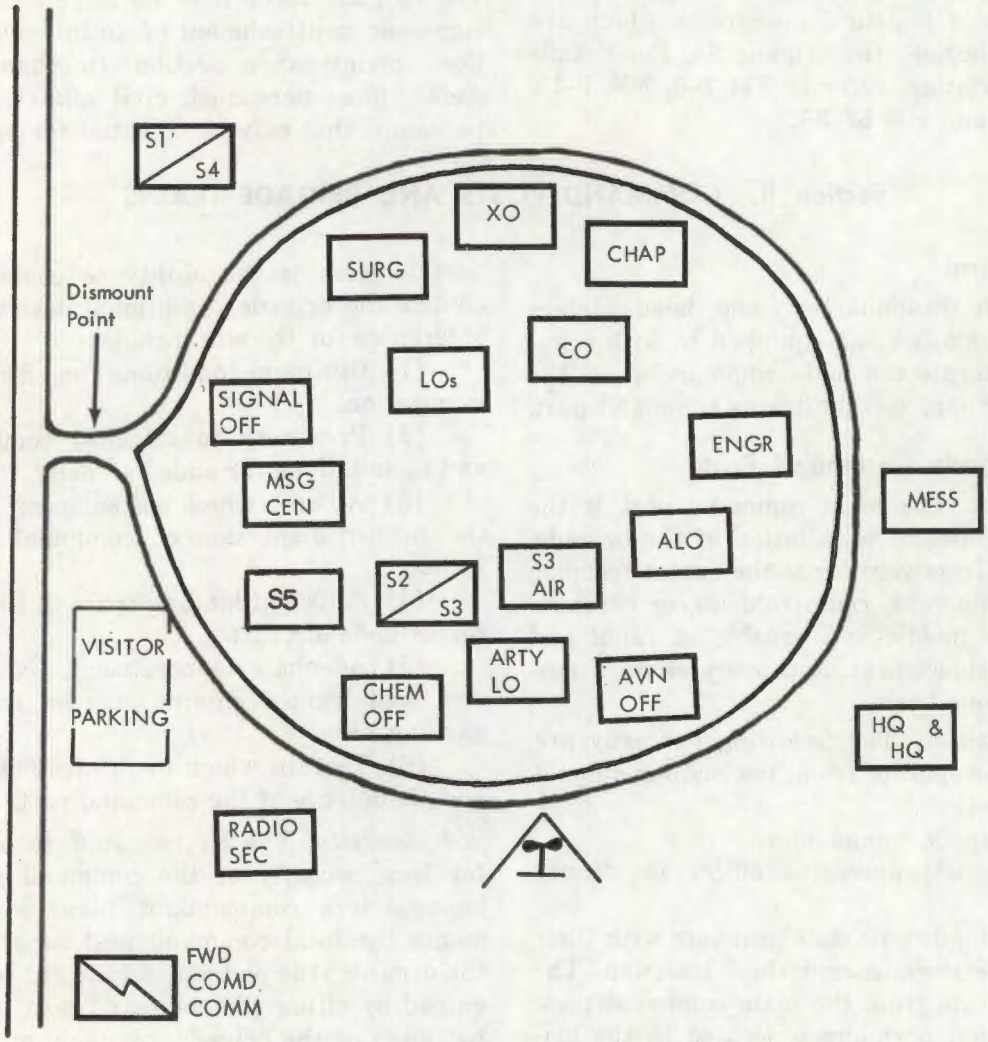


Figure 2–4. Organization of typical brigade command post.

(3) Use of radio and aircraft and motor messengers to maintain contact with key personnel during the displacement.

2–11. Brigade Command Group

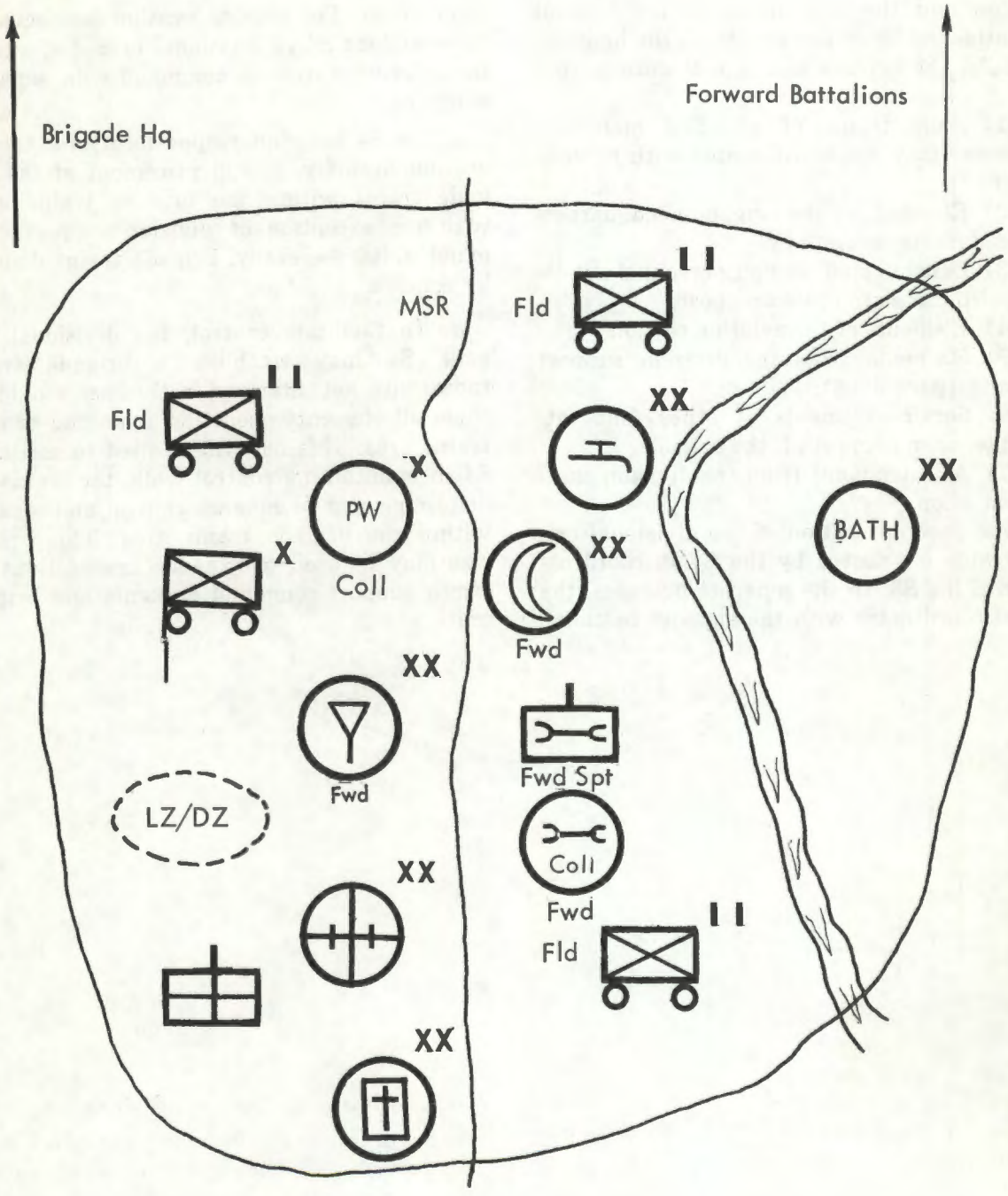
The brigade commander may elect to operate with a command group in fast-moving situations or when his presence is required forward. The command group may constitute the forward command post during displacement or maintain full operations because of enemy action against the main command post.

2–12. Alternate Command Posts

The small number of personnel in the brigade headquarters and headquarters company precludes organization of an alternate command post. Normally, the command post of attached maneuver battalions will be designated alternate command post in predetermined succession.

2–13. Brigade Trains

a. The exact composition of the brigade trains will vary in accordance with the tactical



NOTE: Forward area signal center normally located in brigade trains area. Exact location determined by division signal officer.

2. Forward area signal center normally located in brigade trains area. Exact location determined by division signal officer.

Figure 2–5. Type of brigade trains.

situation and the disposition of the tactical units attached to, or in support of, the brigade. Normally, the brigade trains will include (fig. 2–5):

(1) Field trains of attached maneuver battalions (may not be collocated with brigade trains).

(2) Elements of the brigade headquarters and headquarters company.

(3) Brigade staff section personnel not located with the main command post.

(4) Elements of the aviation section.

(5) Elements from the division support command (para 4–26).

(6) Service elements of other units attached to, or in support of, the brigade.

(7) A water point from the division engineer battalion.

b. The *general* location of the divisional brigade trains is selected by the S4 in coordination with the S3. In the separate brigades, the S4 also coordinates with the support battalion commander. The *specific* location is selected by the assistant S4 in divisional brigades, and by the support battalion commander in separate brigades.

c. The S4 has staff responsibility for the operation, security, and displacement of the brigade trains within the brigade trains area, with the exception of division support command units. Generally, brigade trains displace by echelon.

d. To facilitate control, the divisional brigade S4 may establish a brigade trains radio/wire net. Stations in this net should include all elements operating from the brigade trains area. This net will be used to assist the S4 in maintaining control while the trains are displacing and to enhance control and security within the brigade trains area. This system also may be used to expedite transactions between support command elements and brigade units.

CHAPTER 3
SEPARATE BRIGADES

(NATO STANAG 2101, ABCA SOLOG 104, CENTO STANAG 2101, SEASTAG 2101)

Section I. ORGANIZATION

3–1. Introduction

The separate (infantry, airborne, mechanized, and light infantry) brigade can be assigned to either corps or field army, or it may be employed independently as determined by the theater commander. Its organization is more permanent than the divisional brigade and, in addition, it has sufficient organic combat, combat support, and combat service support elements to conduct independent operations.

3–2. Mission and Capabilities of the Separate Brigades

a. Mission. The brigade mission is to close with the enemy by means of fire and maneuver in order to destroy or capture him, or to repel his assault by fire, close combat, and counterattack.

b. Capabilities. In addition to those capabilities listed in paragraph 1–8 through 1–12, the separate brigade has the organic capability to:

(1) Conduct sustained offensive, defensive, or retrograde operations as an independent force or as a part of a larger force.

(2) Conduct security missions for a larger unit.

(3) Participate in cold war operations as an independent force or as a part of a larger force.

3–3. Organization

Unlike the divisional brigade, the separate brigade has assigned to it a considerable number of organic units. The organic units are referred to as the brigade base, and they provide the separate brigade with the capability to conduct sustained independent operations. The brigade base provides the necessary command and control, combat support, and combat service support to sustain operations of up to five attached combat battalions. The brigade base consists of a headquarters and headquarters company, a support battalion, an armored cavalry troop, an engineer company, and a field artillery battalion.

3–4. Brigade Headquarters and Headquarters Company

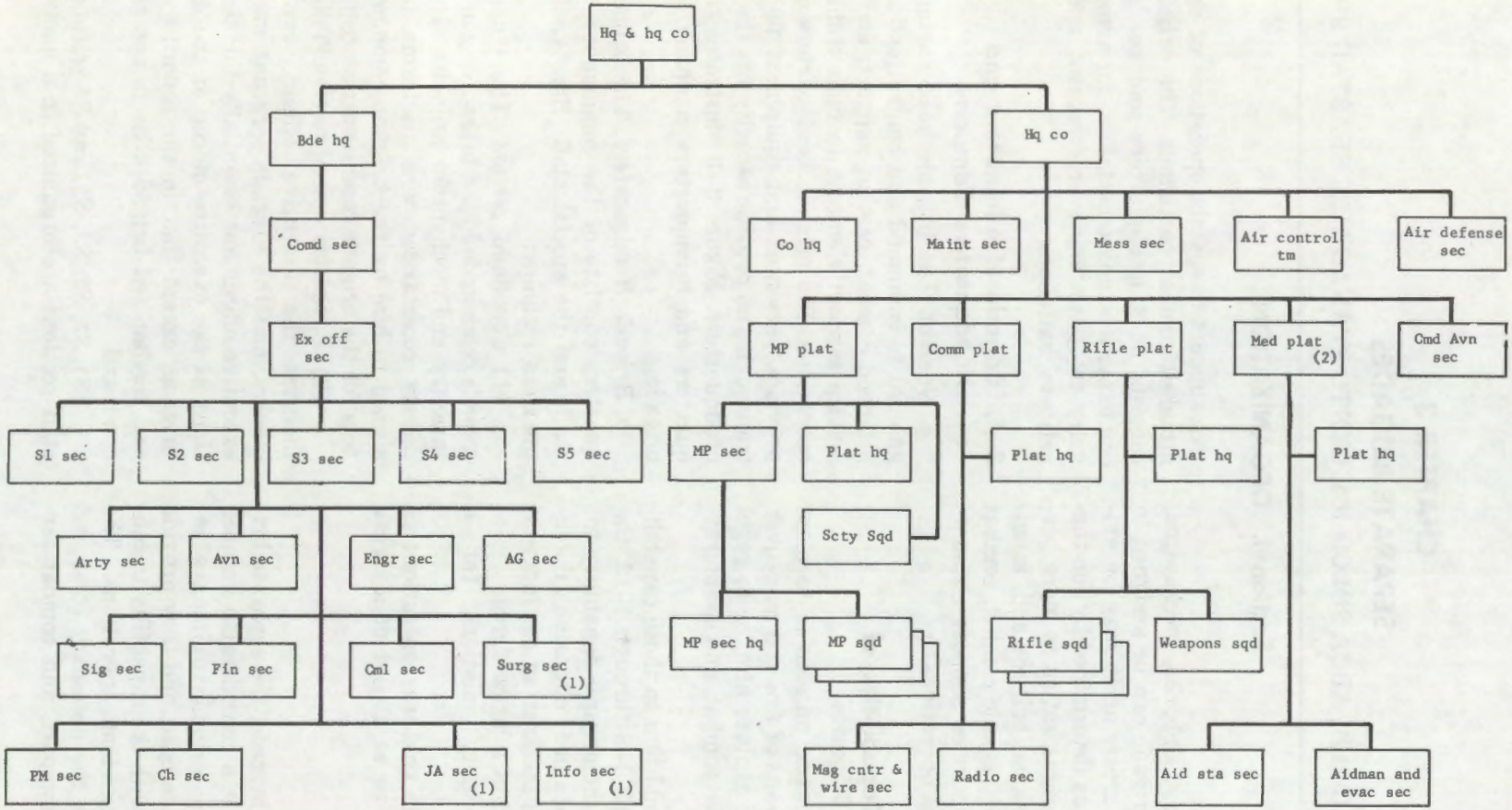
a. General. The brigade headquarters is organized to command and control assigned and attached combat, combat support, and combat service support elements in both training and operations. The brigade headquarters company provides personnel and equipment to operate, transport, and provide security for the brigade headquarters. Figure 3–1 illustrates the headquarters and headquarters company, separate brigade.

b. Brigade Headquarters. The brigade headquarters consists of the commander, the unit staff, and the special staff. Briefly, the headquarters includes:

(1) *Command section.* The separate brigade is commanded by a brigadier general. The infantry and mechanized brigades also have a deputy commander who performs tasks assigned to him by the brigade commander and acts for the brigade commander as required.

(2) *Executive officer section.* This section includes the executive officer, two liaison officers, and the brigade sergeant major. The executive officer has essentially the same functions as the executive officer of the divisional brigade, except that in the separate infantry and mechanized brigades he is not second in command.

(3) *S1, S2, S3, S4, and S5 sections.* These staff sections are organized in a manner simi-



NOTES: (1) Direct access to commanding general, as required.
(2) Section organic to airborne and light infantry.
(3) Includes deputy commander in infantry and mechanized brigades.

Figure 3–1. Separate brigade headquarters and headquarters company.

lar to the divisional brigade staff. The functions and duties of personnel, intelligence, operations, logistics, and civil affairs are the same as in the divisional brigade (para 2–2), except as discussed in paragraphs 3–11 through 3–14. (See FM 61–100 and 101–5.)

(4) *Artillery section.* The artillery section includes the brigade artillery officer and an artillery liaison section. The artillery officer advises the commander on artillery matters, he commands the organic field artillery battalion, and he is the fire support coordinator (FSCOORD) for the brigade. He also is responsible for the preparation of the brigade fire support plan.

(5) *Aviation section.* The aviation section includes the brigade aviation officer who advises the commander on aviation matters. He also commands the organic aviation section.

(6) *Engineer section.* This section includes the brigade engineer and an enlisted assistant. The brigade engineer advises the commander on engineer matters but does not command the organic engineer company.

(7) *Adjutant general section.* This section includes the brigade adjutant general officer who advises the commander on personnel, administrative, and related matters.

(8) *Signal section.* The signal section includes the brigade signal officer who advises the commander on signal matters and controls and coordinates brigade signal activities.

(9) *Finance section.* This section includes the brigade finance officer who controls and supervises the finance activities of the brigade.

(10) *Chemical section.* This section includes the brigade chemical officer and his enlisted assistants. The chemical officer advises the commander on chemical, biological, and radiological (CBR) operations. In coordination with appropriate staff officers, he supervises CBR training in the brigade.

(11) *Surgeon section.* The surgeon section includes the brigade surgeon who plans, supervises, and coordinates medical matters for the brigade. He is assisted by a preventive medicine officer.

(12) *Provost marshal section.* This section includes the brigade provost marshal who enforces the commander's policies with regard to law and order in areas not assigned to subordinate commanders, and he advises in matters pertaining to law and order, traffic control, prisoners of war and civilian internees, and temporary confinement facilities.

(13) *Chaplain section.* The chaplain section consists of the brigade chaplain who advises and assists the commander in religious matters.

(14) *Judge advocate section.* This section consists of the brigade staff judge advocate who advises the commander on legal matters and supervises the administration of military justice in the brigade. He is assigned to the administration company.

(15) *Information section.* The information section consists of the brigade information officer who advises the commander on troop information, public information, and public relations matters. He is assigned to the administration company.

c. Company Headquarters. The company headquarters is composed of the personnel and equipment required for support of the brigade headquarters and headquarters company. (See figure 3–1 for elements of this headquarters.)

3–5. Armored Cavalry Troop

The principal reconnaissance and security unit for the brigade is the organic armored cavalry troop. It is designed to provide security and perform reconnaissance for the brigade or unit to which it may be attached and to engage in offensive, defensive, and delaying actions as an economy-of-force unit. Employment of the armored cavalry troop is discussed in FM 17–36.

3–6. Engineer Company

The engineer company provides the brigade with fixed and floating assault bridging, field water purification, and combat engineer support. The engineer company also can fight as infantry when required.

3–7. Support Battalion

The separate brigade has an organic support battalion which provides brigade-level supply, direct support maintenance, medical services, and miscellaneous services for all elements of

the brigade—organic or attached. The support battalion is discussed in detail in paragraph 3–11 through 3–14.

3–8. Field Artillery Battalion

The separate mechanized brigade has one 155mm, self-propelled (SP) field artillery battalion, while the infantry and airborne brigades have one 105mm towed artillery battalion. The field artillery battalion has minor differences in its headquarters and service battery in that it has an organic supply and maintenance platoon, a meteorological section, a surveillance radar section, and no forward observer section. Forward observers are organic to batteries of the battalion.

3–9. Combat Battalions

The separate brigade base is organized and equipped to provide the necessary command and control, combat support, and combat service support for up to five combat battalions. Numbers and types of maneuver battalions may vary as required by the mission.

3–10. Signal Communication

The separate brigade organizes and operates internal signal communication systems. Multichannel systems and high frequency communications link to higher headquarters and adjacent units must be provided by the higher headquarters. The amount and type of equipment and net organization will depend on the support provided and the requirements of the higher headquarters.

Section I. COMBAT SERVICE SUPPORT

3–11. General

The separate brigade has its own direct support supply, maintenance, medical, and military police capabilities. It does not have a direct support maintenance capability for aircraft. It has an administration company for direct support level personnel services support. Civil affairs personnel are attached or placed in support of the brigades in keeping with the requirement.

3–12. Combat Service Support Personnel

The organization of the staff in the separate brigade follows normal staff organization patterns. There are a few unique positions with combat support responsibilities that are summarized below.

a. There is a surgeon, provost marshal, chaplain, and civil affairs section in the brigade headquarters.

b. The adjutant general, finance officer, and staff judge advocate are members of the administration company, but they function as special staff officers to the brigade commander.

c. There is a brigade ammunition section and brigade supply office in the headquarters and headquarters of the support detachment.

d. The brigade maintenance officer, who is a member of the maintenance company of the support battalion, also is a special staff officer.

e. Other special staff officers, such as the brigade aviation officer, have an interest in the supply and maintenance status of their functional field.

3–13. Support Battalion

The support battalion provides separate brigade level (DS category) supply, direct support maintenance, medical services, and miscellaneous services for all elements of the brigade, organic or attached.

3–14. Combat Service Support Operations

In general, combat service support elements are employed in a manner similar to like elements of the division support command.

a. During tactical operations, the brigade trains normally are controlled by the support battalion commander through his command post. In addition to organizing, securing, and controlling the organic and attached combat service support units in the brigade trains area, the support battalion commander also locates and secures the field trains of the combat maneuver battalions. Security is provided principally through disposition of units, provision of local security by each separate element of

the trains, and constant coordination with the brigade S3 for combat support in the event the trains are subjected to an enemy attack beyond their defensive capability. The brigade S4 and his staff operate in and from the brigade command post.

b. When the brigade is required to echelon the brigade trains, the forward echelon is an extension of the trains and remains under control of the support battalion commander. This echelonment is required in the event that the brigade is forced to operate beyond the effective support range of its logistical support or in the event that the brigade desires to reduce the size of the brigade trains elements in a defensive situation. Whenever echelonment of the trains is proposed, consideration must be given to the added requirements for control, security, and communication for both elements. In this light, the support battalion should be located at the next higher echelon or within the vicinity of the force following the brigade. The brigade trains area should be located to the rear of the brigade command post and employed as in the division. Control between the two echelons is established by radio; however, if the intervening distances become too great, the brigade requires additional army signal support in the brigade trains area so that RATT communication can be maintained.

c. The provision of combat service support is the same as in the division, except that the combat maneuver battalions direct their requests, requirements, and reports to the support battalion instead of to the division support command. Combat maneuver battalions organize combat and field trains as appropriate to the situation.

3–15. Command Post

For discussion of brigade command post, see paragraphs 2–9 through 2–13.

CHAPTER 4
COMBAT SUPPORT AND COMBAT SERVICE SUPPORT

(NATO STANAG 2022, 2031; CENTO STANAG 2031; ABCA SOLOG 2R2, 43; SEATO SEASTAG 2031)

4–1. General

Combat support and combat service support units are attached to, organic to, or placed in support of, brigades to provide the means to conduct operations to accomplish the brigade mission.

a. Combat and combat support units from the division that may be attached to, placed under operational control of, or placed in support of the divisional brigade include field and air defense artillery, aviation, engineer, signal, military police, and armored cavalry. For discussion of combat support and combat service support of the separate brigade, see chapter 3.

b. The division support command provides combat service support to the brigade and its attached or supporting units. Elements of the division support command operate in the brigade area to meet logistic requirements of brigade units. Separate brigades are supported by their organic support battalion.

c. Corps and field army units also may be attached or in support of the brigade. These include field artillery, air defense artillery, aviation, engineer, signal, military intelligence, technical intelligence, Army Security Agency, chemical, transportation, psychological operations, and civil affairs.

d. The brigade normally will receive tactical air support from the Air Force; and Navy gunfire, air, and amphibious support when available and required.

4–2. Fire Support

a. The brigade commander is responsible for the effective employment of all available firepower and maneuver elements under his direct control or in support of his unit, and for the integration of the fire support plan with the plan of maneuver to insure that each complements and supports the other.

b. The most flexible and responsive fire support available to the divisional brigade is furnished by the division artillery battalion normally in direct support of, or attached to, a committed brigade. The fires of this battalion are augmented by other division and corps artillery units, tactical air, Army armed/attack helicopters, and naval gunfire. FM 6–20–1 and FM 6–20–2 contain details of fire support. See paragraph 3–8 for separate brigade artillery support.

4–3. Integration of Nuclear and Nonnuclear Fires

a. The brigade commander integrates nuclear fires with nonnuclear fires in his planned operations. He does this whether the nuclear fires are controlled or requested by him specifically, or are planned and directed by higher headquarters.

b. The capabilities of nuclear and nonnuclear fires must be considered carefully to insure their most effective use. The determination of whether to use nuclear or nonnuclear fires, or both, must take into consideration the mission, characteristics of weapons and targets, and availability of munitions. Nuclear and nonnuclear fires are most effective when employed to complement each other. In addition to other types of nonnuclear fires, the use of quick-acting, nonpersistent toxic chemical agents should be considered for attacking selected personnel targets and those in the buffer zone of a nuclear weapon attack. Persistent chemical agents should be considered for use on terrain or targets which are not in the path of the

friendly attack and which the commander wants to bypass, and/or to restrict the enemy activity.

c. Nonnuclear fires may be used to attack close-in targets which escape nuclear fire damage. They may be used in areas of extensive nuclear fire damage to prevent or delay reorganization. They may be placed to interdict enemy routes of reinforcement and withdrawal. Quick-acting toxic chemical agents are particularly useful in increasing the level of casualties and the area of coverage.

d. In planning the integration of fires, the brigade commander must consider the possibility that the planned nuclear fires may not achieve the expected results or that they may become unavailable because of operational or technical conditions. If the success of the overall operation plan is based on the availability and employment of certain nuclear fires, the brigade commander may have to alter, revise, or perhaps discard the plan entirely if the nuclear fires are not employed. He must be prepared to make changes rapidly or to make specific recommendations to higher headquarters concerning alternate courses of action.

4–4. Special Nuclear Consideration

a. Conditions and restriction of employment of nuclear weapons are announced by division and higher headquarters. Within the framework of operational guidance and existing SOP for nuclear employment, nuclear munitions are allocated to commanders for planning purposes. The allocation is for a specific period, or a specific mission. It is expressed as a specific number of complete rounds in terms of the delivery system and yield. These munitions are employed only after receipt of specific authorization for expenditure. This authority may be delegated to subordinate commanders within prescribed limits.

b. Division normally allocates nuclear weapons to the brigade. In exceptional circumstances (for example, when a battalion task force is operating under division control) an allocation of nuclear weapons may be made directly to a maneuver battalion.

c. Nuclear fires, like nonnuclear fires, are classified as planned fires or fires on targets of opportunity. The frequency with which planned fires are used may be limited by the availability of intelligence concerning suitable targets. Targets selected for planned nuclear fires must be kept under constant surveillance to insure necessary adjustment or cancellation of the fires. Planned nuclear fires are included in the fire support plan. Priorities are assigned to planned fires according to their relative importance to the accomplishment of the mission.

d. The target analysis and weapon delivery data are calculated for planned fires and included in the fire support plan. To the degree possible, plans are made to use all available types of delivery means against planned targets. Selected targets are assigned relative priorities for the preparation of employment data. Usually minor changes in range and azimuth can be made with little loss in time, provided the same planned delivery means are used. A change of delivery means and major changes of distance or direction usually cause a considerable delay. Targets engaged under these circumstances should be considered as targets of opportunity.

e. Targets of opportunity are analyzed and the employment data calculated as rapidly as possible consistent with the need for accuracy and the time available. Unconfirmed and fleeting targets should not be attacked with nuclear fire. The fleeting nature of a target may be the overriding consideration in determining whether a nuclear weapon will be employed against it. Intelligence processes and confirmation reports concerning the target must be expedited. In planning nuclear fires on targets of opportunity, the fastest means of delivery should be utilized, consistent with troop safety and the maximum contribution to the accomplishment of the mission. Nonnuclear fires may be used to fix fleeting targets until nuclear fires can be employed.

4–5. Selection of Nuclear Weapons

a. In determining the appropriate nuclear weapons to use, the commander considers the number, type, and characteristics of the available weapons; available delivery means; extent of damage desired; troop safety requirements;

permanence of target; and available means to exploit the effects.

b. The number and type of weapons available to the brigade are determined by higher echelons of command. This should not preclude requests for specific weapons not included in such allocations. From the weapons allocated to him, the brigade commander must make best use of available warheads by proper target analysis, selectivity in the choice of targets, and maximum exploitation of the effects of the strikes.

c. Army nuclear delivery systems generally are preferred because of their greater accuracy, all-weather capability, and responsiveness to the will of the supported commander. Air delivery, if properly preplanned, permits a fuller use of a nuclear weapon's potential in some situations. Such situations arise when the target is beyond the range of ground delivery units, when enemey action prevents ground units from delivering fire, or when ground delivery means within range of the target are inadequate because of yield or other limitations.

d. The extent of damage desired is determined by the commander who plans or requests the fire. To establish the amount of damage desired, he considers his mission, the enemy situation (to include state of combat training and defenses against nuclear weapons), the terrain and weather, and the safety of his troops. His decision constitutes the basis for weapons planning.

e. Troop safety is a prime consideration in planning the employment of nuclear weapons. Commanders must determine the safety criteria desired for each nuclear strike and inform the nuclear weapons employment officers and other operational planners during the planning stage.

f. A linear target usually is less remunerative for a single weapon attack than is a circular target. The use of more than one small-yield nuclear weapon may provide better results than a single large yield weapon attack against a linear target.

g. Normally, the height of burst selected is that which will cause maximum casualties or damage to the target, consistent with troop safety and limiting requirements.

h. To deny the enemy an area (which will not be occupied subsequently by friendly forces), a surface or subsurface burst may be used to contaminate the area with residual radiation when the area of predicted fallout is within the brigade's area of responsibility. This may be particularly useful in areas where routes for movement are few or pass through defiles. Wind velocity and direction with respect to the location of friendly forces are critical to a decision to employ a surface or subsurface burst.

i. A nuclear safety line is established in advance for each nuclear weapon or group of nuclear weapons to be employed.

4–6. Chemical and Biological (CB) Fires

a. Authority to use CB weapons normally is delegated to the lowest echelon responsible for the area in which the effects of the agent will extend. Regardless of the echelon delegated fire authority, brigade initiates appropriate planning and recommendations for the integration of these fires with other nonnuclear and/or nuclear fires and with the scheme of maneuver.

b. Because of their area coverage effect, chemical agents are particularly suitable against hard dug-in targets and ill-defined targets. In the defense, chemical agents for persistent effect may be used in conjunction with minefields and barriers to contaminate and restrict enemy use of important terrain features such as crossroads, bridges, and defiles. Biological agents may be used when delayed casualty effects are desirable and/or acceptable, as for example, in advance of amphibious, airborne, or airmobile operations, or in retrograde operations if sufficient planning is conducted pertinent to entry or re-entry into the contaminated area.

c. Generally there are no restrictions on the initial employment of nontoxic agents such as flame, smoke, and riot-control agents.

d. Artillery is capable of firing chemical agents. It also is capable of establishing smoke screens to blind enemy observation, and to signal by means of smoke ammunition.

e. Engineers furnish technical advice and assistance to the brigades in laying and clearing

composite minefields which include toxic chemical landmines.

f. Maneuver units are capable of delivering chemical agents to include flame, smoke, riot-control, and defoliant agents; and they are capable of emplacing chemical landmines.

g. Chemical agents (including smoke and flame) also may be delivered by smoke generator units, chemical flame units, naval gunfire, and Air Force, Navy, or Army aircraft.

4–7. Fire Support Plan

a. The brigade fire support plan implements the commander's concept for the employment of supporting fire and contains the details required for the coordination, integration, and delivery of fire. The fire support plan is an annex to the brigade operation order or plan. It consists of a single document with details on air, artillery, air defense artillery, chemical, and naval gunfire in appropriate subparagraphs to include appendixes with details or appropriate supporting plans.

b. The fire support plan is prepared by the FSCOORD, normally the direct support artillery commander or his representative. The S3 has overall staff responsibility for coordinating the fire support plan with the scheme of maneuver or defense plan. The representatives of all fire support means and the S3 work jointly on this integration. The basis of the fire support plan is the commander's guidance and concept of operation. In both, he includes a statement of his desired employment of supporting fires and specifies general target areas, scheduling of fires, and priorities of artillery fires and air defense. His guidance on nuclear employment specifies the results he expects to achieve with nuclear fires, the results he does not want, troop safety, and the way these fires are to be integrated with his plan of maneuver.

c. The exchange of fire support planning data between attached units and the brigade and between brigade and division must be timely and continuous.

4–8. Artillery Fire Planning

a. The artillery fire plan for the brigade is prepared by the artillery battalion in direct support of the brigade. It is based on requirements for preplanned fires:

(1) Submitted by the brigade commander and staff.

(2) Submitted by brigade maneuver units.

(3) Imposed by higher headquarters; e.g., to support an attack by an adjacent brigade.

b. Requirements for CBR fires to be delivered by artillery units are processed through command channels. The commander with approval authority will, if he approves the request, refer it to his fire support element (FSE) in the tactical operations center (TOC) for implementation. If the brigade commander has authority to approve the request, and does so, he passes the fire request to his FSCOORD.

c. The completed brigade artillery fire plan is forwarded to the division artillery fire direction center (FDC) where it is integrated into the artillery fire plan for the division. This is essential to permit concurrent and coordinated fire support planning at all levels. Figure 4–1 illustrates artillery fire planning channels. Fire support planning starts at the company level and extends through the fire support coordination center at battalion and brigade up to the fire support element in the TOC at division level and above. Artillery fire planning is performed between the forward observer, the fire support coordination center and the fire direction center; between fire direction centers and between fire support coordination centers and fire support elements. Armed/attack helicopters and close air support fire planning (preplanned) are processed between the S3 Air and G3 Air in the fire support coordination centers and fire support elements.

d. The air defense appendix to the fire support plan to the brigade operation order, when approved, indicates the method or scheme for air defense and/or ground support operations. The air defense appendix is prepared by the air defense officer and is coordinated with the artillery officer and the brigade S3.

4–9. Fire Support Requests

a. Nonnuclear Artillery Fires. Requests for nonnuclear artillery fires are coordinated by the forward observer with the committed com-

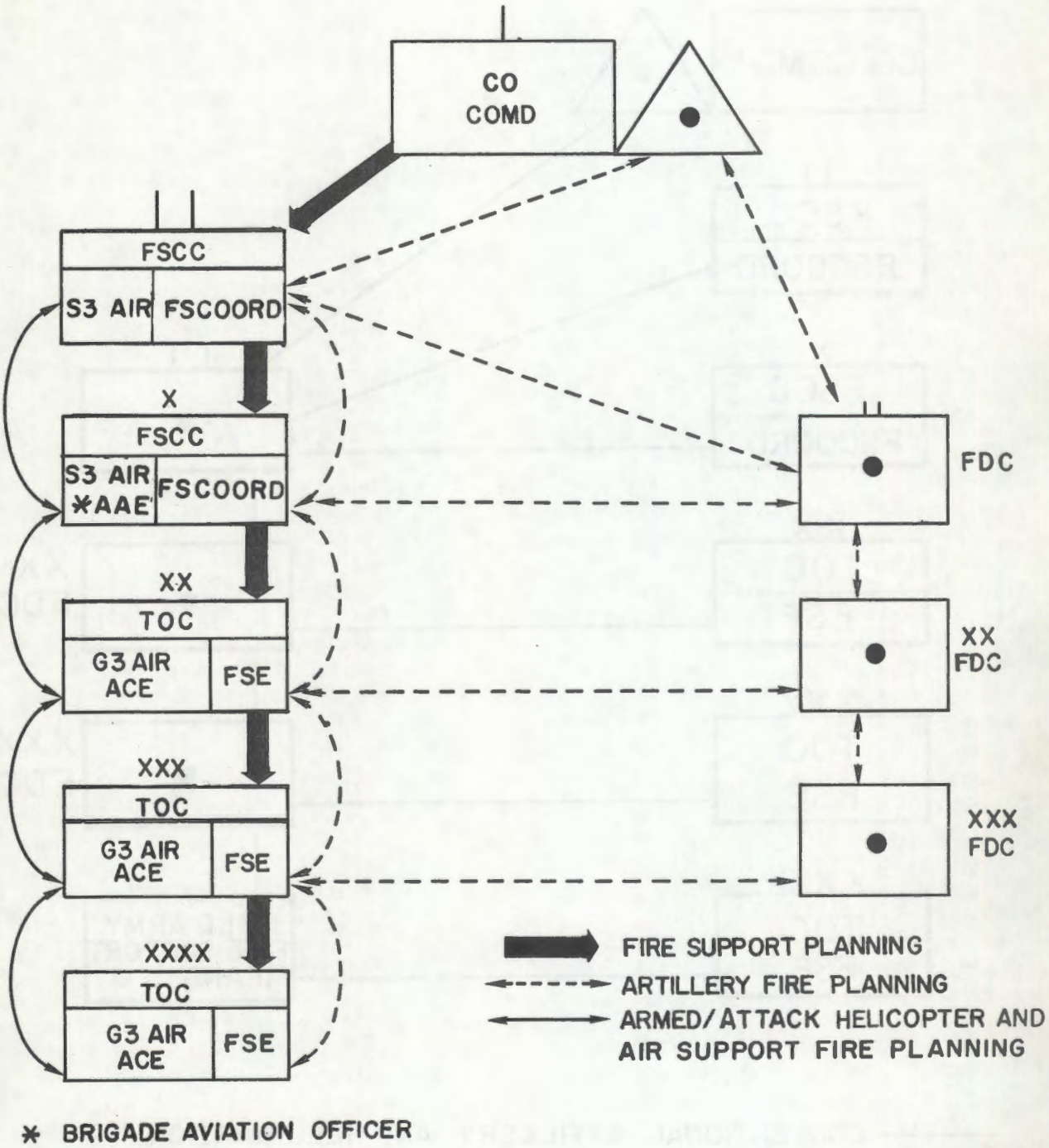


Figure 4–1. Fire planning channels.

pany and then transmitted directly to the FDC of the supporting artillery battalion. Artillery fire requests originating at battalion and brigade are sent directly to the DS artillery battalion FDC. This FDC will request any additional fires required from a reinforcing artil-

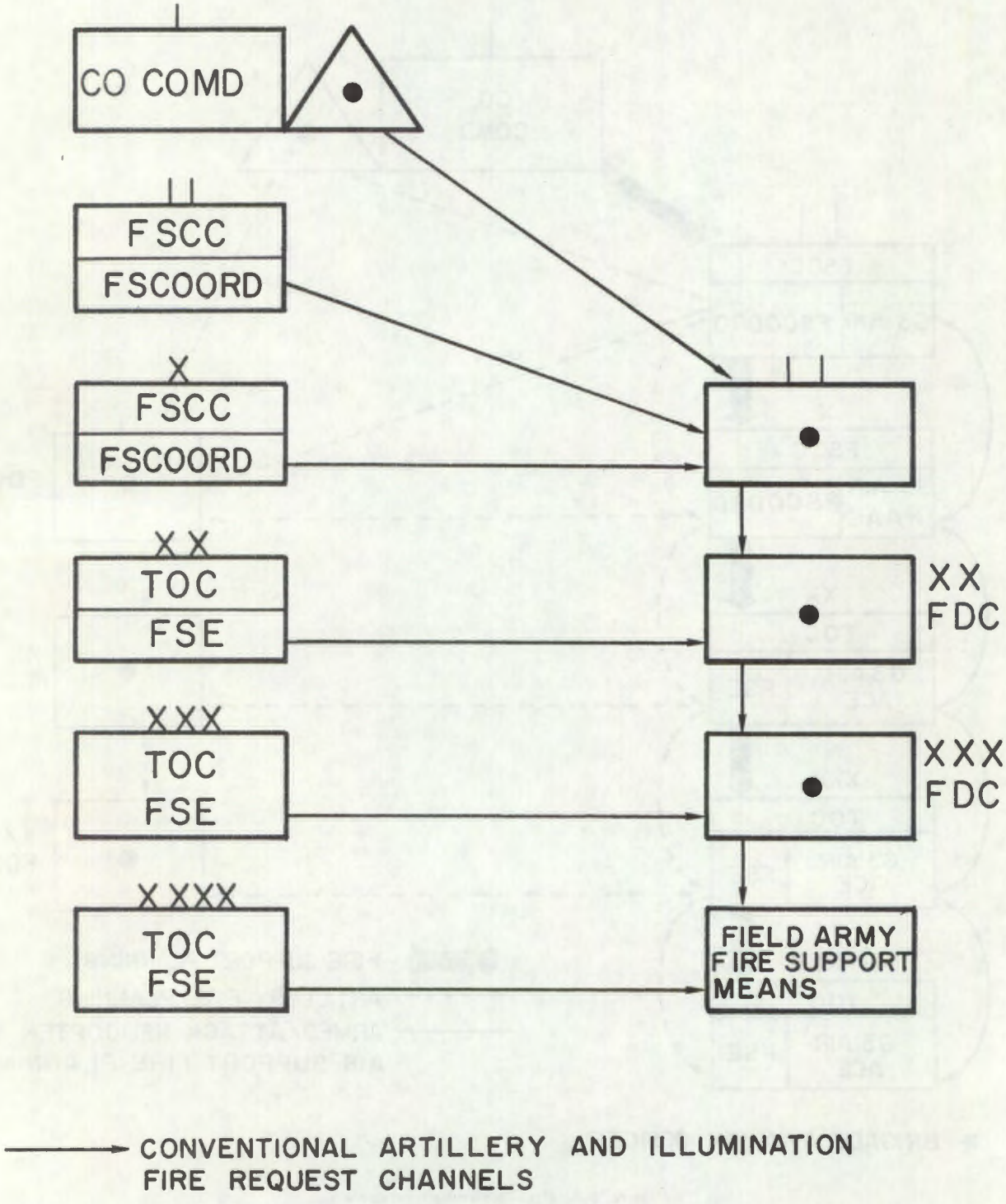


Figure 4-2. Conventional artillery and illumination fire request channels.

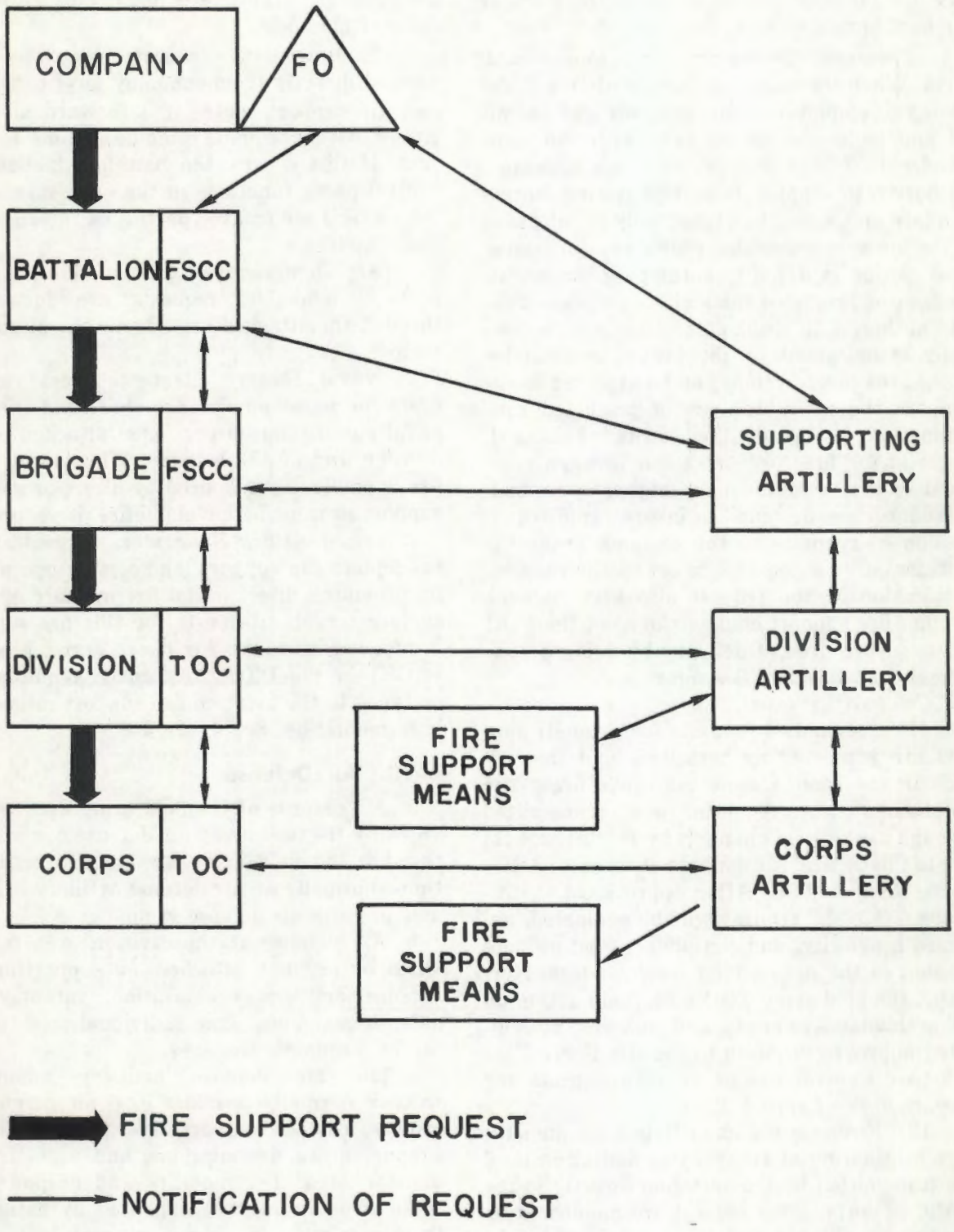


Figure 4–3. Chemical, biological, and radiological fire request channels.

lery unit, if appropriate, or from the FDC of the next higher echelon. See figure 4–2.

b. Chemical, Biological, and Radiological Fires. When their use has been authorized, decisions to employ nuclear weapons and chemical and biological agents rest with the commander to whom the weapons are allocated. Authority to employ fallout-producing bursts (surface and subsurface) normally is delegated to the lowest commander whose area of operations can be expected to encompass the probable area of predicted tactically significant fallout; authority to employ chemical agents normally is delegated to the lowest commander whose area of operations can be expected to encompass the probable area of predicted contamination to include the downwind hazard. Requests for fires are processed through command channels to the next higher command. Procedures are designed to insure rapid transmission of requests to the commander or his representative authorized to act on the request. Notification of the request also may be sent through fire support channels to alert the FDC and to insure prompt delivery by using a concurrent transmission. See figure 4–3.

c. Close Air Support.

(1) Preplanned requests for close air support are processed by battalions and the brigade in the same manner as other fires. The preplanned air requests are transmitted through air request channels by the brigade S3 Air to the tactical air support element (TASE) in the division TOC. After approval at the division TOC, the request will be evaluated, assigned a priority, and consolidated before submission to the next higher headquarters. Normally, the field army TOC takes final action on all preplanned requests and submits consolidated approved requests to the Air Force Tactical Air Control Center as requirements for execution. See figure 4–1.

(2) Requests for immediate close air support originating at company or battalion level are transmitted by the battalion directly to the DASC at corps. Such request are monitored by the brigade S3 Air and division G3, who take no action unless the request is disapproved by the brigade or division, in which case the S3/G3 enters the air request net to issue the disapproval. Figure 4–4 illustrates close air support channels.

(3) Immediate requests may be forwarded directly from company level to the direct air support center if a forward air controller with adequate communications is present. If this occurs, the battalion tactical air control party functions in the same manner as the tactical air control parties of intermediate headquarters.

(4) When naval or Marine close air support is available, requests are forwarded through the attached brigade air/naval gunfire platoon.

d. Naval Gunfire. Requests from combat units for naval gunfire are submitted through naval gunfire liaison personnel attached to the division and/or the brigade. When naval gunfire is employed, it is fired by direct or general support ships using naval gunfire procedures.

e. Armed/Attack Helicopters. Armed/attack helicopters can support land combat operations by providing direct aerial fire support against surface targets. Requests for this fire support are forwarded to the Airspace Control Element (ACE) of the DTOC. Approved requests are assigned to the aviation fire support means for implementation. See figure 4–5.

4–10. Air Defense

a. Air defense of the field army area is provided by the field army air defense commander through the field army air defense organization—normally an air defense artillery brigade and/or corps air defense group.

b. Air defense of the division area is provided by organic, attached, or supporting air defense artillery organization, infantry air defense weapons, and individual and crew-served automatic weapons.

c. The air defense artillery automatic weapon normally provides local air defense to combat, combat support, and combat service support areas, installations, and units in the division area. The mobility and firepower of these weapons may be exploited by assigning them a mission of ground support in the absence of an air threat.

d. Organic and attached air defense units receive guidance and missions from the com-

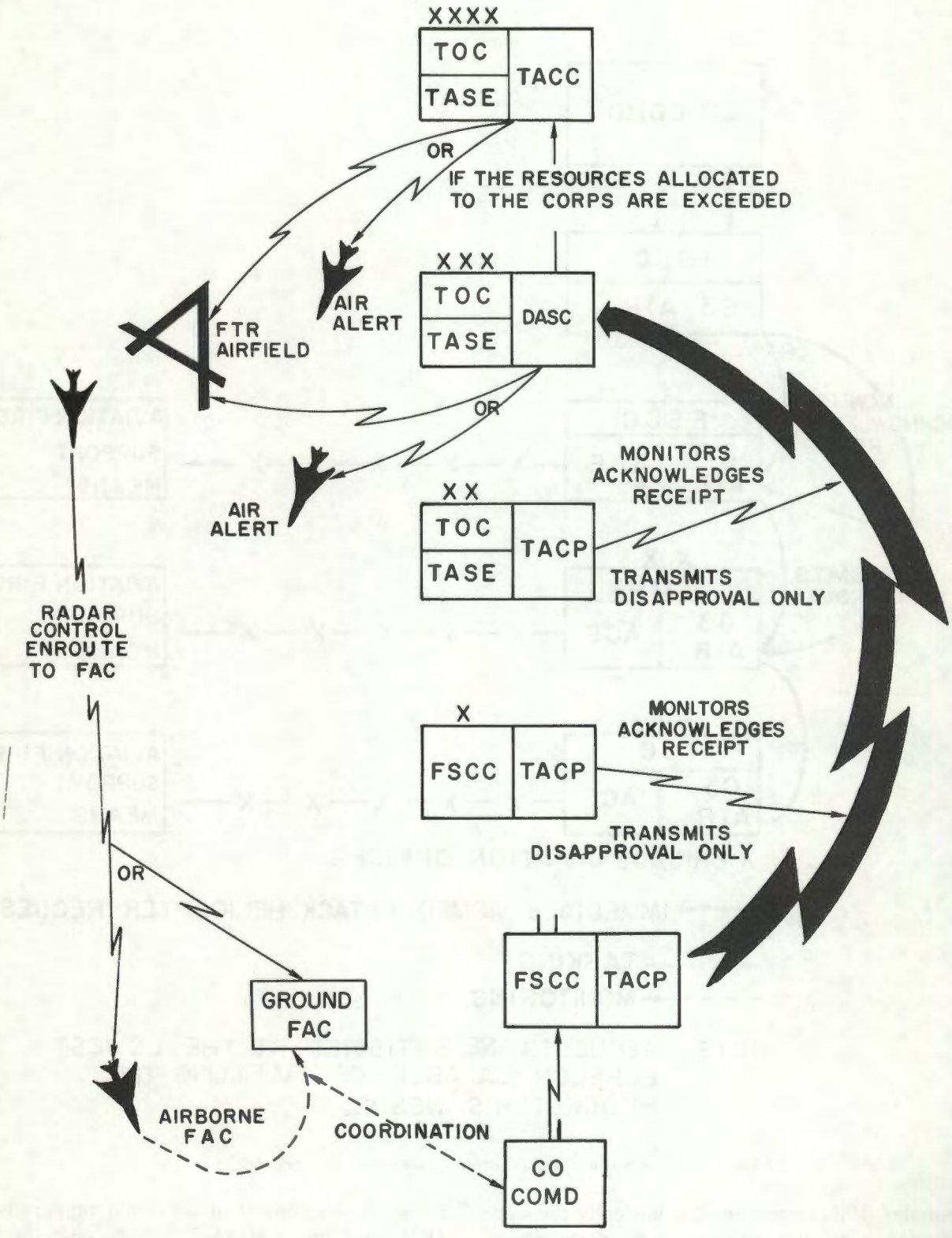


Figure 4-4. Immediate close air support request channels.

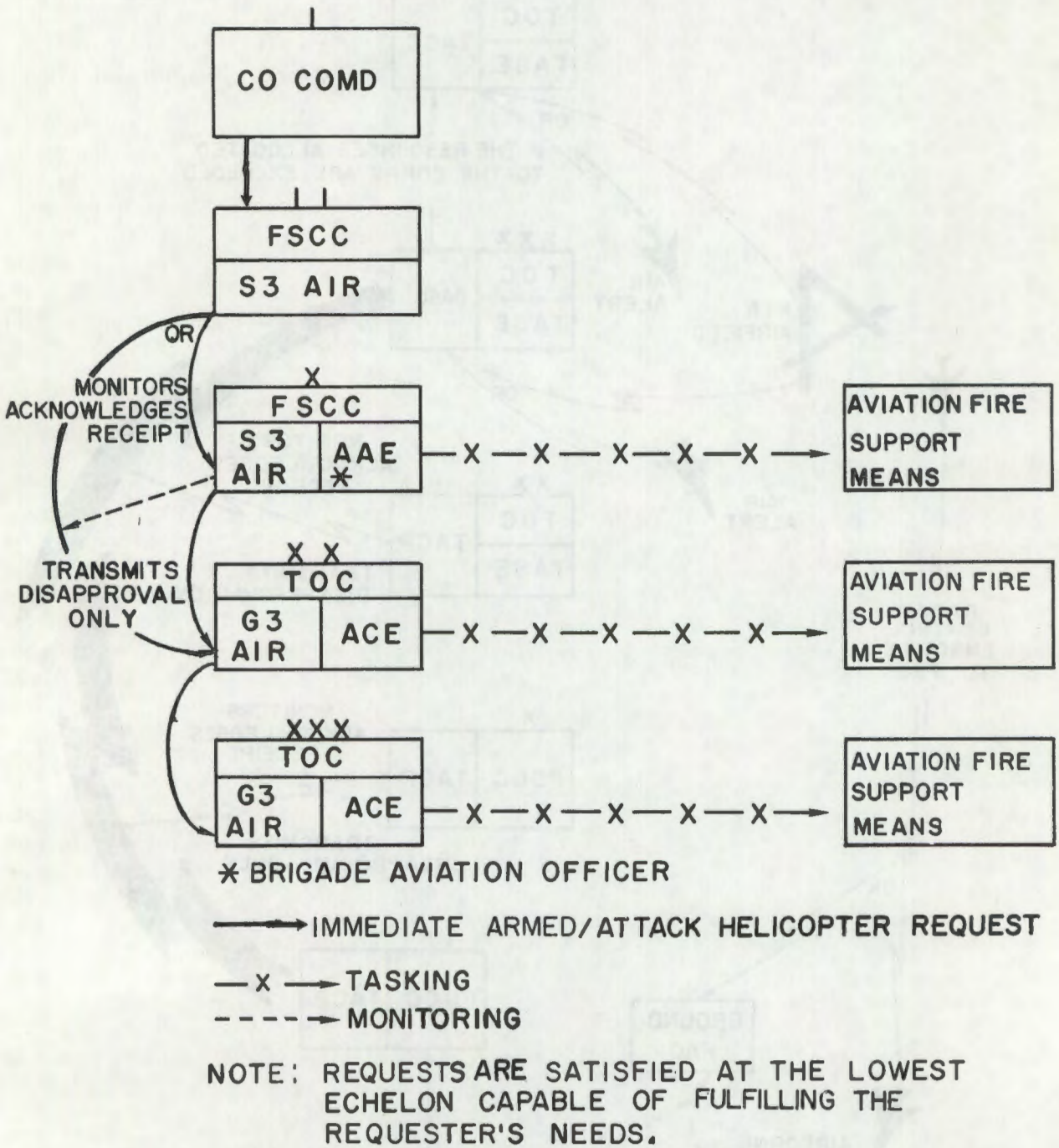


Figure 4–5. Immediate armed/attack helicopter fire request channels.

mander. Unit employment is basically the same in offense, defense, retrograde, or special operations at division/brigade level. The primary differences are changes in priorities for air defense, or assignment of a ground support role. (FM 44–1 and FM 44–3 provide doctrine for air defense employment.)

e. The air defense capability of non-air de-

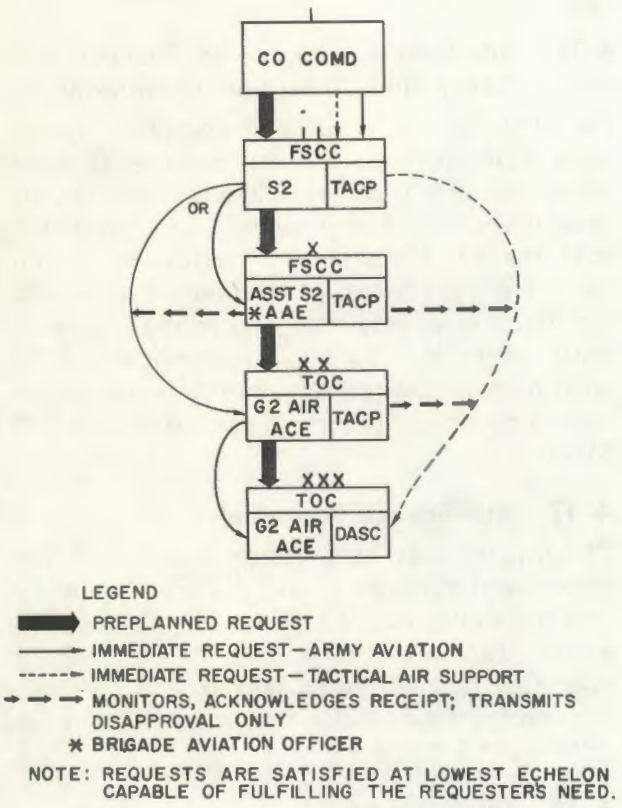


Figure 4–6. Air reconnaissance request channels.

fense weapons should not be overlooked when planning for air defense. A low-altitude air threat may be countered partially by the aggressive use of a large volume of fire from individual small arms and crew-served weapons.

4–11. Intelligence Support

The intelligence capabilities of the brigade are supplemented by intelligence agencies of higher headquarters. Detailed intelligence procedures are prescribed in FM 30–5 and other appropriate 30-series field manuals.

4–12. Flow of Information and Intelligence

a. The brigade S2 section must be capable of processing a mass of information quickly. As this information is processed into intelligence, the S2 section insures timely dissemination to all staff sections and to higher, lower, and adjacent units.

b. The operations and intelligence net provides a direct communication means between brigade and other headquarters.

4–13. Reconnaissance and Surveillance

a. Ground Reconnaissance.

(1) Each maneuver unit attached to the brigade has an organic ground reconnaissance and surveillance capability. Aggressive ground reconnaissance is a positive means of determining disposition and identification of enemy forces. The greater the dispersion on the battlefield, the greater is the requirement for reconnaissance and the more readily patrols can penetrate or develop enemy positions and obtain information.

(2) The armored cavalry squadron is the principal division reconnaissance unit. This unit normally is employed under division control, but the squadron (or its elements) may be attached to the brigade.

b. Air Reconnaissance. Air reconnaissance must be coordinated with ground reconnaissance. The brigade commander must exploit the capabilities of Army aviation. Requests for air reconnaissance missions from subordinate units are processed by the brigade S2, then transmitted to the division TOC for approval. Requests that cannot be accomplished are forwarded to higher headquarters. See figure 4–6.

(1) *Army aviation.*

(*a*) Army aviation supports and reinforces ground reconnaissance. Army aircraft have the range, speed, and special sensory equipment to cover large areas rapidly—a capability which permits ground elements to concentrate on areas of greatest intelligence productivity.

(*b*) Attached or supporting aerial surveillance units from corps or field army provide day and night aerial photography, near all-weather aerial radar and infrared imagery, and daylight visual reconnaissance.

(*c*) Organic helicopters give the brigade a visual observation capability; however, none of these aircraft have the primary mission of visual air reconnaissance. The S2, in coordination with the S3, develops procedures to take advantage of organic aircraft without interfering with their primary mission of command, control and communications.

(*d*) FM 1–5, FM 1–15, FM 17–36, and FM 30–20 contain detailed procedures for the employment of Army aviation air reconnaissance and surveillance aircraft.

(2) *Other services.* The capabilities of air reconnaissance elements of the Air Force, Navy, and Marine Corps complement those of Army aviation. The attached Air Force tactical air control party and elements of the Fleet Marine Force air/naval gunfire liaison company (ANGLICO) provide advice and detailed information concerning the employment of these reconnaissance resources.

4–14. Counterintelligence

a. Counterintelligence increases the security of the brigade and aids in the achievement of surprise by denying information to the enemy through active and passive measures. Active counterintelligence measures are designed to block the enemy's attempts to gain information, and they include counterreconnaissance, challenge and password systems, and air and ground reconnaissance to detect the enemy's intelligence effort. Passive measures conceal information from the enemy. They include censorship, secrecy discipline, security of classified documents and materiel, signal coummunications security, movement control, concealment, camouflage, electronic countermeasures, and control of the civilian populace.

b. The brigade assistant S2 usually is designated the brigade counterintelligence officer.

4–15. Captured Enemy Materiel

The S2 is responsible for the evacuation of captured enemy materiel in accordance with command policy, as stated in FM 30–5 and FM 30–16, when such materiel has an intelligence value.

4–16. Intelligence Support of Tactical Cover and Deception Operations

Planning tactical cover and deception operations is primarily an S3 responsibility. The intelligence and counterintelligence aspects of these operations, however, must be coordinated with the S2. Planning for tactical cover and deception operations is accomplished at all echelons; however, the subordinate echelon must insure that its plan is coordinated fully with higher headquarters. For detailed discussion of cover and deception operations, see FM 31–40.

4–17. Intelligence Personnel

The brigade may have attached to it an interrogation of prisoner of war (IPW) team and a counterintelligence (CI) team for normal operations. The separate brigade, or any brigade operating independently, may receive an imagery interpretation (II) team in addition to the IPW and CI teams.

4–18. Civil Affairs

The brigade conducts civil affairs activities as directed by higher headquarters to support the commander's accomplishment of his military mission, which may be limited to the action required to prevent undue civilian suffering and to prevent interference with combat operations by the civilian population. This may include control over thee populace to clear combat areas, prevent congestion of roads, and maintain security. Field manuals of the 41-, 54-, 100-, and 101-series cover details on civil affairs operations and policy.

Section II. SUPPORT FROM DIVISIONAL UNITS

4–19. Aviation Battalion

a. Brigades organic to airborne and infantry divisions will receive aviation support from the division organic aviation battalion. Brigades attached to an airmobile division will receive this support from the aviation group and the aerial artillery battalion. The armored and mechanized division aircraft are primarily command and control aircraft except for the aircraft of the armored cavalry squadron and those assigned to division artillery. Separate brigades will receive aircraft support from corps and field army resources.

b. Army aviation provides support to combat units, other combat support units, and combat service support units.

c. FM 1–5, FM 1–15, FM 1–100, and FM 57–35 contain details on Army aviation employment.

4–20. Cavalry Squadron

a. The cavalry squadron is a combat unit organized primarily to perform reconnaissance and security missions over wide frontages and to extended distance. It can provide security for the unit to which assigned or attached. At the expense of primary mission accomplishment, it can engage in offensive, defensive, and retrograde operations as an economy-of-force measure. It does not possess the strength and armament to participate in sustained offensive or defensive combat operations without reinforcement.

b. The squadron is armored cavalry in the airborne, infantry, and mechanized divisions, and air cavalry in the airmobile division.

c. FM 1736 contains details on the employment and organization of the armored cavalry squadron. FM 17–37 (when published) contains details on the air cavalry squadron.

4–21. Artillery

a. The artillery provides combat support to the brigades by delivery of fires of appropriate type, caliber, and density under all conditions of weather, visibility, and terrain. It also provides target acquisition support through the use of forward observers, radar, and the target acquisition platoon organic to each direct support artillery battalion.

b. The artillery of the armored, infantry, and mechanized brigades can deliver nuclear, chemical, and conventional fires. The airborne and the airmobile division artillery have no organic nuclear capability and only a limited chemical capability.

c. The division artillery of the airmobile division includes an organic aviation battery. The mission of this battery is to increase the effectiveness of the division artillery by providing immediate, responsive aviation support to the division artillery headquarters and its elements.

d. The division artillery of the airmobile division also includes an aerial artillery battalion. This battalion is highly mobile and can deliver immediately responsive fires to support the maneuver element from the air. Aerial artillery can reinforce a direct support artillery unit and normally is employed in a general support or general support reinforcing role. The artillery battalion provides an aerial antitank missile system.

e. See FM 6–20–1, FM 6–20–2, FM 6–102, and FM 6–140 for details of artillery employment.

4–22. Air Defense Artillery

a. The division or attached ADA battalion provides air defense or ground fire support to the brigade. While the ADA battalion may be employed as a whole in support of the division, the division commander may attach a battery to the brigade. Normally an AW battery would be attached to (or placed in support of) a brigade, the mission and situation could dictate a missile battery or a tailored composite AW/missile battery. The battery may be fragmented further by attaching platoons or sections to elements of the brigades.

b. See FM 44–1 and FM 44–3 for details of ADA employment.

4–23. Chemical

Chemical units are provided by field army and may operate under division control. These units may be further attached to, or placed in support of, the brigade. FM 3–1, FM 3–10, FM 3–12, FM 3–50, and FM 20–33 contain details on CBR smoke, and flame weapons employment and combat service support.

4–24. Signal Battalion

a. The forward communications company of the division signal battalion establishes and operates signal centers to support units within a designated forward area and to provide secondary or area links for connecting brigade headquarters to the division multichannel communications network. These signal centers provide message center, motor messenger, cryptographic, teletype, telephone and radio service (excluding internal radio nets) to brigade trains. The field trains of the maneuver battalions, when in the brigade trains area, also are connected to a forward area signal

center by wire or cable. To summarize, the forward area signal centers afford access to the division communications system for all units being supported, in particular, the forward direct support elements of the division support command; all support, however, is supplemental to the organic capabilities of the supported unit.

b. Multichannel communications terminals (radio relay and/or cable) also are provided at the brigade headquarters to connect brigade headquarters to the division main and the division alternate CP and the supporting area signal center. In addition, radio/wire integration facilities are provided in the signal centers to connect mobile FM radio stations. This provides a means of communication between an FM radio station and other elements of the division connected to the signal center by telephone. Refer to FM 11–50, FM 11–57, and FM 61–24 for further information on the operation of the signal battalion.

4–25. Engineer Battalion

a. One engineer company from the division engineer battalion or the engineer company organic to the separate brigade normally is placed in direct support of the brigade, but may be attached when distances or the tactical situation preclude centralized engineer control. This unit may be reinforced by additional division engineer units or equipment. Special engineer units and equipment support the brigade when it is employed in special operations.

b. The commander of the engineer unit attached to, or in support of, the brigade functions as the engineer staff officer.

c. FM 5–135 and 5–136 contain details on engineer employment.

4–26. Military Police Company

The military police company under the operational control of the division provost marshal provides military police support to the division. A military police platoon normally is employed in support of each committed brigade to provide support on an area basis. The military police platoon organic to the separate brigade provides support in much the same manner. See FM 19–1 for details on employment of military police.

4–27. Support Command

a. Division support command units operating from the brigade trains area provide combat service support to the brigade and other divisional units in the area. Support command elements normally found in the brigade trains include:

(1) A forward support company of the maintenance battalion with teams from the aircraft maintenance company. This company has the capability of providing direct support (maintenance and repair parts) for all brigade equipment except medical, electrical accounting machines, and cryptographic equipment. The main support company provides backup support to this unit and assists in the evacuation of unserviceable materiel from the brigade to the division support area, as necessary (except for items evacuated directly to the supply and transport battalion of the division support command). The headquarters and main support company also arrange for the evacuation of materiel to maintenance or collection facilities in the corps. The physical movement of such materiel from the division area is the responsibility of the transportation company. FM 29–30 contains details on division maintenance support.

(2) A medical company from the division medical battalion. This company has the capability of establishing and operating a clearing station. It evacuates patients from battalion aid stations, using the ambulance platoon, and operates a medical supply point for brigade elements. See FM 8–15.

(3) A forward supply section of the supply and service company, supply and transport battalion. This section operates a distribution point for class I, II, IV, and VII supplies; another point for class III supplies; and may operate a class V distribution point for the airborne and airmobile brigade. See appendix B for description of the ten classes of supply; FM 29–50 contains details on division supply operations.

(4) A graves registration team, a salvage collecting point, bath, and clothing exchange.

(5) Water supply point (provided by engineer battalion).

b. The support command units employed with a brigade operate under the control of the support command commander. However, when the brigade is organized for independent or semi-independent operations, these support elements normally are attached to the brigade and will be under the operational control of the designated division support command representative present.

c. The brigade S4 coordinates security, specifies the location of installations in the trains areas, and controls displacement of division support command elements when they march with the brigade.

d. For additional information on the organization and operations of the division support command elements, see FM 54–2.

Section III. AIRLIFT

4–28. General

a. Airlift of troops, cargo, and supplies is accomplished through the use of cargo/utility helicopters of Army aviation units or cargo aircraft of the tactical Air Force supporting the field army.

b. Requests for airlift can be initiated at any level of command, and they are satisfied at the lowest echelon capable of filling them.

c. The supported commander or his representative approves or disapproves all requests. The air element providing airlift support acts in an advisory capacity.

4–29. Airlift Requests

a. Requests are either immediate or preplanned.

(1) Preplanned requests for cargo, supplies, and troops are submitted through command channels to the division transportation officer (TO). The TO evaluates, consolidates, and, if approved, assigns a priority and forwards requests that cannot be accomplished at division level to the corps movements control center (MCC). The corps MCC evaluates, consolidates, and, if approved, assigns a priority and forwards the requests to the field army movements control center. The field army MCC normally makes the final consolidation, tasks the appropriate Army aviation unit or the Air Force airlift control center to perform the missions, and notifies the originators of the approval through channels. If the requests are disapproved at any echelon, the requesters are notified through channels.

(2) Immediate requests for cargo and supplies below battalion level are forwarded to the battalion CP by the most rapid means available. At battalion level, requests are validated by the commander or his representative and passed to the tactical air control party (TACP). The TACP transmits the requests directly to the direct air support center (DASC) collocated with the corps tactical operations center (CTOC). TACP's at intermediate headquarters monitor the requests and acknowledge receipt. Normally, acknowledgment of the requests by intermediate TACP's indicates approval by the associated headquarters unless, within a specified period of time, a disapproval is transmitted. The DASC passes the requests to the corps MCC for action and coordination. Meanwhile, the intermediate TACP's pass the requests to the associated headquarters for action and coordination. All echelons coordinate simultaneously. If headquarters where the DASC is located or a higher headquarters disapproves the requests, the DASC notifies the originators and the requests are canceled. If requests are approved by the commander at the DASC level, the corps MCC tasks the appropriate Army aviation unit or the DASC to perform the missions flown from allocated sorties. If all allocated sorties are committed, the DASC obtains additional sorties or forwards the requests to the airlift control center supporting the field army for completion.

(3) Immediate requests for airlift of troops are forwarded to the division TOC for accomplishment from division resources. Re-

quests which cannot be filled at division are relayed by the division in the same channels prescribed for immediate requests for cargo and supplies, as discussed above.

b. FM 1–100, FM 57–1, FM 57–35, FM 100–27, and TM 57–210 contain technical information and doctrine for air movement in Air Force and Army aircraft.

CHAPTER 5

OFFENSE

(NATO STANAG 2088, 2099; CENTO STANAG 2088; SEATO SEASTAG 2099; ABCA SOLOG 108)

Section I. INTRODUCTION

5–1. General

This chapter provides doctrine for the employment of the five infantry brigades in offensive operations. Conditions of terrain, climate, and special operations dictate modification of techniques and procedures for offense; however, the doctrine for offensive operations remains the same. Chapter 8 and the applicable publications listed in appendix A discuss the techniques peculiar to special operations and environment.

5–2. Forms of Maneuver

a. The basic forms of maneuver are the penetration, frontal attack, and the envelopment; a double envelopment and a turning movement are variations of the envelopment. The distinction in the brigade form of maneuver exists primarily in the intent of the brigade commander since the maneuver elements of the brigade may use all the forms of maneuver in the attack. Infiltration is a technique of movement used in conjunction with the several forms of maneuver. The exploitation is a terrain-oriented offensive operation which usually follows a successful penetration or envelopment. The pursuit is an enemy force-oriented offensive operation which normally follows a successful exploitation.

b. The brigade, appropriately organized for combat, has the capability of participating as part of the division in the execution of all forms of maneuver. The brigade normally conducts the turning movement and frontal attack only as part of a larger force.

c. A higher commander seldom dictates the form of maneuver to be adopted by the brigade. However, the mission assigned, including the tasks derived from it, and the requirement for secrecy may impose limitations in time and direction of attack. The mission of the brigade, characteristics of the area of operations, disposition of opposing forces, and the relative combat power of the opposing forces are analyzed to determine the best form of maneuver to be adopted. Normally, terrain, the available time, own dispositions, ability to support the attack, and the enemy situation are the principal factors in choosing the form of maneuver to accomplish the mission.

d. All forms of maneuver can be assisted by airmobile and airborne operations which place forces on the enemy's flanks or in his rear.

5–3. Mission and Concept

The mission for the brigade normally is assigned by higher headquarters and defines the goal toward which the effort of the command is directed. Brigade missions usually will be brief but specific in terms of tasks to be accomplished. Normally, only a final objective(s) will be assigned; intermediate objectives will be assigned only when their seizure or neutralization is essential to the accomplishment of the division mission. The brigade commander and staff carefully study the mission to determine tasks specifically included and those additional tasks implicit in the mission that must be accomplished in order to complete the mission assigned to the brigade.

a. The brigade is organized for combat to make the best use of the capabilities of all its elements. It employs a combination of fire and maneuver to accomplish offensive missions.

b. When CBR munitions are employed, the division exploits the effect of these fires. Combat forces move through, over, or around the effects of these fires to dominate, neutralize, capture, or destroy enemy forces, to control terrain objectives, or to disrupt enemy rear areas.

c. In nonnuclear war with present weapons, transport, and communications, offensive operations should be planned centrally but decentralized in execution. Nonnuclear fires are used to support maneuver and to fix, interdict, or destroy enemy forces. Against an enemy possessing an air arm capable of controlling the airspace or employing nuclear weapons, the brigade avoids concentration that will present lucrative targets for attack by these means.

d. Successful offensive action requires the massing of superior combat forces at the decisive place and time, the rapid application of this power to destroy the enemy, followed by planned and orderly exploitation and/or dispersal. Speed is essential to success, since the necessary concentration of forces for the attack tends to present a lucrative nuclear target.

e. Once an attack is launched, every effort must be made to gain and maintain momentum until the objective is secured. When the opportunity for decisive action occurs, the commander unhesitatingly must commit the necessary resources.

Section II. PLANNING THE ATTACK

5–4. General

The brigade commander and his staff follow a logical sequence of action in planning the attack.

a. First, the brigade mission is studied and analyzed to gain a complete understanding of all tasks (both specific and implied) required to accomplish it. The brigade staff provides the commander with current information in order to keep him abreast of the current situation as he considers his mission.

b. Next, the brigade commander restates the mission and provides planning guidance to his staff. This guidance is based upon his study of the mission, his knowledge of both the friendly and enemy situation, guidance he has received, and his own professional knowledge and skill. His guidance usually is general in nature, but should indicate courses of action which he feels merit detailed consideration by his staff. He refrains from favoring a specific course of action at this time in order to permit the staff to make unbiased estimates and explore all courses of action which promise likelihood of success.

c. After receiving the commander's guidance, the staff officers prepare their separate estimates and recommendations (FM 101–5).

d. Upon receiving the staff recommendations, the commander completes his own estimate and arrives at his decision. Frequently, this will be a rapid process, performed in a few minutes. The commander's decision translates the course of action selected in the estimate into a complete statement that answers the questions Who, What, When, Where, How, and Why. The decision includes the direction and objective(s) of the brigade main and supporting attacks (if considered). It may include planned employment of the brigade reserve. The decision may include additional information on the scheme of maneuver and general visualization of fire support, although the latter is more properly included in the commander's concept of how the operation will be conducted. Subordinate commanders may be informed of the general plans of the brigade by fragmentary order so that concurrent planning can take place.

e. After stating his decision, the commander provides the staff with his concept of how the operation will be conducted (commander's concept). In doing so, he elaborates on his decision (explaining any aspects deemed necessary) and, in addition, may provide guidance and instructions to the staff that will facilitate task planning and preparation of orders. He may include, for example, explanation or clarification of:

(1) Purpose of the operation.

(2) Scheme of maneuver to include his visualization of important events in sequence of accomplishment.

(3) Use of nuclear and other fire support including allocation of nuclear weapons/rounds and duration of preparation fires.

(4) Organization for combat.

(5) Requirements for security.

(6) General control measures.

(7) Any other measures he may consider of broad significance to the command.

(8) Air defense missions and/or priorities.

f. The commander's decision and concept of operation then are translated into the operation order which is disseminated to subordinate, adjacent, and higher headquarters.

g. Following the issuance of the attack order (usually oral), the commander and his staff supervise and assist in its execution, modifying it as required to meet changes in the situation. Control measures such as checkpoints and phase lines are used to enable the brigade to issue fragmentary orders to react to changing situations.

5–5. Objectives

a. The brigade objective normally is assigned by higher headquarters. It usually consists of key terrain, the seizure or control of which will afford the brigade a tactical advantage over the enemy. When seizure or destruction of the objective requires the employment of more than one subordinate unit, the objective is subdivided clearly to delineate responsibility. The main attack (when designated) is directed at that portion of the brigade objective whose seizure wll provide decisive results.

b. The brigade may be assigned a mission which is related to a geographical area or an enemy force rather than to key terrain. The brigade commander then must analyze his mission to determine how it best can be accomplished. As a result of his analysis, he may ascertain that it is necessary for the brigade to relate its operations to terrain objectives in order to achieve the directed degree of control over the specified geographic area or enemy force.

5–6. Available Forces

a. The headquarters directing the operations normally allocates to the brigade the resources necessary to accomplish assigned missions. These resources include all combat, combat support, and combat service support units attached to or placed in support of the brigade. Having analyzed his mission, the brigade commander then considers the resources allocated to the brigade to determine how they can best be employed to perform assigned, primary, and supporting tasks and insure sufficient combat power at the point of decision. He keeps higher headquarters informed of changes in the friendly and enemy situations that may affect the accomplishment of the mission and allocation of forces.

b. When nuclear weapons have been allocated for an attack, the brigade commander plans for their use on remunerative targets so as to reduce the requirements for maneuver forces to close with and destroy the enemy in the target area.

c. A chemical attack produces casualties without the destructive effect of nuclear fires. Chemical fires in conjunction with nuclear fires increase the confusion and casualties inflicted upon the enemy and retard his efforts to organize his defense.

5–7. Scheme of Maneuver

a. General. The scheme of maneuver is the commander's placement and movement of his maneuver units to accomplish the mission. At brigade level, the scheme of maneuver is based on forces attached, mission, enemy, terrain, weather, space, and time. In the attack, maneuver units normally are employed in the main attack, supporting attack(s), and the reserve. When the brigade attacks in a single column, however, only a main attack (lead battalion) and reserve (balance of the battalions) will be involved. Also, when attacking battalions are assigned objectives whose seizure offers equal opportunity for success; or when the brigade attacks in multiple columns to develop a vague situation or to conduct a reconnaissance in force; or in a movement to contact, main and supporting attacks may not be designated initially. As the situation develops, a particular attack by one or more of the battalions may be designated as the main attack. When appropriately tailored and/or supported with Army

or Air Force aircraft, the brigade may integrate airmobile/airborne operations into most all schemes of maneuver.

b. Main Attack.

(1) The main attack is directed against the objective whose seizure best facilitates the accomplishment of the brigade mission; and this attack is accorded priority in the allocation of combat power. It is provided the means to obtain decisive results.

(2) The main attack is weighted by the allocation of maneuver units and by fire and other combat support. It may be weighted by giving it advantages such as the best avenue of approach and by directing it against enemy weakness.

(3) The main attack may be changed from one unit to another during the conduct of the attack to exploit a successful advance or to take advantage of weaknesses detected in the enemy defenses.

c. Supporting Attack(s).

(1) A supporting attack should contribute to the success of the main attack by accomplishing one or more of the following:

(*a*) Seizing terrain which facilitates the maneuver of the main attack.

(*b*) Fixing the enemy in position.

(*c*) Deceiving the enemy as to location of the main attack.

(*d*) Forcing the enemy to commit reserves prematurely, piecemeal, or in an indecisive area.

(*e*) Preventing enemy reinforcement in the area of the main attack.

(2) Adequate means are provided for the accomplishment of these tasks. Nuclear and chemical weapons may be used to accomplish tasks which otherwise might require the commitment of large bodies of troops. If there is an abundance of means (especially nuclear weapons), the maneuver elements of the supporting attack forces may approximate those of the main attack.

d. Reserve.

(1) *General.* In the attack, the brigade retains a reserve to enter combat at a decisive time and place to exploit success or complete the accomplishment of the mission. A high degree of mobility vastly enhances the potential of a reserve. A reserve also provides the commander with a means of dealing with contingencies. The reserve should not be used to redeem failure but to:

(*a*) Exploit success.

(*b*) Reinforce the attack.

(*c*) Maintain or increase the momentum of the attack.

(*d*) Hold ground seized by the attacking force.

(*e*) Defeat or block enemy counterattacks.

(*f*) Provide security.

(*g*) Block routes of egress of the enemy.

(2) *Size of reserve.* A deep objective, limited knowledge of the enemy situation, or inability to visualize the attack to its final objective requires the retention of a larger reserve than in situations where these conditions are known. When attacking an enemy known to have inferior mobility, the reserve may be smaller than when attacking one of equal or superior mobility.

(3) *Location of the reserve.* Dispersal of reserve elements into multiple assembly areas or march columns provides some protection from nuclear attack. Consideration is given to locations that facilitate rapid movement to points of probable employment.

(4) *Movement of the reserve.* In fast-moving operations, the reserve may move at a prescribed distance behind the attacking echelons. In slow-moving operations, the reserve moves by bounds. In certain operations, the reserve may be transported by Army aviation. Regardless of how it moves, the reserve always must be positioned for rapid employment and must remain within supporting distance of the committed forces.

(5) *Nuclear weapons.* Nuclear weapons are allocated by division. The brigade normally holds a portion of its nuclear weapons in reserve.

(6) *Reconstitution of reserve.* Plans should be made prior to the attack to reconstitute a reserve at the earlies opportunity after the reserve is committed.

e. Formations. The scheme of maneuver specified in the commander's decision estab-

lishes the brigade formation for the attack. The formation will be a column, or a line, or variations of these. Within a brigade formation, the battalions will be in formations appropriate to the accomplishment of their missions.

(1) *Column formation.* In the column formation, the brigade attacks in a column of battalions along a single axis. A variation of the column is the echelon formation in which the battalions move at staggered intervals on different routes along a single brigade axis. The column formation is suitable when the brigade attacks along a narrow front, when the enemy situation is vague, or when the initial enemy resistance is expected to be light. It also may be appropriate when nuclear weapons are employed to destroy the enemy in a portion of a zone. The column formation provides the brigade commander with the maximum flexibility in employment of his forces, leaving the bulk of the maneuver units available for commitment as the situation develops. The disadvantages of the column formation are that it lacks firepower to the front and requires more time to move reserve elements forward for commitment. For these reasons, mounted forces are better suited for this formation.

(2) *Line formation.* The line formation employs two or more battalions in the attacking echelon. It is appropriate when maximum combat power forward is desired. With dismounted forces, when conditions otherwise favor a column formation, the line formation may be used in consideration of the time required to deploy reserve battalions from the rear of a column formation. Similar considerations are involved with respect to the interval between attacking battalions. Although it will vary with the mission, terrain, and enemy situation, the interval normally is not so great as to preclude mutual support (movement of one battalion, if necessary, to the aid of another to prevent defeat in detail). In mounted operations, mobility permits the interval to be greater than in dismounted operations. In employing the line formation, an avenue of approach for each attacking battalion must be available.

5–8. Organization for Combat

a. General. The mission, enemy situation, terrain, and troops available are considered in determining the brigade organization for combat. Generally, infantry and tank battalions are cross-attached or cross-reinforced to form task forces. The task organization is adjusted as required in the course of an operation to meet the requirements of changing conditions. The availability of Army aviation to support an operation, particularly of battalion size, enhances the brigade's combat effectiveness.

b. Infantry-Heavy. An infantry-heavy battalion task force is best suited for operations where an obstacle must be breached, where antitank defenses are strong, when a built-up area must be seized, or where terrain is unfavorable for employment of a large number of armored vehicles. In such operations, tanks support the advance of the infantry. For employment in mounted operations, mechanized infantry or infantry mounted on wheeled vehicles may be organized into infantry-heavy battalion task forces. The tanks in this case, however, are employed primarily to lead the attack and are supported by infantry.

c. Tank-Heavy. Tank-heavy battalion task forces are organized primarily for operations that permit mounted attacks, with tanks leading and supported by infantry. Such task forces normally are employed if the enemy is strong in armor, if there is favorable tank terrain, or if there is a possibility of rapid exploitation. Tank-heavy forces are appropriate for the enveloping force in a brigade envelopment or for the brigade reserve organized to permit rapid movement through a gap (created by forward battalions) to seize the brigade objective.

d. Balanced. Task forces consisting of equal numbers of tank and infantry elements may be organized when the enemy situation is too vague to determine the need for tank or infantry-heavy forces. This organization permits commitment of forces capable of performing either tank or infantry missions.

e. Airmobile. Airmobile forces operate relatively independently of the terrain influences

that restrict ground operations. Offensive operations usually are oriented on the location and destruction of enemy forces rather than on the seizure or retention of terrain features. Airmobile operations are characterized by rapid execution and timely withdrawal or reinforcement. A rapid tempo of successive operations is maintained to seize the initiative to keep the enemy off-balance, to achieve significant advantage by surprise, to seize key terrain, and to destroy the enemy forces.

f. Airborne. Usually, airborne forces are not committed on missions that can be performed as economically or as expeditiously by other combat forces. An airborne force is both a tactical and a strategic threat that may compel the enemy to disperse his force to protect vital installations in his rear areas and on his flank.

g. Support.

(1) The supporting artillery for the brigade is placed in direct support of, or attached to, the brigade. In either role, its method of employment, its integration in the brigade formation for the attack, and the priority of its fires are controlled by the brigade commander. In the movement too contact, in the exploitation, or when deep objectives are to be seized, direct support artillery must move with the maneuver elements in order to keep within supporting distance. If the artillery battalion is attached to brigade, an artillery battery may be attached further to an infantry or tank battalion operating at such distances from the bulk of the brigade as to preclude effective centralized artillery control.

(2) Air defense artillery units, attached or in support of a brigade, provide primarily air defense to the brigade. However, air defense systems having a surface-to-surface capability, provide ground fire support as required. Air defense units provide two basic types of low-altitude air defense—defense of mobile units and defense of vital areas. When used in a ground support role, they are integrated into the ground fire support plan. Missile units are most effective when deployed in an area defense pattern to provide early destruction of enemy aircraft along low-altitude approach routes and to defend key brigade elements.

(3) Attached or supporting engineers are made available to the brigade in offensive operations. Engineer units should be retained under centralized control (whenever possible) to provide for unity of engineer effort and maximum use of resources. When centralized engineer control would be difficult or impractical, an engineer company may be attached to the brigade; engineer platoons may support or be attached to combat battalions, dependent upon the command relationships and capability of the parent company.

(4) Vehicles or Army aircraft supporting the brigade may be allocated further to the control of the using maneuver units. Whenever possible, such attachment should preserve unit integrity of the unit.

h. Brigade Command Installations. In the attack, the brigade commander operates from a command group located in the area of the brigade unit making the main effort where he can best influence the action. The brigade executive officer/deputy commander normally remains with the command post. Radio is the primary means of control.

i. Brigade Trains. In most situations, the brigade trains operate from a position well forward in the brigade area. They displace as required. In exceptional cases where a brigade element, e.g., battalion task force, is employed in a semi-independent role away from the main body of the brigade, essential medical, supply, and maintenance elements from the brigade trains may be attached to it.

5–9. Fire Planning

a. Integration. The plan of fire support and the scheme of maneuver for the attack must be coordinated and integrated closely to provide maximum effectiveness. They are developed concurrently and are revised as the operation progresses. Planning should include the use of all available fire support means. Whenever possible, weapons of maneuver battalions in brigade reserve are employed to reinforce the fire of battalions making the attack.

(1) *Determination to fire.* The commander ordering the attack determines whether an artillery preparation will be fired. Factors to be considered are:

(*a*) Whether the probable effect of the preparation will justify the attendant loss of tactical surprise.

(*b*) Availability of fire support means, to include supply of ammunition.

(*c*) The number of targets which can be located in time to prepare and assign fires.

(*d*) Whether the effect sought can be accomplished before the enemy can change his tactical dispositions.

(*e*) The effects of fires in creating obstacles to planned maneuver.

(*f*) Troop-safety requirements in relation to targets.

(2) *Fires during the conduct of the attack.* The brigade fire support plan should include on-call fires which can be placed quickly in all areas and on targets when need for such fires can be envisioned. On-call fires are used to assist the attacking force and consolidation on the objective. Fire support elements also control ammunition resupply and expenditure to provide adequate fire support for targets of opportunity which may develop during the attack.

(3) *Fires during reorganization and consolidation.* Fire support to cover reorganization and consolidation after objectives have been seized is included in the fire support plan. Fire data for such fires are as complete as possible to permit rapid and effective fire support for repelling enemy counterattacks.

b. Alternate Plans. The availability of nuclear fires often may be the decisive influence on the scheme of maneuver. For example, in a penetration, nuclear fires may be programed to rupture the enemy's position or to widen the gap, or both. If the plan of maneuver has been determined by the planned employment of nuclear weapons, alternate plans for the attack (based on the assumption that planned nuclear weapons may not produce the predicted effects or cannot be delivered) must be prepared.

5–10. Control Measures for the Attack

The brigade commander prescribes only those control measures required to adequately control the operation of the brigade, as well as those controls specified by higher headquarters. The latter are limited in a mission-type order when the brigade is assigned independent or semi-independent roles or may be in considerable detail when the brigade is part of a coordinated division attack. Control measures may include:

a. Objectives. See paragraph 5–5.
b. Line of departure.
c. Time of attack.
d. Boundaries or zones of action.
e. Axis of advance.
f. Direction of attack.
g. Assembly area.
h. Attack position. The brigade does not normally use an attack position.
i. Phase lines.
j. Checkpoints.
k. Contact points.
l. Infiltration lanes. Such lanes normally are not designated by the brigade order.
m. Other control measures. For control measures used in airborne and airmobile operations, see FM 57–1 and FM 57–35.
n. For detailed discussion of control measures, see FM 7–11, FM 7–20, FM 61–100, and FM 101–5.

5–11. Security

a. General.

(1) The brigade commander is responsible for the security of the brigade as a whole. In turn, commanders of each subordinate element of the brigade are responsible for security of their units. The brigade takes active and passive measures prior to the attack to prevent the enemy from determining the time and place of the attack and to cover the brigade's preparation for it. Tactical cover and deception plans normally are not included as part of the brigade's operation order or plan, but the brigade assists in the implementation of such plans made by higher headquarters.

(2) The brigade commander employs attached units (or elements of them) and supporting forces to obtain the desired security. Elements of the division cavalry squadron may be attached to the brigade and are ideal for security roles because of their organic mobility and firepower. During the attack, security may be obtained by employment of security forces and surveillance means under brigade control,

by the disposition of brigade forces, location of friendly units, the speed with which the attack is executed, the control of key terrain, and the use of fires.

(3) When brigade security forces are employed, they operate directly under brigade control and are given specific guidance as necessary. In determining the requirement for brigade security, the brigade commander considers the security afforded by other sources. Exceptionally, a subordinate battalion may be directed to provide, under its control, a force for the security of the brigade.

b. Coverage of Gaps. When the brigade attacks on a broad front, gaps of considerable width can be expected to occur between battalions within the brigade and between the brigade and adjacent units. Responsibility for control of such gaps must be specified clearly.

(1) Gaps are controlled primarily by security forces, patrols, continuous ground and aerial surveillance, and by fire, using resources immediately available to the brigade and other resources such as tactical air.

(2) Enemy forces discovered in gaps which are capable of seriously interfering with the accomplishment of the mission are destroyed by fire or by fire and maneuver. Preferably, they are destroyed by fires to avoid commitment of maneuver forces. Those enemy forces not posing a serious threat may be contained by minimum force until they can be eliminated by brigade reserve units or by other forces following the brigade.

5–12. Combat Service Support

The plan of attack must be capable of being supported logistically. The brigade commander is concerned primarily with critical shortages of equipment and supplies that may affect adversely the brigade's combat operations. If a projected operation cannot be supported with resources available to the brigade, assistance is requested from higher headquarters (FM 54–2).

Section III. MOVEMENT TO CONTACT

5–13. General

a. A movement to contact is an offensive operation to gain initial contact with the enemy or to regain lost contact. Its purpose is the early development of the situation to provide an advantage prior to decisive engagement. The movement usually is conducted on a broad front. It may take the form of an administrative march when no enemy interference, except by air, is anticipated, a tactical column when contact is improbable, or an approach march when contact is imminent.

b. Security is a critical consideration in the movement to contact. It is enhanced by the formation adopted by the brigade, by early development of the situation, and by retaining the bulk of the brigade's combat power uncommitted and readily available for rapid employment against the enemy. When available, tactical air is used to provide column cover.

c. The commander exploits every collection means and agency at his disposal to secure information about the enemy, to prevent surprise, to acquire target information, and to gain a maneuver advantage.

d. The brigade may conduct a movement to contact as part of the division or, when assigned adequate forces, in an independent operation.

e. The movement to contact must be planned carefully, and commanders of attached maneuver battalions should be given maximum authority and freedom of action to execute the advance rapidly and aggressively. March objectives, phase lines, checkpoints, and axes of advance are employed as control measures. The brigade must be able to plan and disseminate mission-type orders to effectively commit itself in a coordinated attack when the situation calls for it.

f. Maximum use is made of forward area air defense weapons.

g. See figure 5–1 for brigade organization for the movement to contact.

5–14. Meeting Engagement

a. In the movement to contact, the brigade frequently will participate in a meeting engagement where the brigade, not completely deployed for combat, must engage an enemy

concerning which it has inadequate intelligence.

b. In each meeting engagement, the brigade commander is confronted with three possible courses of action:

(1) Attack piecemeal from march formation as fast as units can be brought into battle.

(2) Reconnoiter and contain the enemy force and defer decisive action until the bulk of his force can be committed in a coordinated operation, either offensively or defensively.

(3) Attempt to break contact and avoid or bypass the enemy force.

c. The paramount objective of the commander fighting a meeting engagment is to seize and retain the initiative. If he retains the initiative, he may adopt any of the three principal courses of action mentioned above that will contribute most effectively to the accomplishment of his mission. Without the initiative, he can only react to the enemy's actions.

Section IV. CONDUCT OF THE ATTACK

5–15. General

a. The discussion in this section applies generally to any attack. Conduct of the attack employing various forms of maneuver and in special conditions are discussed in succeeding sections of this manual and in FM 61–100.

b. In the attack, flexibility and speed of maneuver, adequate fire support, and timely decisions are required. This is particularly important in operations against an enemy who possesses equal mobility and nuclear firepower.

c. A successful attack demands the best effort of all concerned. Aggressive leadership, proper staff supervision, well-trained troops, high morale, and esprit are all essential to success.

d. The speed, armor protection, and mobility of tanks and mechanized infantry must be exploited to permit infantry-tank task forces to close with and destroy the enemy. Infantry remain mounted in carriers during movement and dismount only when required to do so by terrain conditions and enemy action or troop disposition.

e. Dismounted attacks must be time-phased more slowly than mounted attacks. However, the ability of the infantry to maneuver over difficult terrain makes it possible to use avenues of approach which may gain the advantage of surprise. Tanks are used to support the advance of dismounted infantry, when possible.

f. When suitably reinforced with Army aircraft, the brigade can operate relatively independently of the terrain influences that restrict surface operations.

5–16. Phases of the Attack

a. Generally, the attack is planned and executed in three phases:

(1) Preparatory.

(2) Conduct.

(3) Consolidation and reorganization.

b. These phases rarely will apply to the brigade as a whole; one element of the brigade may be conducting the attack while another element may be consolidating and reorganizing.

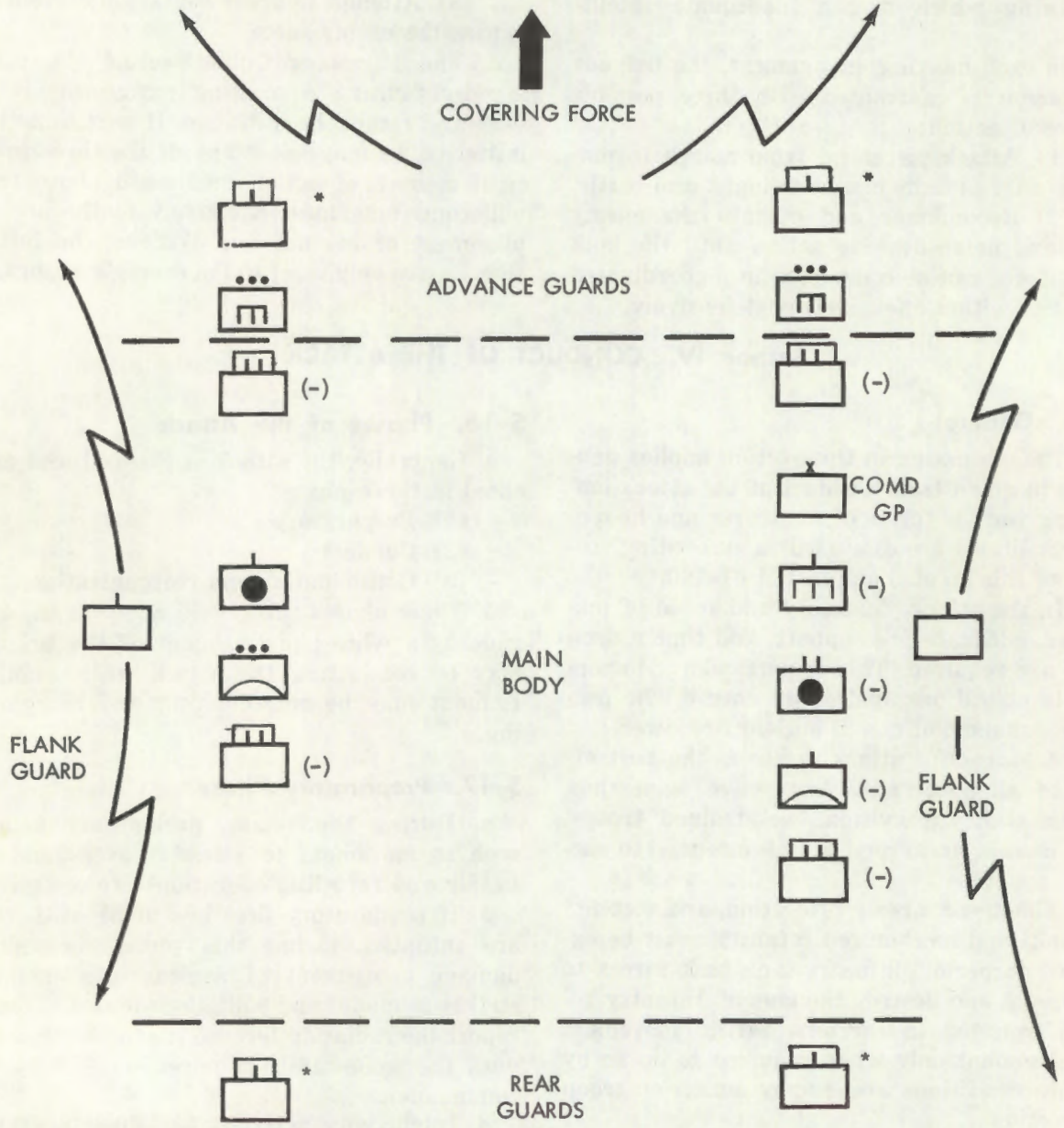
5–17. Preparatory Phase

a. During this phase, preliminary actions such as movement to assembly areas and resupply and refueling operations are completed.

b. If preparatory fires are to be used, they are initiated during this phase. Immediate damage assessment of nuclear and chemical strikes is made, and radiation detection teams report the radiation level so it can be compared with the troop-safety requirements set by the commander.

c. Intelligence activity, particularly ground and aerial surveillance, is intensified to detect the enemy's reaction to the preparatory fires, to the movement of troops, and particularly to any feints, demonstrations, or other deceptive measures conducted during this phase as part of the division deception plan.

d. Troops begin moving forward from assembly areas into attack position, if used, so that they cross the line of departure at the prescribed time. Preparatory fires are exploited to cover this movement. Normally, the brigade attacks from widely dispersed assembly areas,



* In this case the advance guard for each column is furnished by the lead battalions and the rear guard by the rearward battalions on each axis. Brigade controls the flank guards directly and controls the advance and rear guards through the battalions concerned. Artillery observers are with the lead companies. The location of the artillery units shown are for an initial passage of lines. Once artillery units begin to go into firing positions, they will disregard their initial locations and move where they can best support the operation. Air defense elements are interspersed along both columns.

Figure 5–1. Type organization for brigade in movement to contact (multiple columns).

massing at the last possible moment to avoid presenting targets for enemy fire.

5–18. Conduct Phase

a. Supporting fires continue in support of the attack as units cross the line of departure. Battalions move forward maintaining dispersed formations, massing only to the extent required to overcome resistance.

b. Unless directed otherwise, brigade units bypass, destroy by fire, or contain other enemy forces to permit the rapid advance of the brigade to seize the final objective. Bypassed enemy troops are reported to higher headquarters. In the event the bypassed units could jeopardize the accomplishment of the mission they will be destroyed.

c. At the brigade level, the attack is conducted as a series of rapid advances and assaults, and brigade units are maneuvered to provide as much mutual support as possible.

d. Priority of supporting fires is shifted in coordination with changes in the scheme of maneuver. Whenever possible, the enemy is destroyed by fire alone—either nuclear or nonnuclear.

e. The reserve moves by bounds or at a prescribed distance behind attacking units from which it can move rapidly to points of probable employment. The reserve maintains dispersed formation, making full use of available concealment and cover. Whenever possible, its long-range firepower is used to support the attack. The reserve should be committed intact at the decisive time and place. The brigade commander seeks opportunities which can be exploited by the reserve for decisive results. Although the reserve may be used to mop up bypassed resistance, to augment flack or rear security units, to assist in covering gaps, or to defeat counterattacks, its primary role is to insure the availability of a force which can achieve decisive results. The brigade commander reports commitment of the reserve to higher headquarters and reconstitutes a reserve from his own force at the earliest practicable opportunity, or requests additional units from division. If the attack is prolonged, committed units are rotated for rest, maintenance, and resupply.

f. During the assault on the final objective, all resources of the brigade are committed if required. Units proceed beyond the final objective to maintain contact with the enemy and to secure and defend avenues of enemy approach into the objective. Minimum forces are left on objectives to defend them, and the remainder of the brigade disperses as much as possible. Fires are shifted to assist in the retention of the objective and are placed on likely avenues of approach for an enemy counterattack. The brigade makes necessary preparations to continue the attack.

g. If the attack is discontinued or if the brigade reverts to division reserve, it may move into dispersed assembly areas or assume a defensive posture.

h. During the attack, the brigade trains (or elements) move forward to insure that logistical support for the attack is adequate.

5–19. Consolidation and Reorganization Phase

a. The purpose of consolidation and reorganization is to prepare the attacking force for future action. When possible, the seizure of the objective should be followed by immediate continuation of the attack or exploitation of the success achieved. Emphasis is placed on security, resupply, and reorganization. Consolidation and reorganization should never interfere with maintaining the momentum of the attack.

b. Upon seizure of the objective, pockets of enemy resistance are cleared as rapidly as practicable. Consolidation of the objective may be facilitated through the use of boundaries to delineate areas of responsibility, and the use of contact points to designate where units will coordinate the organization of the position.

c. If the attack is discontinued, consolidation and reorganization is more complete. Trains are displaced forward, equipment is repaired or evacuated, personnel replacement are sent to units, necessary changes are made in task organization, and patients who could not be evacuated during the attack are transported to supporting medical facilities.

Section V. PENETRATION

5–20. General

a. In the penetration, the attack passes through the enemy's principal defensive position, ruptures it, and neutralizes or destroys enemy forces in order to break up the continuity of his defense and facilitate future offensive operations. The divided enemy forces then are destroyed in detail, and mobile forces exploit through his rear area.

b. Penetrations (fig. 5–2) are conducted in three stages:

(1) Rupture of the enemy's forward defensive position.

(2) Widening and securing the gap.

(3) Seizing and controlling objectives.

c. While these stages usually are conducted in sequence, essentially they are tasks which must be accomplished before a successful pene-

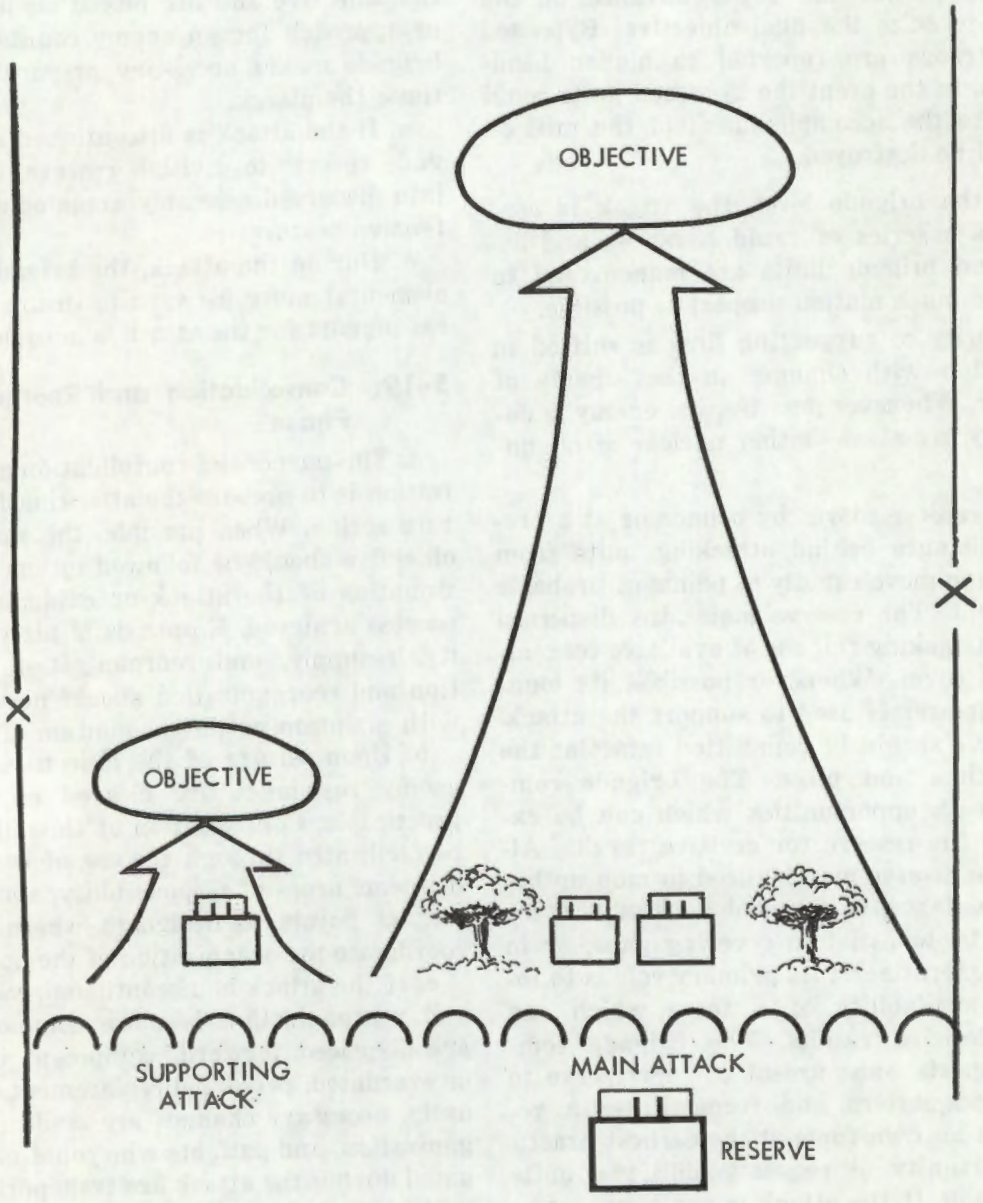


Figure 5–2. Brigade conducting a penetration.

tration can be completed. All three stages may be conducted simultaneously; they frequently are when nuclear weapons and aviation support have been allocated to the brigade. Nuclear weapons can be employed to create the gap or widen and secure its shoulders. Mechanized or mounted battalions exploit the effects of nuclear fires to link up with airmobile units which have seized objectives in the enemy's rear.

d. The penetration of a well-organized position requires a preponderance of combat power and continued momentum of the attack. The attack must move rapidly to seize objectives which destroy the continuity of the defense. If the attack is slowed or delayed, the enemy is given time to react. If the rupture is not made sharply to accomplish rapid seizure of the objectives, the attack may resemble a frontal attack, which affords the enemy an opportunity to fall back intact on his routes of communication and avoid destruction.

5–21. Basic Considerations

a. The penetration is adopted as the form of maneuver when dictated by the brigade's mission, or it is selected by the brigade commander when one or more of the following conditions exist:

(1) The enemy's flanks are unassailable.

(2) The enemy is overextended and there are weak spots in his defenses.

(3) Terrain and observation are favorable.

(4) Ample fire support (particularly nuclear) is available.

(5) The attacker has the preponderance of combat power.

b. In the penetration, intermediate objectives usually are assigned in the first two stages of the operation, i.e., objectives which are required to rupture the enemy's forward defense and those required to widen and secure the gap in the enemy's line through which the main attack will pass. The brigade penetration objective is selected to seize key terrain in the brigade zone located at a depth within the enemy defenses at least to a line of his reserves for a brigade-size force. Seizure of this key terrain normally will eliminate the enemy's capability to counterattack successfully with his reserves.

c. The main attack should be on a relatively narrow front and is directed toward the decisive objective. In some cases, the main attack force is not committed until supporting attacks and/or nuclear fire have ruptured the enemy's position and provided a gap. (The mechanized battalion task force is ideal for this role.) The bulk of the armor attached to the brigade should be used to move through the gap to seize the final objective.

d. Supporting attacks may be used to widen the gaps, to prevent the enemy from disengaging, and to destroy him in place. They are directed toward seizing or controlling terrain on the shoulders of the penetrations to enable the main attack force to move through the gap.

e. The reserve should be kept mobile and positioned where it can exploit initial success. Frequently, it will pass through forces making the initial assault or assist in seizing or destroying the final objective.

f. Controls imposed by the brigade for a penetration usually include a line of departure, time of attack, zones of action or axes of advance, assembly areas for major subordinate units, and objectives.

5–22. Fire Support

a. The penetration normally is preceded by preparatory fire which neutralizes enemy positions, limits enemey ability to react against the attack, and covers the movement of attacking units.

b. Nuclear weapons contribute to the effectiveness of fire support; however, the effects of nuclear weapons must be considered in relation to the scheme of maneuver. It is frequently preferable to use these weapons on the flanks rather than in the area of the main attack.

c. Use of nonpersistent-effect chemical agents is a means of expediting rupture of the position. They increase the friendly combat superiority in the area without producing obstacles.

d. Fires are planned to widen the shoulder of the penetration and to neutralize enemy efforts by holding the shoulders of the penetration.

e. Fires are planned to neutralize enemy reserves, to prevent movement of enemy forces

into or out of the area of operations, and to destroy any targets which seriously threaten the accomplishment of the mission.

f. Enemy forces isolated during the rupture of the position may be reduced by fire.

Section VI. FRONTAL ATTACK

5–23. General

The frontal attack, using the most direct route, strikes the enemy all along his front. It normally is employed by corps and higher commands to overrun and destroy or capture a weakened enemy in position, or to fix an enemy force in position to support another form of maneuver. The brigade participates in the frontal attack as part of a larger force.

5–24. Basic Considerations

a. The brigade commander may initiate a frontal attack against a weak or disorganized enemy when the situation is not developed fully; when the attacker has overwhelming combat power; when the time and situation require immediate reaction to enemy action; or when the mission is to fix the enemy in position, deceive him, or assist the main attack. Frontal attacks, unless in overwhelming strength, are seldom decisive; consequently, their adoption as a main attack rather than a more decisive and less costly form of maneuver seldom is justified.

b. When participating in the frontal attack initiated by higher headquarters, the brigade commander seeks to create or take advantage of conditions that will permit a penetration or envelopment of the enemy position.

c. Detailed information on the frontal attack is contained in FM 61–100.

d. A reserve is retained to permit redistribution of forces and to take advantage of changes in the tactical situation.

Section VII. ENVELOPMENT

5–25. General

In the envelopment (fig. 5–3), the enveloping force passes around or over the enemy's principal defensive positions to seize objectives which cut his escape routes and subject him to destruction in position from the flank or rear. Supporting attacks hold the enemy in position during the advance of the enveloping attack. The envelopment forces the enemy to fight in two or more directions to meet the converging attacks.

5–26. Basic Considerations

a. Ground envelopment requires that the enemy have an assailable flank, or that an assailable flank be created by massed nonnuclear or nuclear fires or a penetration, or that the enemy dispositions permit infiltration of his position. Aerial envelopment requires suppression of enemy air defense fires, or it requires that enemy dispositions and capabilities be unable to interfere materially with the flight of the airmobile or airborne force.

b. The brigade may use the envelopment as the form of maneuver for its own attack or may take part in an envelopment being made by the division or larger force. In the first instance, one or more battalions of the brigade make the fixing attack while other brigade units pass around the enemy's flank to seize objectives in the rear. When part of a division envelopment, the brigade may be given the encircling role or the supporting role of fixing the enemy in place.

c. Envelopments require an appropriate balance of forces for the main and supporting effort. Frequently, the forces holding the enemy in position are economy-of-force elements, with greater combat power allocated the enveloping force. The holding force must, however, have sufficient combat power to keep the enemy fully engaged during movement of the enveloping force.

d. Airmobile and airborne forces may be assigned the mission of seizing or destroying objectives in the rear. Combat units are landed on or as close to their objectives as possible; however, if the enemy is defending in depth,

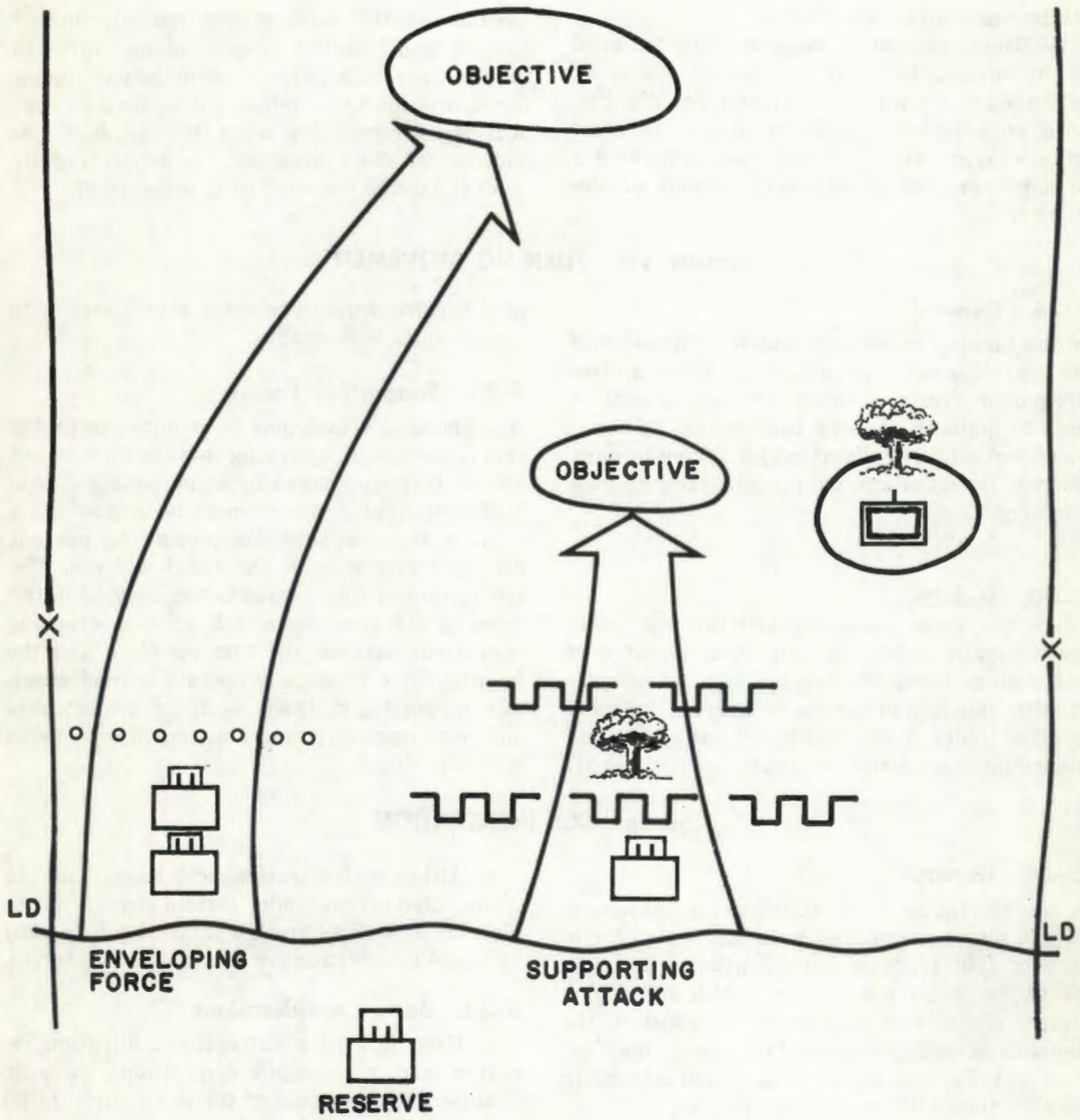


Figure 5–3. Brigade conducting an envelopment.

such forces must make their landings in undefended areas from which they will attack to seize their objectives.

e. If the enemy attempts to cut off the enveloping force or extend his flank beyond it, the brigade commander may elect to penetrate the enemy's overextended front. An attempt to flank the enemy's extension may lead to a dangerous separation of the enveloping force from the supporting attack.

f. The brigade commander is alert to opportunities to exploit success with his reserve. These opportunities may be in the area of either the enveloping or the supporting attack.

When the reserve is committed, another is constituted as soon as practicable.

g. Minimum control measures are assigned to the enveloping force. The use of a zone of action may simplify control and coordination with an adjacent supporting attack. In some situations, an axis of advance may be necessary to implement the commander's scheme of maneuver.

5–27. Fire Support

Because of the secrecy requirement, limited targets, and inability of local enemy forces to impede the attack in the area of the enveloping force, a preparation might not be fired in support of the enveloping force. If fired, it is violent, but of short duration. The supporting attack(s) may be preceded by a preparation.

Section VIII. TURNING MOVEMENT

5–28. General

In the turning movement, which is variation of the envelopment, the attacking force passes around or over the enemy to seize objectives deep in his rear, thereby forcing him to abandon his position or divert major forces to meet the new threat on ground of the attacker's own choosing.

5–29. Mobility

Since the force executing the turning movement usually is beyond supporting distance of other elements of the brigade, it must be sufficiently mobile and strong to operate independently. Under most conditions, battalions will be mounted or airmobile when acting as part of a turning force. The cross attachment with armor units is desirable.

5–30. Supporting Forces

A supporting attack may be required to fix the enemy; however, a turning movement need not always be accompanied by a supporting attack. Sufficient combat power must be applied by a holding force against the enemy to prevent his interference with the turning force. The application of this combat power may be in the form of a supporting attack or of a screening operation. Because the turning force and the holding force frequently operate beyond mutually supporting distance, each force must have sufficient combat power and mobility to avoid defeat in detail.

Section IX. INFILTRATION

5–31. General

a. Infiltration is a technique of movement which may be employed with all forms of maneuver. The purpose of infiltration is to penetrate the enemy position by stealth and deploy forces in his rear to conduct or assist in the conduct of decisive tasks. These tasks may be:

(1) To seize key terrain (main attack) in conjunction with supporting attacks.

(2) To destroy the enemy or his vital installations to assist the main attack by attacking his reserves, fire support delivery means (especially nuclear), and key command, communication, and logistical installations.

(3) To obtain information for intelligence purposes.

b. Gaps in the enemy lines, rough or difficult terrain, and poor visibility conditions facilitate infiltration.

c. Although infiltration best lends itself to dismounted action, under certain circumstances aircraft as well as ground vehicles can be used to expedite movement of the infiltrating forces.

5–32. Basic Considerations

a. Execution of a successful infiltration requires terrain or enemy dispositions, or both, that permit movement of forces through initial enemy defenses without detection.

b. The brigade retains direct control over an infiltration when the infiltrating force is of battalion-size or larger. Otherwise, control is decentralized.

c. Control measures must be in considerable detail since the infiltration is conducted by small groups during periods of reduced visibility and often through difficult terrain.

d. Linkup plans must provide adequate rec-

ognition means and unity of command once the linkup has been made.

e. Within the area of infiltration, a series of infiltration lanes of sufficient width to permit the infiltrating groups to move by stealth are designated. Infiltration lanes (in conjunction with the coded designation of infiltrating groups and their probable sequence of movement), checkpoints, and phase lines provide a means of reporting the progress of the operation and of coordinating fires with movement of the groups. Other control measures used are attack positions, objectives, and rallying points or areas.

f. Communications must be provided for use within the infiltrating unit and for use between that unit and the controlling headquarters.

g. Units making an infiltration usually attack only with individual weapons and hand-carried, crew-served weapons. Provision must be made to provide adequate fire support and air defense support to infiltration units once they close on the objective. Plans should call for the air delivery of heavier weapons to these units in the objective area to provide additional support for subsequent operations.

h. Supporting fires are planned to cover and assist movement of infiltration forces.

Section X. RECONNAISSANCE IN FORCE

5–33. General

a. A reconnaissance in force is a limited objective operation to discover and test the enemy's dispositions and strength or to develop other intelligence. Although its primary aim is reconnaissance, it may uncover weaknesses in the enemy's dispositions which may be exploited promptly with success.

b. The brigade may conduct a reconnaissance in force as a unit, or elements of the brigade may conduct a reconnaissance in force on a limited scale for the brigade.

c. Mechanized and armored brigades are excellent reconnaissance in force units. Brigades operating dismounted can conduct a reconnaissance in force of limited depth. When reinforced with ground transport or aircraft, dismounted units can extend their reconnaissance over a wide front.

5–34. Basic Considerations

a. The reconnaissance in force normally develops information more rapidly and in more detail than other reconnaissance methods. In arriving at a decision to reconnoiter in force, the commander considers the:

(1) Extent of his knowledge of the enemy situation and the urgency and importance of the additiinal information sought.

(2) Efficiency and speed of other information collection agencies.

(3) Extent to which his plan of action may be divulged by the reconnaissance in force.

(4) Possibility that the reconnaissance may lead to a general engagement under unfavorable conditions.

b. When information is sought regarding a particular area, the reconnaissance in force is planned and executed as an attack with a limited objective. Where information on the enemy is desired over a wide front, multiple reconnaissances in force are conducted. In each case, the reconnoitering force should be given an objective(s). This objective should be selected as an area (usually key terrain) which, when threatened, will cause the enemy to react, thereby disclosing the information sought. Reconnoitering forces need not necessarily reach and seize the objective assigned. When the information (enemy strength, dispositions, and possible intentions) is developed, the reconnoitering force may be given a subsequent mission or be withdrawn.

c. The reconnoitering force must be strong enough to cause the enemy to react to the attack, thus disclosing his location, strength, planned fires, and planned use of reserves. The size of the force depends upon the mission of the brigade and the situation. The brigade commander may use a force as small as a company or the brigade as a unit, while retaining sufficient reserves to exploit enemy weaknesses.

d. Plans must provide for exploitation of enemy weakness and the extrication of the force in the event it is threatened by a superior enemy force which could lead to a decisive engagement.

e. Upon completion of its reconnaissance, the force may remain in contact with the enemy or it may withdraw. If the reconnaissance is to be followed by further attack, other units pass through the reconnoitering force in the attack or it may conduct the attack itself.

Section XI. COORDINATED ATTACK

5–35. General

a. A coordinated attack is a deliberately planned attack designed to destroy or capture the enemy by a combination of fire, maneuver, and close combat.

b. A coordinated attack is planned in detail. The two types of offensive operations discussed previously—movement to contact and reconnaissance in force— are preliminary operations. They are conducted to either gain contact with the enemy or develop the situation. The coordinated attack is the next logical step; however, movement to contact and reconnaissance in force are not required before every coordinated attack.

c. The coordinated attack is the offensive operation most frequently referred to, or thought of, when the term "attack" is used.

5–36. Basic Considerations

a. The coordinated attack is undertaken after thorough reconnaissance, methodical evaluation of relative combat power, acquisition and development of targets, and systematic analysis of all other factors affecting the situation.

b. A coordinated attack may be made before, after, or in conjunction with other offensive operations.

c. A coordinated attack normally involves overcoming major enemy resistance. When highly organized, well-fortified enemy positions must be destroyed or penetrated, normally a coordinated attack is required.

d. This type of offensive operation requires the maximum application of combat power; strict adherence to the fundamentals of offensive operations; thorough, detailed planning; and positive, aggressive leadership at all echelons of command.

e. Such attacks occur frequently in either nuclear or nonnuclear warfare. In warfare involving use of nuclear or chemical munitions, reducing vulnerability and the period of risk of friendly elements are major considerations during the preparation and massing of the attacking force. In a nuclear environment, plans must be developed for rapid dispersal of forces immediately after they accomplish the mission. Mobility is essential in the nuclear environment to accomplish rapid assembly, movement to the objective, speedy dispersion, and reassembly to counter enemy threats.

f. Adequate time is required in a coordinated attack to allow for thorough planning, careful reconnaissance, and detailed evaluation.

g. Air defense for the attacking force is mandatory. Priority for air defense normally is given to the main attack. See FM 44–1 and FM 44–3 for details on air defense during offensive operations.

5–37. Organization for Combat

The coordinated attack requires a combined-arms force that is organized to provide the maximum combat power. The mission, enemy, terrain, and troops available influence each situation in which a coordinated attack must be made. The commander must consider the recommendations of his staff and use his judgment to develop the best combat organization.

5–38. Conduct of the Coordinated Attack

The coordinated attack is conducted in accordance with the principles discussed in this chapter and chapter 8. The commander is granted maximum freedom and support in carrying out the coordinated attack. The only restrictions imposed are those necessary to maintain control and insure noninterference with adjacent units.

Section XII. EXPLOITATION

5–39. General

a. Exploitation is the followup of gains to take full advantage of success in battle. Exploitation is a decisive phase of the offensive intended to destroy the enemy's ability to reconstitute and conduct an organized defense or to withdraw in an orderly manner. It permits maximum destruction of the enemy and his resources at minimum cost to the attacker.

b. At brigade, the exploitation may call for an advance of many kilometers over a broad front and may well lead into the pursuit. Such operations may be conducted employing techniques of the movement to contact.

c. The exploitation normally occurs after a successful attack and seizure of the brigade objective. With adequate nuclear support, however, the exploitation may be launched from the outset of the offensive action.

5–40. Basic Considerations

a. Since the exploitation is the continuation of an attack, commanders at all echelons must be prepared to exploit and pursue at any time the opportunity is presented.

b. Objectives deep in the enemy rear are selected by higher headquarters. Their seizure should deny the enemy routes of escape, encircle him, and destroy his communication centers and logistical installations.

c. Organization for combat should provide for tank-heavy forces composed of tanks and mechanized infantry. Airmobile and airborne forces are used to secure objectives critical to the advance and to cut enemy lines of escape. Swift raids, thrusts, and envelopments prevent enemy reorganization. Artillery and other combat support units should be attached to the brigade for the exploitation. Full use should be made of tactical air and Army aviation for fire support and reconnaissance.

d. Exploitation may be initiated on order, or upon reaching prescribed objectives or phase lines. Indications favoring exploitation include a decrease in enemy resistance, an increase in captured enemy personnel, an increase in abandoned materiel, and the overrunning of artillery, higher unit command posts, signal installations, and supply dumps.

e. The exploiting force advances rapidly and arrives at its objective(s) with maximum strength. The force clears only as much of its zone as is necessary to permit its advance to continue. Enemy forces that interfere or can interfere with accomplishment of the mission are destroyed. The exploiting force bypasses, or contains with minimum forces, enemy resistance of insufficient strength to jeopardize the accomplishment of the mission. Bypassed forces are reported to higher headquarters.

f. There are two general methods by which the commander can exploit the success of the brigade. Whichever method the commander chooses is implemented rapidly.

(1) *Exploit with committed forces.* In this method, forces are committed to exploit their own success. This method generally is indicated when the attacking echelon has accomplished its mission and is the force most readily available to continue the advance against the enemy. It may become necessary to reorganize and resupply these forces on the move.

(2) *Exploit with reserves.* In this method, the brigade reserve is committed by passing it around, over, or through the forces which have achieved the success. Generally this method is indicated when the attacking echelon still has essential tasks to accomplish, still is engaged actively with enemy forces, or will require reorganization before it can continue the advance.

g. Decentralized execution is characteristic of exploitations. Mission-type orders are given to subordinate commanders. A minimum number of control measures are used.

h. In the exploitation, nuclear weapons are used principally on targets of opportunity. These weapons are used to destroy hostile reserves and to seal enemy escape routes. Chemical agents are effective means of blocking defiles.

i. Logistical support, particularly forward movement of class III and V, may be the limiting factor in determining how far the brigade may exploit or pursue the enemy. Portions of the brigade trains accompany the battalion task forces.

Section XIII. PURSUIT

5–41. General

a. The pursuit normally follows the exploitation. It differs from the exploitation in that its primary function is to complete the destruction of the enemy force which may be in the process of disengagement. While a terrain objectime may be designated, the enemy force itself is the primary objective. The brigade commander must be alert for any sign of the enemy's inability to maintain organized resistance, report such facts to higher headquarters, and maintain relentless pressure on the enemy force facing him. The pursuit is initiated upon approval of higher headquarters.

b. There are two general methods of conducting the pursuit.

(1) *Direct pressure.* In this method, the direct pressure force maintains pressure against the retreating enemy. The mission of this force is to prevent enemy disengagement and subsequent reconstitution of the defense, and to inflict maximum casualties. This method may be used by all types of forces, including dismounted infantry. It is a frontal attack, with the forces advancing with maximum combat power forward on a broad front.

(2) *Direct pressure in combination with an enveloping force.* In this method, the direct pressure force maintains pressure on the retreating force while a highly mobile enveloping force cuts the enemy's line of retreat to intercept and destroy him. This method requires that all of the force or at least the enveloping force be provided with a means of increasing its relative mobility over the enemy (air or ground vehicles).

5–42. Basic Considerations

a. Once the pursuit is ordered, the commander presses the attack with all available resources. Maximum use is made of airmobile and/or mechanized forces. Local enemy defenses are overrun, and isolated pockets of resistance are bypassed or destroyed by fire. The main enemy force is prevented from organizing an effective defense by the presence of the pursuer.

b. The brigade commander may designate terrain objectives, phase lines, or checkpoints to control a pursuit. In assigning control measures for a pursuit, subordinate commanders are given as much freedom of action as is consistent with security and maintenance of command integrity.

c. Major subordinate elements are made as self-sufficient as resources will permit.

d. Fire support elements are placed well forward so that fire can be delivered deep into enemy positions and on enemy retreating columns. Close air support is used to interdict routes of movement of enemy columns.

e. Preparation is made for combat service support. Class III consumption is particularly high. Air transportation may be used for delivery of supply to forward units. Maximum use is made of captured enemy materiel, particularly transportation and stock of supplies.

Section XIV. NIGHT COMBAT

5–43. General

a. Night combat is an integral part of all operations because the brigade must operate under all conditions of visibility to accomplish its mission.

b. In the past, primary emphasis during the period of darkness has been placed on combat-associated activities such as rest, movement, and preparation for daylight combat. Night combat has been treated as a special operation primarily because of the individual soldier's inability to see at night. However, this inability to see or fight can be offset by using night operating aids, including night vision devices.

c. Night attacks may be used to continue the momentum gained by a successful daylight attack, to gain surprise, to accomplish massing under the cover of darkness, and to reduce the effectiveness of enemy fires.

d. Control is more difficult at night; therefore, more restrictive control measures must be used.

e. There are two methods for conducting a night attack: illuminated and nonilluminated.

The particular method employed depends on such tactical considerations as the enemy strength and degree of preparation of his positions, his security measures, the terrain, light conditions, and means available. The nonilluminated attack is made to achieve surprise in closing with the enemy before he discovers the attack. The illuminated attack is made when the enemy position is strong, when the possibility of achieving surprise is remote, and where control of units requires use of daylight control methods. Either method of night attack may use fire support, although preparatory fires normally are not used in a nonilluminated night attack. The factors affecting fire support are the same in the night attack as in the daylight attack (para 5–9*a*(1)).

f. During operations in smoke, fog, haze, thick jungle, and other conditions of reduced visibility, techniques used in night operations may apply.

5–44. Basic Considerations

a. Plans for night attacks are more detailed and less flexible than for daylight operations. The emphasis is on simple, easy-to-execute formations and maneuver. Planning is centralized and execution is decentralized.

b. As in an infiltration, secrecy and stealth often may be essential to success. Deceptive measures must be taken to keep the enemy from discovering the time and direction of attack. Noise and light discipline must be enforced.

c. Close combat is more frequent at night than during daylight attacks because of the decreased ability to use aimed fire and because the coordination of supporting fires with the maneuver of troops is more difficult.

d. Although well-trained units can execute night attacks on short notice, planning and troop-leading procedures for a night attack generally are more extensive and time-consuming than for a similar operation conducted during daylight. Brigade planning should allow subordinate commanders and staffs adequate time for daylight reconnaissance, and for preparations in assembly areas. Troops should be briefed thoroughly on the final plans.

e. Time patterns are avoided so the enemy cannot predict the time of attack. Often, an attack is made late at night so initial objectives can be seized by daylight and the attack continued at that ime. If the objective is relatively deep or the brigade mission requires immediate continuation of the attack, the attack may begin early at night and continue to the final objective during darkness.

f. Objectives for night attacks should be recognized easily at night. Approaches which have easily recognized landmarks should be selected. More open avenues of approach may be used at night because of the added concealment of darkness.

g. The brigade assigns a zone of action for each subordinate element. The line of departure specified by brigade should be recognized easily on the ground, and, if the night attack involves a passage of lines, it may be marked in advance by friendly troops.

h. Every effort is made to maintain the existing pattern of fires prior to and during the attack. In determining whether a preparation will be fired, its probable assistance to the maneuver force must be weighed against the need for tactical surprise stemming from an attack by stealth. If a preparation is not fired, on-call fires are planned to be used in the event surprise is lost. In addition to normal fires, fires are planned to cover the withdrawal of the attacking force, to box in the area of the attack, and to cover the reorganization on the objective.

i. Illumination is planned and may be used throughout the attack or on an on-call basis after secrecy has been lost. Plans should include all types of illumination: searchlights, illuminating shells, and illuminants delivered by aircraft. Normally, the brigade commander delegates authority to the battalion to initiate the use of illumination, although brigade carefully coordinates its use to prevent illuminants used in one zone from interfering with operations in another zone.

j. Night airborne or airmobile operations are possible and are considered a normal part of night attack operations.

k. Listening silence on radios is maintained as long as possible for secrecy, and primary reliance is placed on the use of wire. Once the at-

tack is discovered, normal communications will be used. Prearranged pyrotechnic signals also may be employed.

5–45. Conduct of the Night Attack

a. The brigade commander and his staff operate well forward in order to maintain close control.

b. Brigade assists in the movement of battalions forward from assembly areas to attack positions by providing control personnel at key points along the routes.

c. The brigade elements remain in column formation for as long as possible to facilitate control, preferably until the probable line of deployment is reached.

d. The reserve is positioned well forward. In dismounted attacks, it may at times move at a fixed distance behind the attacking elements rather than move by bounds. The plans for the reserve should be made in great detail to permit its commitment at night, when required. Preferably, it is committed at considerable distance from other attacking units to avoid intermingling and confusion. The reserve may be composed of tanks or infantry, or it may well be airmobile or airborne since surprise usually will have been lost when it is committed, and it should possess a high degree of mobility.

e. Flank and rear security must include patrols to search for, uncover, or contain bypassed units and detect enemy counterattacks.

CHAPTER 6

DEFENSE

(NATO STANAG 2079; CENTO STANAG 2079; SEATO SEASTAG 2079; ABCA SOLOG 48R)

Section I. INTRODUCTION

6–1. General

This chapter provides doctrine for the employment of the five infantry brigades in defensive operations. Conditions of terrain and climate, as well as intensities of warfare, dictate modification of techniques and procedures for defense; however, the basic doctrine for defense remains the same.

6–2. Capabilities

The brigade is capable of conducting a defensive operation as part of a larger force or in an independent or semi-independent role. Its capabilities are dictated by resources attached to it, placed in support of it, or otherwise made available to it. Methods of conducting the defense are determined, in part, by the capabilities of attached, or organic, and supporting elements.

6–3. Fundamentals of Defense

a. The defense is adopted only as a temporary measure until such time as the defender can assume the offensive. During conduct of the defense, the defender strives to gain and maintain the initiative. The attacker is harassed continually by fires and offensive maneuver when appropriate. The defender uses all means available to detect an enemy weakness and maintains sufficient flexibility in his planning to exploit those that occur. All resources are employed to inflict maximum destruction on the enemy force.

b. The brigade defends to gain time in preparing for subsequent offensive operations, to economize force, to force the enemy to mass, to exhaust an enemy force, to deny a superior enemy force entry into an area, or to force an attacking enemy into an area where he will be vulnerable to destruction.

c. Fundamental considerations for planning, organizing, and conducting the defense are:

(1) *Proper use of terrain.* Proper evaluation and organization of the brigade defensive area is essential to maximum use of available forces. That portion of the brigade area which provides good observation, fields of fire, and obstacles to the enemy, and which favors the defender is lightly manned in favor of stronger forces in areas that afford the attacker an advantage. The natural defensive characteristics of the terrain are improved with assistance and advice from supporting engineers and by artificial obstacles, with due consideration for offensive maneuver and future operations. Use of minefields and other obstacles will vary with the brigade's mobility. Those terrain features which, if seized, will afford the attacker an advantage are defended strongly. Above all, the commander analyzes the terrain to determine the key terrain whose retention is essential to the accomplishment of his mission.

(2) *Security.* The defender must take all possible steps to avoid tactical surprise. He provides for early warning and reliable information of approaching enemy forces. Security measures include placing security elements in the direction of anticipated enemy approach and providing necessary security for protection of flanks and rear.

(3) *Mutual support.* Consistent with accomplishment of the assigned mission and dispersion appropriate to the terrain, forces are placed to provide an exchange of defensive re-

sources. Such resources may include fires, observation, or maneuver elements. The capability of mutual support may be attained laterally or in depth. Control of gaps is effected through surveillance, patrolling, obstacles, prearranged fires, and provision for maneuver elements to exploit or reinforce fires. Normally gaps are accepted between battalions rather than companies.

(4) *All-round defense.* In defensive planning, the brigade commander retains the capability to defend against enemy ground and air attacks coming from any direction. Principal forces and available supporting weapons are positioned to detect, engage, and destroy enemy ground forces and aircraft along their most likely avenues of approach, although provisions also are made to meet these attacks from other directions. Plans should be sufficiently flexible and reserves should be positioned to permit destruction of guerrilla forces, or destruction of forces delivered by air into the rear area. Terrain permitting, all-round defense is insured most economically by proper positioning of security forces and provisions of a highly mobile reserve capable of traversing the entire defensive area. In areas that are not accessible to mounted forces, security elements must be employed in sufficient strength at critical points to defeat or contain enemy forces and prevent disruption of supporting operations of the defender.

(5) *Defense in depth.* Units must be disposed in depth forward of the key terrain which must be retained to accomplish the brigade mission. Adequate depth is essential if the enemy is to be stopped and ejected by reserves in the event he forces entry into the brigade battle area. Accordingly, the brigade commander provides for depth by locating the FEBA well forward of the terrain that must be held in order to accomplish the mission. The brigade commander also insures that fires are planned in depth throughout the battle area.

(6) *Responsiveness.* The brigade commander must retain the ability to influence the conduct of the defense in order both to counter the enemy's attack and to seize the initiative if the enemy exposes a weakness or commits a tactical error. Since the enemy has the choice as to when, where, and with what portion of his available forces he will attack, the defender positions his forces and plans fires and movement to meet the widest possible range of contingencies.

(7) *Maximum use of offensive action.* Defending forces must be alert to regain the initiative by offensive action, and must take maximum advantage of the mobility of airmobile, airborne, mechanized, and armored units. Aggressive patrolling, raids, spoiling attacks, and counterattacks supported by nuclear or conventional fires are among the means by which the offensive spirit is maintained.

(8) *Dispersion.* In the organization of the defense, the brigade commander disposes his forces to present the least remunerative target to enemy nuclear fires. Separation of units must be consistent with the capability of providing sufficient mass to accomplish the brigade mission and provide an offensive maneuver force on a timely basis.

(*a*) Terrain permitting, dispersion for a mounted battalion acting as the reserve may be greater than for dismounted elements. The availability of helicopters will, on the other hand, permit a high degree of dispersion of foot elements notwithstanding terrain obstacles.

(*b*) Desirably, and if mobility permits timely massing, the reserve battalion(s) may be positioned in company-size assembly areas or blocking positions at two or more locations to permit more timely employment in the counterattack role or to block multiple avenues of enemy approach within the reserve area.

(9) *Time available.* The brigade commander considers the time available for planning and preparation in formulating his plan of defense. Close timing and careful selection of tasks to be completed are essential to the successful conduct of a defensive mission. Every effort should be made to prepare the defense in advance of enemy action. The more time available to subordinate units and the better it is used, the more effective the defense will be. Defensive preparations expose troops to the risk of being detected by the enemy and being subjected to his fires before the main attack begins. If time permits, those defensive

preparations which cannot be concealed should be carried out at night. All available time is utilized in the preparation of a defensive position.

(10) *Integrate and coordinate defensive measures.*

(*a*) *Fire planning.* Maneuver and coordinated fires (nuclear, chemical, and nonnuclear) are the principal means used to defeat an enemy assault forward of and within the defensive position. The planning should provide maximum effective fire on the attacking forces—both ground and air—throughout the conduct of the defense. It includes the fires of all weapons of attached and supporting units. Maximum effort must be made to implement all possible active and passive measures for defense against air attack and observation. Air defense considerations, such as the aerial threat, hostile air avenues of approach, air defense coverage, dissemination of early warning, and identification of friendly aircraft, must be taken into account in fire planning.

(*b*) *Barrier (obstacle) plans.* The defensive characteristics of the terrain are enhanced by an effective use of planned barrier systems including minefields, atomic demolition munitions (ADM), other artificial obstacles, and chemical agents. The advantages of these barriers (obstacles) must be exploited by the defending troops; however, care must be exercised in planning the barrier systems to avoid loss of freedom of maneuver by the defending units, particularly when mechanized.

(*c*) *Plan for defense against armor.* Armor is sensitive to terrain and obstacles. Further, when engaged in an assault or under fire, armor normally is "buttoned up" with consequent limited observation. The initial effort in defense should be directed against destroying enemy armor at the greatest possible range. As the enemy approaches the FEBA, fires are planned to destroy accompanying or following infantry. Enemy armor that has penetrated into rear areas is defeated best by isolation from infantry, maximum use of natural and artificial obstacles, antitank defense in depth, and proper employment of antitank weapons by units occupying positions in rear areas. Local security of elements in rear areas should provide for antitank mines and obstacles, covered by fire with antitank weapons, integrated to cover the best approaches into the area.

6–4. Forms of Defense

a. The fundamental forms of defense are the mobile defense and the area defense.

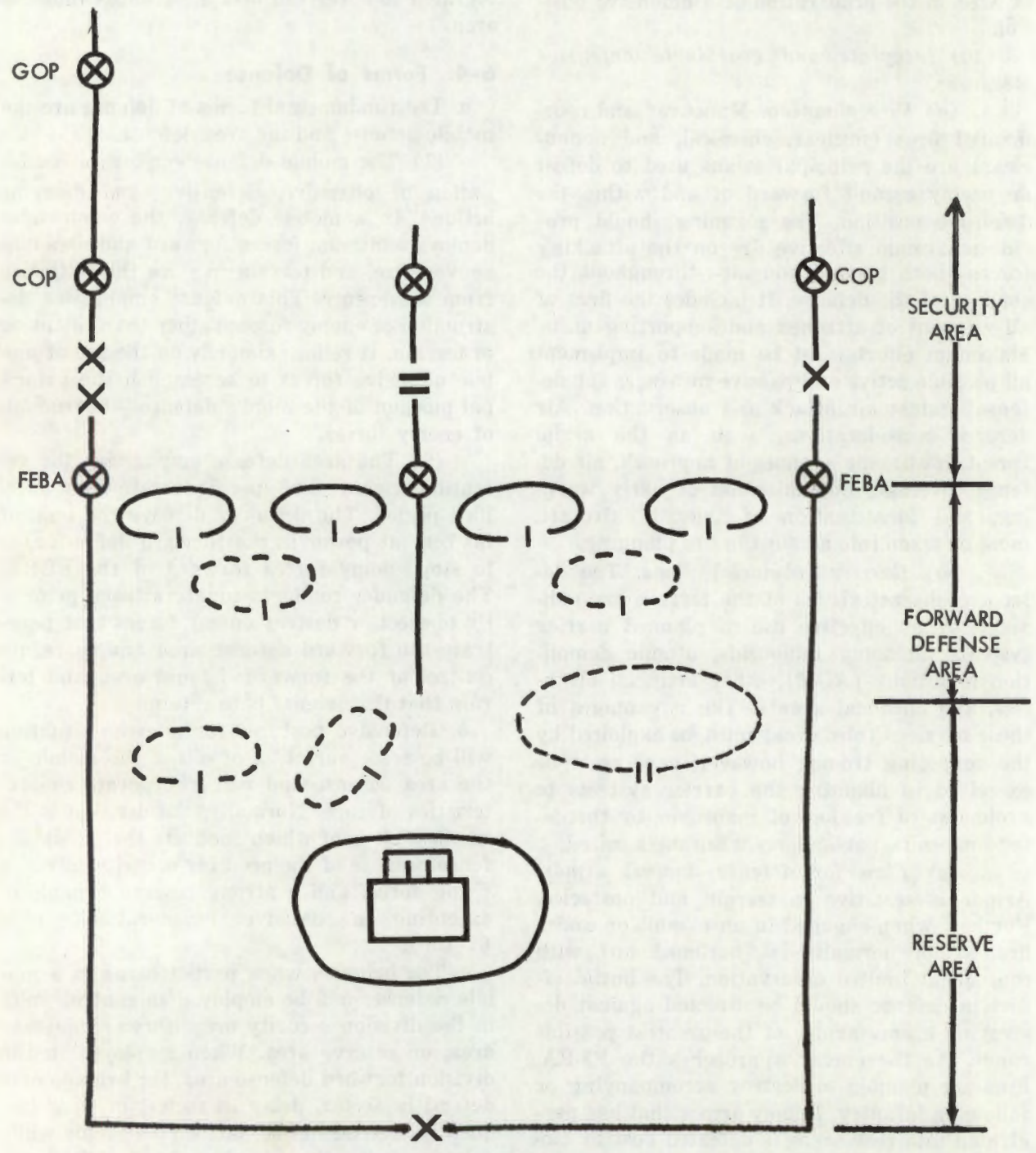
(1) The mobile defense employs a combination of offensive, defensive, and delaying actions. In a mobile defense, the commander deploys minimum forces forward and uses maneuver, fire, and terrain to seize the initiative from the enemy. This defense emphasizes destruction of enemy forces rather than retention of terrain. It relies primarily on the use of mobile offensive forces to accomplish the principal mission of the mobile defense—destruction of enemy forces.

(2) The area defense emphasizes the retention or control of specific terrain for a specified period. The defender deploys the bulk of his combat power in the forward defense area to stop enemy forces forward of the FEBA. The defender conducts counterattacks primarily to eject or destroy enemy forces that penetrate the forward defense area and to regain control of the forward defense area and terrain that the defense is to retain.

b. Defensive postures for a given situation will be some variation of either the mobile or the area defense and will incorporate characteristics of each. Normally, the division is the smallest element which conducts the mobile defense because of the need for security forces, a fixing force, and a strong reserve capable of executing a decisive counterattack (FM 61–100).

c. The brigade, when participating in a mobile defense, will be employed to control units in the division security area, forward defense area, or reserve area. When employed in the division forward defense area, the brigade may defend in sector, delay in sector, or, less frequently, defend in one part of the sector while delaying in another. In the role of division reserve, the brigade will be given the mission of providing depth to the division position by constructing blocking positions and preparing plans for and conducting offensive action to

destroy an enemy penetration with all or part of the force. In an area defense, the brigade may be deployed in forward positions or as the reserve.



NOTE: RESERVE COMPANIES OF THE FORWARD BATTALIONS ARE MANNING THE COP.

Figure 6–1. Brigade defense areas.

6–5. Defense Areas

Defense areas include the security area, the forward defense area, and the reserve area (fig. 6–1). The elements within these areas will vary in composition and strength as dictated by the mission, enemy capabilities, terrain upon which the defense is conducted, and the strength and capability of troops available.

6–6. Security Area

The security area extends from the FEBA and as far to the front and flanks as brigade security elements are employed. The depth of this area may be limited by the presence of security elements from division or higher echelon to the front. In its security area, the brigade establishes the combat outpost (COP). The brigade may constitute the division general outpost (GOP) or the corps covering force. When so employed, it should be organized with airmobile or mechanized infantry as well as tank units to provide the mobility and firepower required by this type of mission.

a. The mission of the security echelon is to provide early warning of an enemy approach and (within its capabilities) delay, disrupt, and destroy enemy formations and deny him close ground observation of the forward positions. As additional missions, the security echelon locates positive and probable targets for the defenders and may employ stay-behind forces to direct fires, provide information, and/or disrupt enemy operations.

b. The brigade security echelon may be employed from, and under the control of, forces occupying the forward defense area. When circumstances preclude this arrangement, the brigade security echelon is provided from the reserve either under control of the appropriate forward elements or under centralized control of the brigade.

c. The security echelon is composed of an appropriate balance of combined arms and is supported by fires from attached or supporting delivery means.

6–7. Forward Defense Area

a. The forward defense area extends from the FEBA to the rear boundary of the forward committed battalions of the brigade. Forces occupy the forward defense areas along, or in proximity to, the FEBA. They may defend with the mission of denying the enemy entry to the main battle area or may delay to an area of the commander's choosing pending delivery of fires and maneuver to destroy the enemy force.

b. Gaps in the defensive area may be covered by surveillance directly under control of the brigade or under control of an adjacent element. Battalions position forces in the forward defense area based on the mission and the relative defensibility of the terrain.

6–8. Reserve Area

The reserve area is that portion of the battle area from the rear of the forward committed battalions to the brigade rear boundary. The brigade reserve in this area is composed of those uncommitted forces retained for employment at a decisive time and place. They are positioned with access to any part of the battle area. They routinely prepare blocking positions to add depth to the battle position.

Section II. DEFENSE PLANNING

6–9. General

In planning the defense, the brigade commander seeks to correlate the terrain to resources available in relation to discharge of his mission. The defender has the initial advantage in that he reconnoiters the terrain and selects the area to be defended. Additionally, he may dispose his forces to cause the enemy to mass and present a target in areas covered by prearranged fires. On the other hand, the attacker has the advantage of electing the time and place for his offensive maneuver.

a. The plan of defense includes the scheme of maneuver and the plan of fire support to include air defense. These are developed concurrently and integrated to insure maximum use of available resources.

b. Defensive planning is continuous. Contingency planning is conducted concurrently with development of the basic plan, and transition

to an alternate plan is considered in conduct of the defense.

c. Plans must be simple and flexible, and their execution must be within the capability of forces known to be available at the time the plan is to be executed.

6–10. Sequence of Planning

In developing plans, the fundamentals of defense are considered throughout the process. These fundamentals are related closely and are an integral part of the planning process.

a. In the initial stages of planning, determination is made as to the basic form of defense to be adopted. The form of defense may be designated by higher headquarters or the decision may be left to the brigade commander. Normally, the division is the smallest element capable of conducting a mobile defense because of the need for a strong reserve capable of executing a decisive counterattack. Considerations which affect the commander's choice of the form of defense include the mission, the enemy, the terrain, and troops available.

b. Planning for the defense is initiated upon receipt of the mission. The brigade commander and his staff follow a logical sequence to complete their command and staff actions.

(1) First, the mission is analyzed so that all tasks—both specified and implied—are identified and understood.

(2) Next, the staff provides current information to the commander to assist him in formulating his planning guidance.

(3) The brigade commander considers the information presented by his staff. Based on this information, his knowledge of the situation, a study of the mission and map, and application of his professional experience and judgment, he formulates and issues his planning guidance. The guidance may be in general terms, or, if the particular situation requires, in detail. It may include the possible courses of action (indicating a general trace(s) of the FEBA or location of forces) which the commander desires the staff to consider in conducting their reconnaissance and formulating their estimates.

(4) After issuing his planning guidance, the commander and staff conduct a reconnaissance of the area to develop the courses of action and to verify their map analysis in order to complete their individual estimates.

(5) Upon receiving the staff recommendations, the commander completes his own estimate and arrives at his decision. Normally, this action will be accomplished rapidly; however, there may be times when the commander will consult with commanders of subordinate battalions prior to announcing his decision. The decision is an expanded statement of the course of action selected as a result of his estimate and includes the trace of the FEBA, designation of the forces to occupy the FEBA, composition and mission of the reserve, the priority of fires, and any nuclear fires to be employed to complement the scheme of maneuver.

(6) After announcing his decision, the commander may desire to elaborate on his decision to provide the staff with his concept of how he visualizes the selected course of action will be conducted. This commander's concept will provide the staff with additional guidance to assist them in preparing the necessary plans and orders. His concept may include explanation or clarification of:

(*a*) Location and composition of the COP forces.

(*b*) Tentative allocation of artillery final protective fires.

(*c*) Allocation and use of nuclear weapons.

(*d*) Location and employment of the reserve.

(*e*) Provisions for rear area security.

(*f*) Guidance for the employment of major combat forces.

(*g*) Guidance for counterattack planning.

(*h*) Guidance for air defense planning.

(*i*) Priority of tasks.

c. An evaluation of the terrain to be defended in conjunction with forces available forms the basis for organization of the defense. The terrain is viewed from the standpoint of the enemy and his known capabilities. Avenues of approach into the position are analyzed in relation to probable enemy use. Natural obstacles are evaluated as to their effectiveness. Observation, key terrain, fields of fire, and rela-

tive defensibility of areas are evaluated in relation to advantages and disadvantages imposed. The terrain is divided tentatively by the commander, and the strengths and weaknesses of each portion are examined to determine the relative tasks imposed on forces that will undertake its defense. The commander then visualizes the forces essential to accomplish the mission in relation to the terrain to be defended.

d. Once the terrain is evaluated, the commander considers his resources. Terrain is allocated to subordinate defending forces in relation to their capabilities, with due consideration for equal defensive tasks.

e. In analyzing the area to be defended, consideration is given to improving the natural defensive strength of the terrain to the maximum extent possible, consistent with plans for subsequent operations. Natural obstacles may be extended or improved with mines and other artificial obstacles. Natural cover, concealment, observation, and fields of fire are evaluated with a view toward their improvement.

f. During analysis of the terrain, consideration is given to likely target areas for interdiction. These target areas normally will be defiles on expected routes of movement of an attacker, assembly areas and attack positions for massing of attacking elements, and other sensitive locations that appear essential to an attacking force.

g. Planning should include provisions for employment of maneuver forces forward of the defensive position to conduct a spoiling attack and to disrupt or destroy operations in the enemy rear areas. In conduct of the defense, the defender seeks to reduce the effectiveness of the enemy's strength, while making maximum use of his own combat power.

6–11. Counterattack Planning

a. The counterattack is a decisive element of the defense.

(1) In the area defense, planning is conducted as soon as the general defensive scheme of maneuver is reasonably firm, and is continued throughout the conduct of the defense. Priority for planning is directed toward eliminating those enemy penetrations which would threaten most seriously the accomplishment of the brigade mission.

(2) In the mobile defense, the defender (in selecting the area where he wishes to accept decisive engagement within the battle area) seeks to force the enemy to react in conformity with the defensive plan based on planned maneuver and fires, and obtains the initiative in exploiting enemy weaknesses and errors by seizing every opportunity to destroy enemy forces by offensive action. The commander conducting the mobile defense considers counterattack and defensive planning concurrently with emphasis on planned maneuver.

b. In the case of multiple penetrations, the initial priority for counterattack planning must include destruction of the penetration that would most endanger the defense. The commander of the force expected to conduct the counterattack normally performs detailed planning, reconnaissance, and coordination before submitting his plan to the brigade commander for approval.

c. The brigade counterattack plan will include an assumed penetration, the counterattacking force, fire support, and certain specific control measures that direct and control the counterattack. These control measures are terrain objectives, direction of attack, LD, and route(s) from reserve area (fig. 6–2). The width and depth of the assumed penetration is based on a consideration of the terrain the brigade can lose and still counterattack, and the capability of both the enemy and the brigade force. An organization for combat is developed that relates to the probable task to be accomplished. This will include appropriate provisions for a blocking force and provisions for fire support. Time permitting, counterattack plans are rehearsed.

6–12. Contingency Planning

Commanders must give attention to the possibility of a failure on the part of defending forces or unexpected combat power on the part of the enemy. Plans must be sufficiently flexible to insure timely reaction to offset the unexpected and to preserve forces in the event the commander is unable to offset a threat to ac-

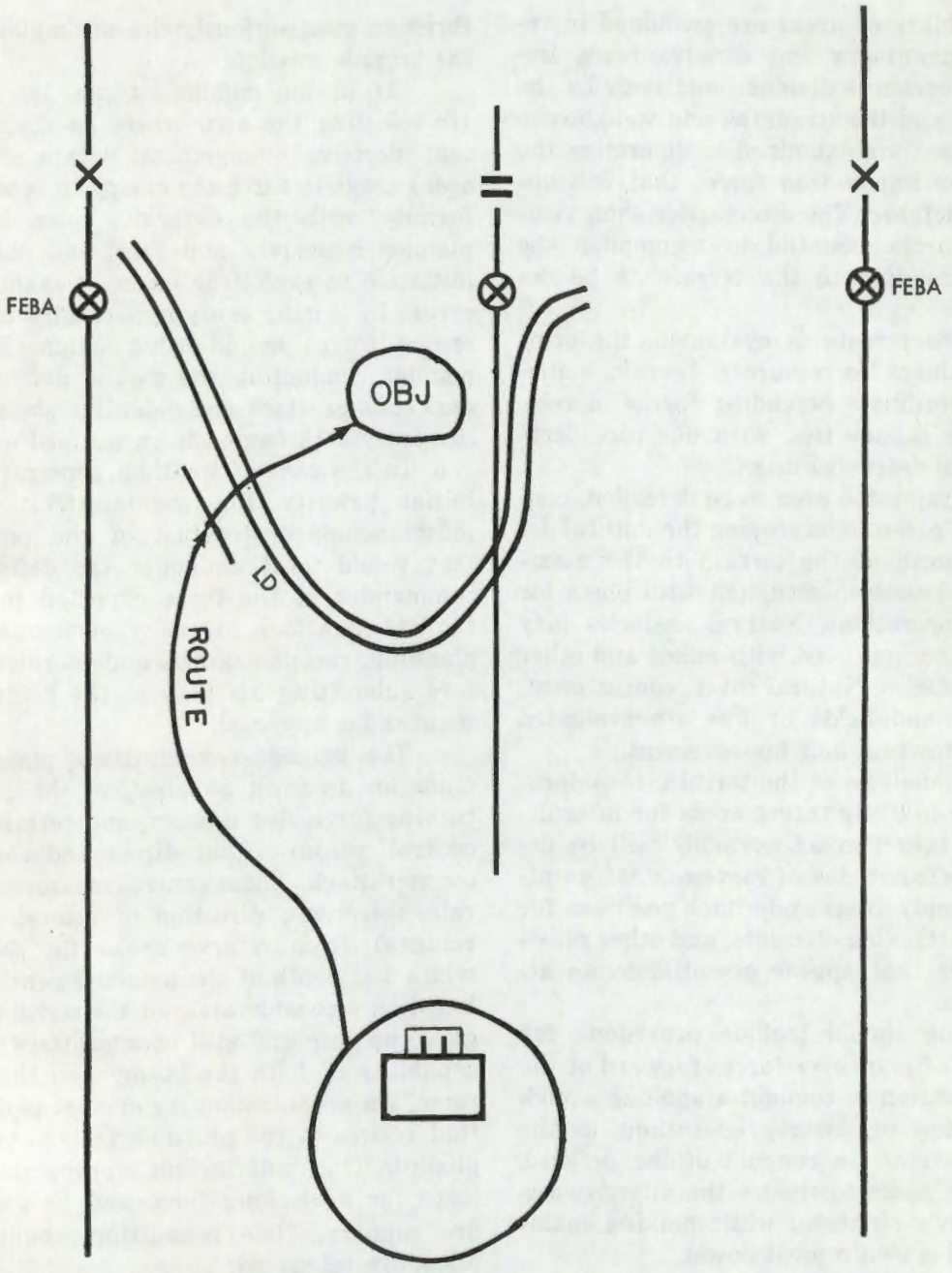


Figure 6–2. Essential control elements of a brigade counterattack plan.

complishment of the mission. Until authorized, a defensive position may not be abandoned. Contingency planning must consider these factors and must include sufficient flexibility to counter unexpected situations.

6–13. Organization for Combat

a. Forces are formed into an appropriate task force to execute the tasks visualized by the commander. Available combat forces are applied against the requirements for establishing security, establishing the forward defensive positions, providing a reserve, and discharging contingency missions.

b. If the defense is to be mobile in nature or if enemy action to overcome the defense cannot

be predicted reasonably, priority attention is given to the reserve. If the mission is oriented to retention of terrain, strong elements are assigned for establishing the forward defense areas. If time for preparation of defensive positions is critical and the security elements are expected to extend this time, strong security forces are provided. In providing security forces, the mission and time available are weighed to determine whether these forces will come from the forward defense echelon or from the reserve.

6–14. Control

a. The brigade commander defines sectors of defensive responsibility for subordinate elements by designation of flank and, occasionally, rear boundaries. Flank boundaries habitually extend forward to the range of direct support fires, and to the rear to provide subordinate units adequate maneuver space for brigade forces. Rear boundaries are used for control of the area responsibility.

b. Normally, the brigade commander prescribes assembly areas or blocking positions for the reserve.

c. To control the defense, the commander must plan adequate communication. All means of communication are used to the extent practicable.

(1) In the area defense, wire is an important means of communication. When adequate wire communication is available, radio is not used; however, radio nets remain open since wire communication may be interrupted or may be inadequate for the situation. Use of radio normally is restricted except during periods of enemy contact. Pyrotechnics and other visual signals may be used in the defense to help identify friendly units, to call for lifting and shifting of supporting fire, and to facilitate execution of counterattack plans.

(2) Contingent upon the time factor, wire communication may be provided the brigade COP. If it is, plans must include provisions for a positive breach in the system upon withdrawal of the COP.

(3) In a mobile defensive situation, primary reliance is placed on radio communication.

6–15. Combat Support

a. Artillery. Fire support planning is conducted concurrently with the development of the scheme of maneuver for defense and continues throughout the operation. This planning provides for long-range fires to be delivered on attacking forces as soon as they come within range, fires in support of the security echelon, fires to disrupt enemy formations engaged in attacking the defensive position, and fires within the battle area to include fires in support of planned counterattacks. Fire support plans, when formalized, become a part of the commander's defensive order.

(1) The brigade fire support plan includes plans for all supporting fires—nuclear and nonnuclear—of attached and supporting elements. Fire support plans of maneuver battalions attached to the brigade are integrated into the brigade fire support plan. Fires are coordinated with elements on the flanks, and the plan includes provisions for coordination of fires of subordinate elements.

(2) Fire support planning includes the number and yields of nuclear rounds intended for use in selected areas forward of the FEBA, on targets of opportunity, and those to be retained in reserve to support counterattacks. Specific attention is given to planning nuclear fires since delivery means may or may not be under control of brigade.

(3) Toxic chemical agents for persistent effect are particularly suitable means of fire support in defensive operations.

(4) While the brigade commander ordinarily does not direct employment of fire delivery means organic to subordinate elements, he has the prerogative of doing so.

(5) Armed/attack helicopters may deliver direct aerial fire support in areas not accessible to other fires. Close air support may be desirable when targets are beyond the range or capabilities of other fire support means.

(6) Naval gunfire (if available) can furnish a considerable volume of fires in certain areas.

b. Engineer. Normally an engineer company is placed in support of the brigade. In addition, other engineer elements will be employed in the brigade area to support the brigade and

perform engineer tasks for the division. Supporting engineers usually will be employed to assist in organizing the position and increase the defensive capability of the brigade.

c. Army Aviation. Army aviation organic to the brigade consists of aircraft having a primary mission of command and control, and observation. Additional aircraft, as required, may be requested from higher headquarters. Organic and other aircraft under control, or in support, of the brigade operate under the direct staff supervision of the brigade aviation officer.

d. Chemical.

(1) Detailed plans are prepared to integrate the use of chemical agents with other fire plans, barrier plans, and the scheme of defense.

(2) Chemicals may be used in support of forces along the FEBA, on enemy forces concentrating for an attack, to support the reserve in the execution of counterattacks, and to help protect the flanks of friendly forces. Chemical concentrations can be used effectively to assist in reducing combat effectiveness; to help destroy, canalize, or contain the enemy along major avenues of approach; or to contaminate key terrain or likely enemy assembly areas. When chemicals are authorized, it is normal to integrate chemical mines into high explosive minefields to increase their obstacle value and make clearance more difficult.

(3) Smoke can be used to obscure operations from the enemy by blinding enemy observation and by hindering enemy aerial observation and tactical air operations within the defense area. Smoke must be used with caution, however, in order not to block essential observation by the defending forces.

(4) Since the brigade has no organic chemical units, large-scale use of chemical agents by the enemy may require additional decontamination support from higher headquarters.

(5) For more detailed discussion of chemical support, see FM 3–1 (Test), TM 3–10, TM 3–50, TM 20–33, and TM 101–40.

e. Air Defense. Air defense planning is conducted concurrently with the development of the scheme of maneuver for a defense and continues throughout the operation. Planning for employment of air defense in support of a defensive operation is more centralized and controlled at the air defense battalion level to support the entire division. Therefore, air defense artillery units normally are not attached or placed in support of a brigade, unless the brigade is operating independently.

6–16. Combat Service Support

Planning for defensive operations includes consideration of available materiel and the capability for its replacement. Similarly, combat service support elements must be capable of and sufficiently flexible to sustain the operation through the period of defense and subsequent operations.

a. The brigade headquarters is limited to coordination, control, and planning in relation to combat service support. The brigade coordinates allocation of materiel on a priority established by the defensive plan. Items in short supply are subject to controlled distribution, and adjustments are made to insure that essential requirements are satisfied.

b. Service support elements are positioned to preclude their interference with maneuver. In highly fluid operations, combat service support is positioned well to the rear. Those items that are exposed to a rate of expenditure exceeding the time and space factors for routine resupply are placed in a mobile status for immediate responsiveness to meet requirements. The basic consideration in locating the brigade trains is the support of the maneuver elements.

Section III. CONDUCT OF THE DEFENSE

6–17. General

a. Active conduct of the defense is initiated when security elements from a higher echelon pass through the brigade COP, or through forward positions if a COP is not employed. At that time, the COP initiates those actions which were planned previously but had been suspended while other security forces were to

the COP front. The tempo of aerial and ground reconnaissance is increased, and fire support registration is completed.

b. When the COP is withdrawn, forces occupying positions on the FEBA prepare to repel the attacker. Lanes through barriers and obstacles for passage of security forces are closed, local security is made aware of the situation, and surveillance means are employed to maintain a fix on the attacker. If enemy forces withdraw, reconnaissance is employed forward of the FEBA to locate and determine the enemy situation and, if appropriate, the COP may be established again. If the attacker cannot be located within the brigade area of responsibility, the brigade commander makes appropriate recommendations for a reconnaissance in force beyond his area of responsibility to locate enemy forces. He does not initiate such action without approval of higher headquarters.

c. The decision to counterattack and its timing are based upon the commander's professional judgment or (on occasion) on orders from higher headquarters. When a penetration appears imminent or actually has started, the brigade commander advises higher headquarters, alerts the counterattacking force, increases surveillance over the threatened area, and provides all available assistance to the subordinate commanders concerned.

(1) In the mobile defense, it is desirable to stop or slow the penetration; however, this is not a prerequisite. The counterattack should be launched prior to the time the attacking enemy can consolidate his gains and reorganize or regroup his forces.

(2) In the area defense, the brigade commander counterattacks when the enemy has seized or threatens to seize terrain critical to the defense.

(3) The counterattack may be launched when the enemy presents his flanks or rear, when he becomes overextended, or when his momentum is dissipated.

d. After commitment of the reserve, the brigade commander must reconstitute another reserve from resources available to him. He frequently will impose conditions on the commitment of reserves under the control of subordinate elements whose positions are intact.

e. When evidence indicates a counterattack would fail, the brigade commander so advises higher headquarters and assumes a blocking role pending subsequent instructions from higher headquarters.

f. Throughout the conduct of the defense, the commander considers conducting a spoiling attack. Its purpose may be to destroy a portion of the enemy force, throw the enemy off-balance, or deny the enemy ground observation and surveillance of the defended area.

6–18. Brigade Participation in a Mobile Defense

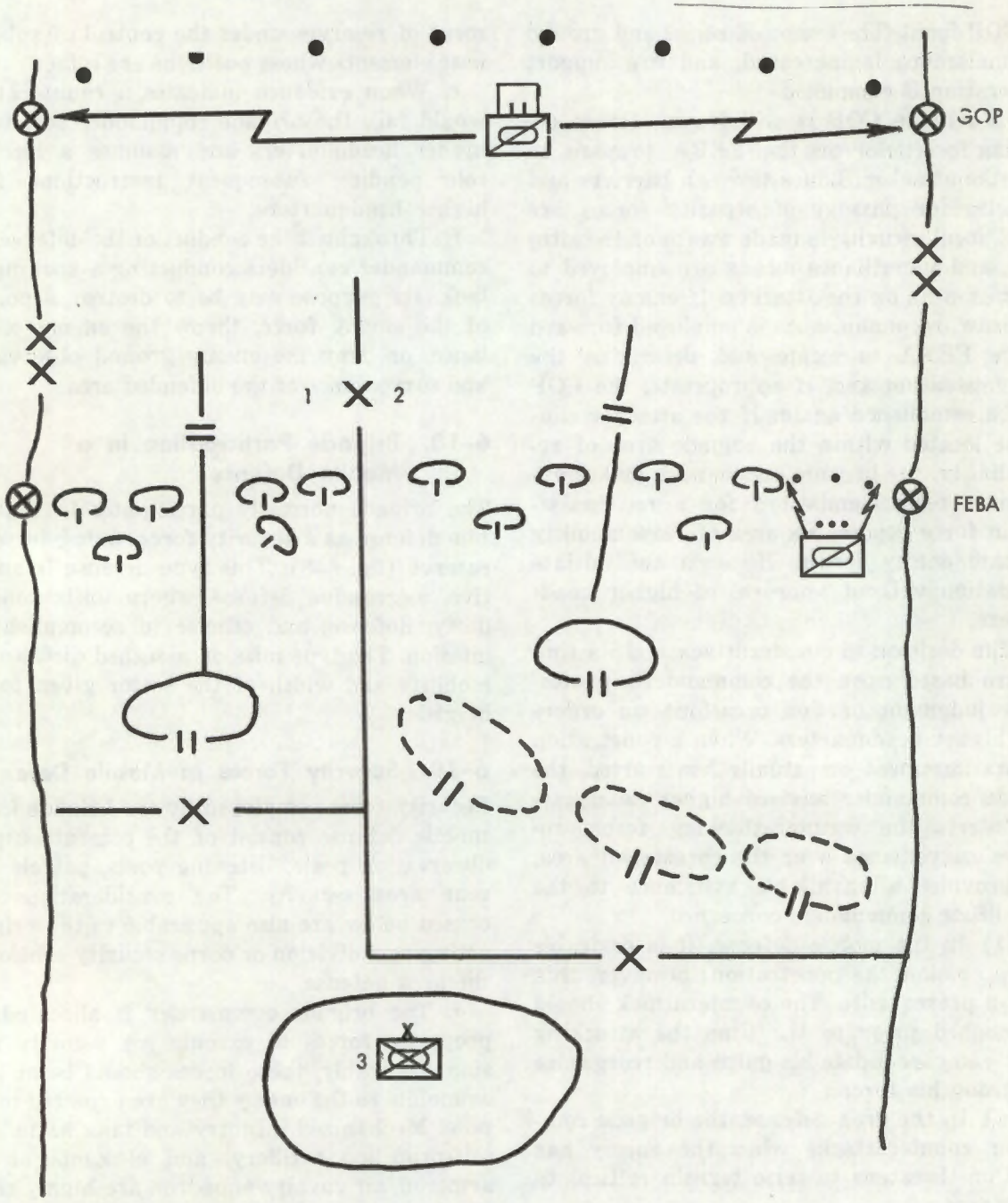
The brigade normally participates in the mobile defense as a security force, fixing force, or reserve (fig. 6–3). This type defense is an active, aggressive defense where units conduct delay, defense, and offense to accomplish the mission. The type mission assigned dictates the mobility and width of the sector given to the brigade.

6–19. Security Forces in Mobile Defense

Security forces employed by the brigade in the mobile defense consist of the combat outpost, observation posts, listening posts, patrols, and rear area security. The considerations discussed below are also applicable to the brigade acting as a division or corps security echelon in the area defense.

a. The brigade commander is allocated appropriate forces to execute his security mission. Desirably, these forces should be at least as mobile as the enemy they are expected to oppose. Mechanized infantry and tank battalions, self-propelled artillery, and elements of the armored/air cavalry squadron are highly effective in executing this type mission.

b. Because of the nature of a security mission, the proportion of reconnaissance elements to other forces is increased. In the event constituted reconnaissance units are not provided, the force commander should form them from available resources. Airmobile forces are suitable for this purpose; however, if aircraft are not available in appropriate quantities, highly



NOTE:

a. 1st Brigade is conducting area defense while participating in mobile defense being conducted by division.

b. 2d Brigade is prepared to delay to blocking positions on order in support of the mobile defense being conducted by division.

c. 3d Brigade constitutes division reserve prepared to counter-attack on order.

Figure 6–3. Brigade in mobile defense.

mobile ground forces of combined-arms task forces are employed.

c. Security elements operate in a semi-independent role at a considerable distance from the main force. For this reason, attachment of combat support units is preferred over a supporting relationship. The brigade commander normally will further attach his resources to form combined-arms task forces capable of operating along selected avenues of approach into his area of operation.

d. The brigade commander conducting a security mission normally will establish and organize his operation in a manner similar to a defense. His security echelon normally is composed of reconnaissance elements. Forward forces man the line of designated security positions, and an appropriate reserve is retained consistent with the nature of his mission.

e. The execution of a security mission is similar to that of a delaying action in that the commander is expected to trade space for time. His planning includes appropriate considerations for a delaying action as outlined in chapter 7.

f. If assigned a rear area security mission, the brigade conducts reconnaissance, maintains surveillance over critical areas, and establishes observation posts, roadblocks, and patrols.

6–20. Fixing Forces

a. The mission of the brigade fixing forces in a mobile defense is to warn of impending attack; to delay, disorganize, and inflict maximum destruction upon the enemy; to force the enemy to mass; and to canalize him into a suitable area for attack by the division reserve.

b. The fixing forces may conduct area defense, delaying actions, screening force operations, and limited offensive operations in any combination as required to contain and/or canalize the attacker and make him as vulnerable as possible to fires and to counterattack by the reserve.

c. The wide sector normal to the mobile defense, coupled with the requirement to retain the bulk of the division in reserve, limits the combat power that will be allocated to the fixing force. Seldom will the brigade have sufficient force to establish a COP. Wide intervals between battalion strongpoints will be common, placing greater requirements on surveillance means.

6–21. Brigade as Division Reserve in Mobile Defense

The brigade assigned the division reserve mission in the mobile defense is tailored for offensive action. It is the strongest element of the division and is given priority in allocation of forces. It includes the bulk of the division's tank strength. For additional discussion of the reserve brigade, see paragraph 6–25.

6–22. Brigade Participation in an Area Defense

The area defense is based on retention of specific terrain. Emphasis is placed on blocking avenues of approach into the battle position and defending in depth to hold the terrain. The bulk of the division's combat power is committed to defending the forward defense area.

6–23. Security Forces in Area Defense

a. Considerations for employing the brigade as a security force in the area defense are similar to those in the mobile defense (para 6–19). With the bulk of the division allocated in the forward defense area, the GOP normally is manned by the armored cavalry squadron. The reserve brigade, although primarily concerned with preparing blocking positions and counterattack plans, may be assigned missions in the division security echelon and may provide elements for rear area security missions.

b. In addition to the security echelon employed by division, the brigade in the forward defense area may be required to provide a COP.

6–24. Forces in the Forward Defense Area in Area Defense

The brigade in the forward defense area is infantry-heavy. The brigade organizes its assigned position with the bulk of its force on the FEBA. Battalion defense areas are disposed laterally and in depth to provide mutual support and all-round defense. Emphasis is placed on retaining key terrain and repelling the enemy's attack by fire and close combat.

6–25. Brigade as Division Reserve in Area Defense

The reserve is positioned so that it can execute counterattack plans and contain penetrations. The reserve insures the continuity of the defense by counterattacking enemy penetrations, by executing blocking missions, or by reinforcing forward elements.

a. The reserve brigade is assigned the primary mission of preparation and execution of counterattack plans. Counterattack planning is conducted concurrently with development of the defense plan and is continued throughout the defensive operation. Adjustment in the defensive situation frequently will require a change in the counterattack plans. Once plans are prepared and approved, subordinate commanders are briefed and required to rehearse their plans with their immediate subordinates.

b. The development of blocking positions and the general provision for depth to the battle area are normally the responsibility of the reserve brigade. Blocking positions are prepared in accordance with the division plan of defense, but are not limited to it necessarily. In development of depth to the division battle area, the reserve brigade commander should make appropriate recommendations for adjustments or additional positions.

c. The reserve brigade or a portion of it may be directed to relieve a brigade occupying a forward defensive position or to replace an element that has been destroyed. The reserve brigade commander and staff remain continuously abreast of the situation to permit expeditious action in these cases.

d. The reserve brigade may be called upon to conduct reconnaissance in force forward of the battle area.

e. Under certain circumstances, maneuver elements that will be available to the reserve brigade for a counterattack may be employed on a mission directly under control of division, with arrangements for their immediate availability to, and constant liaison with, the brigade commander.

f. Whether or not aircraft are allocated to the reserve brigade to assist in rapid deployment of security forces, the brigade prepares plans for employment of airmobile forces as part of the division rear area security plan.

6–26. Conduct of Defense at Night

a. At night the frontline battalions employ patrols, listening posts, and night-operating aids to detect the advance of the enemy. By utilizing night-vision devices, the size of unit defensive positions need not be reduced at night and visual contact can be maintained between units. Unoccupied areas between units and on the flanks are kept under surveillance by employing night-vision devices and electronic sensing devices.

b. Preparations are made in the daytime for the defense at night. Sectors of fire are assigned for individual and crew-served weapons. Stakes set up during daylight assist in coverage of assigned sectors.

c. The night visibility plan is prepared to coordinate the use of all night-vision aids, illumination means, and surveillance devices. It contains specific instructions concerning the use of visible illuminants, infrared light, infrared viewers, passive night-vision devices, and radar.

d. Other aspects of the conduct of defense at night are basically the same as for its conduct during daylight.

e. For further discussion of night operations, see FM 31–36 (Test).

Section IV. OTHER DEFENSIVE OPERATIONS

6–27. General

In addition to the threat of an attacker attempting to overcome defending forces on the FEBA and penetrations into the areas of adjacent forces that threaten the brigade position, the commander must be alert to the probability of attack by armor, air-delivered forces, guerrilla elements, and infiltration through gaps in the defensive positions. Initial planning should include provisions for early detection of these threats and their destruction when they materialize. Highly mobile forces with a self-sustaining combat capability are particularly effective for defense against such attacks.

a. Planning should include provisions for establishment of an observation and patrol capability in rear areas. The responsibility for establishment of this system may be given to the reserve commander along with adequate authority to call upon brigade forces to assist in implementing his plan. Initial provisions should include local security for all elements in the rear area, an effective communications system, armed convoy escorts, a barrier plan, and the establishment of observation posts. All organic, attached, supporting, and other units in the area are integrated into the planning.

b. Observation posts are established throughout the brigade area of responsibility. Establishment of the system should be in conjunction with similar plans of adjacent elements and the division system to the rear. These facilities should have communications links to similar elements and the control headquarters. Aerial surveillance and observation should be employed whenever feasible.

c. Patrols should be employed to maintain contact and to develop intelligence. Reconnaissance patrols are employed in those areas that cannot be screened effectively by observation and during periods of reduced visibility. Once a threat is located, it is reported, kept under surveillance, and its actions continuously reported to the controlling headquarters. Under no circumstances should an area be neglected because of its isolation or because it is considered impassable. Consideration should be given to airmobile patrols.

6–28. Defense Against Armor

a. Antitank defenses cover likely avenues of armor approaches. No area should be overlooked as the enemy frequently will employ armor over other than ideal terrain.

b. Maximum use of natural obstacles, atomic demolition munition craters, and antitank minefields facilitates the destruction of armor by canalizing it into fields of fire for antitank weapons.

c. If armor succeeds in overrunning the forward area, antitank weapons located in depth seek to stop further advances. Forces in forward areas normally remain in position to prevent the enemy infantry from accompanying its armor, and to destroy enemy tanks.

6–29. Defense Against Airborne and Airmobile Attack

Defense against airborne and airmobile attack includes use of observation posts, patrols, air defense weapons, and a readily available reserve.

a. The enemy landing area is taken under fire to disrupt the operation, inflict casualties, and prevent reorganization. If the enemy force is of sufficient size, consideration should be given to employing nuclear weapons in the area. When time permits, nuclear effects and target analysis data should be predetermined for the most likely enemy landing areas.

b. A mobile force to destroy or contain the enemy threat should be made available from the brigade reserve. Desirably, it should contain armor and mechanized infantry. If the mechanized element can initiate an attack prior to the enemy's reorganization and preparation for defense, the problem of destruction is minimized.

6–30. Air Defense

a. Air defense measures taken by the brigade include passive protective measures, a warning system, assignment of firing areas, and attack of air targets in accordance with established rules of engagement.

b. Air defense artillery units may operate in the brigade area under the control of division or higher headquarters. Detailed plans for use of air defense artillery in the ground fire support role are prepared by the commander of the air defense unit in coordination with the FSCOORD.

c. Organic non-air defense weapons, as well as organic air defense weapons, provide brigade units with a limited local air defense capability against hostile aircraft. These weapons are employed as part of the unit's local defense with a dual mission of ground and air defense. They are not components of an integrated and coordinated air defense system.

d. Organic air defense and non-air defense weapons normally are employed against aircraft committing a hostile act and aircraft pos-

itively identified as hostile. For rules of engagement for air defense weapons, see FM 44–1.

6–31. Defense Against Guerrilla Attack

a. Plans for defense against guerrilla activity are part of the brigade overall plan for defense. Units in the rear area handle small-scale attacks with their own resources.

b. Although the commander seldom can divert major combat elements for protection within the brigade area, he may have to divert mobile combat elements of combat a serious guerrilla threat. He may alert the brigade reserve for possible employment in the event of a large-scale attack in the brigade rear.

c. FM 31–15, FM 31–16, FM 31–21, FM 31–22, and FM 31–23 contain additional information on defense against guerrilla action.

6–32. Defense Against Infiltration Forces

a. Infiltration is a constant threat, particularly when forces in the forward defense area are dispersed. The enemy may attempt infiltration as a means of disrupting operations and harassing installations in the rear area, or he may attempt massive infiltration as a type of offensive action.

b. Specific measures to aid in controlling infiltration include extensive counter-reconnaissance, combat patrols, antipersonnel obstacles, warning devices, and electronic surveillance devices.

c. If the threat of attack by infiltration exists, a mobile combat force may be given the primary mission of combatting the infiltrating forces.

d. Small-scale infiltration may be offset by defensive measures similar to those prescribed for defense against guerrilla forces.

Section V. REAR AREA SECURITY AND AREA DAMAGE CONTROL

6–33. General

a. Rear area security measures are actions taken to prevent or neutralize enemy threats to units, activities, and installations in the rear area, except active air defense operations or actions against enemy threats large enough to endanger the command. A large-scale enemy penetration or vertical envelopment of the rear becomes a part of the main battle and, thus, becomes an operational matter.

b. Area damage control consists of the preventive and control measures taken prior to, during, and after an enemy nuclear, chemical, or biological attack or natural disaster to reduce the probability of damage and minimize its effects on combat, combat support, and combat service support operations.

c. Planning, coordinating, and supervising tactical security for the brigade area is the staff responsibility of the S3. Within the overall tactical security plan of the brigade, the brigade S4 is responsible for planning for and implementing security measures in the brigade trains area. Area damage control is the staff responsibility of the S4 because it is the action taken to minimize the effects of the hostile attack or disaster and to restore combat service support.

6–34. Rear Area Security

a. The brigade S4 discharges his responsibility for rear area security by:

(1) Locating logistical facilities where they can provide mutual support.

(2) Establishing a security plan for the trains area.

(3) Enforcing camouflage and light discipline.

(4) Employing obstacles.

(5) Using armed convoys.

(6) Coordinating the security plan with reserve elements located in proximity to the brigade trains.

b. When the threat of enemy action is of a magnitude that renders the security capability of logistical support units ineffective, combat units may be assigned specific security missions to insure continuation of logistical support operations.

6–35. Area Damage Control

a. Actions taken by the brigade to avoid or minimize the effects of enemy mass destruction attacks or natural disasters include:

(1) Dispersion of combat service support units consistent with the accomplishment of the mission.

(2) Locating logistical facilities to capitalize on the protective characteristics of the terrain, such as caves and tunnels, and subsurface manmade structures. (This measure has more application at division and higher levels because of the relative stability of logistical facilities at these levels as compared to the frequent displacement of trains at the battalion and brigade level.)

(3) Establishing an adequate warning or alert system.

(4) Enforcing light and camouflage discipline.

(5) Establishing unit area damage control SOP.

(6) Designating unit control and assessment teams (CAT).

(7) Training CAT(s) to include integration with tactical training.

b. Measures taken to restore control include:

(1) Dispatching CAT(s) to the site of the attack or disaster.

(2) Damage assessment of both personnel and materiel.

(3) Providing medical evacuation for personnel of the affected unit(s).

(4) Performing radiological monitoring and survey when mass destruction is the result of a nuclear weapon.

(5) Restoration of control to include communications in the affected unit or, if appropriate, assumption of control by the area damage control team.

c. A CAT is formed at brigade level from the resources in the brigade headquarters and headquarters company. Its functions include:

(1) Establishing control and assessment command post.

(2) Determining and reporting effectiveness of units.

(3) Assuming control of units in affected area.

(4) Releasing combat effective units to tactical commanders.

(5) Requesting required combat service support.

(6) Directing and controlling the operations of rescue and decontamination squads.

d. The brigade usually does not form rescue and decontamination squads because it has no organic units other than the headquarters and headquarters company. The brigade S4 does, however, direct the rescue and decontamination squads of one battalion to assist another when the magnitude of destruction is beyond the scope of such teams in the affected battalion.

e. FM 5–42, FM 100–5, and FM 100–10 contain details on area damage control operations.

CHAPTER 7

RETROGRADE

(NATO STANAG 2082)

Section I. INTRODUCTION

7–1. General

a. A retrograde operation is an organized movement to the rear or away from the enemy. It may be forced by enemy action or it may be voluntary as part of an overall scheme of maneuver. In either event, such an action must be approved by the next higher commander. It should be planned in advance. Retrograde operations are characterized by centralized planning and decentralized execution. A retrograde operation, because of its effect on morale, requires positive and effective leadership and initiative in unit leaders.

b. A well-planned, well-organized, and aggressively executed retrograde operation provides opportunities for inflicting heavy damage to enemy units and materiel. Therefore, retrograde operations may be conducted as a series of defensive, offensive, withdrawal, and delaying operations. Every occasion offered to inflict damage on enemy forces is exploited to the maximum. Enemy forces that advance too quickly and extend themselves are attacked and destroyed by maneuver elements.

7–2. Purposes and Types of Retrograde Operations

a. Purposes. The overall purpose of a retrograde operation is to preserve the integrity of a force so that at some future time the offense may be resumed. Additionally, retrograde movements are conducted for one or more of the following reasons:

(1) To harass, exhaust, resist, delay, and inflict punishment on the enemy.

(2) To draw the enemy into an unfavorable situation.

(3) To permit the use of the force elsewhere.

(4) To avoid combat under undesirable conditions.

(5) To gain time without fighting a decisive engagement.

(6) To disengage from combat.

(7) To place the forces involved in the desired position in relation to other friendly forces.

(8) To shorten lines of communication.

b. Types. Retrograde operations are classified by types as withdrawal, delaying action, and retirements. These are defined as follows:

(1) A withdrawal is an operation in which a deployed force disengages from an enemy force.

(2) A delaying action is an operation in which a force under enemy pressure trades space for time while inflicting maximum punishment on the enemy without becoming decisively engaged in combat.

(3) A retirement is an operation in which a force avoids combat under existing conditions by conducting an orderly withdrawal according to its own plan and without pressure by enemy forces.

7–3. Basic Considerations

a. Mobility. Forces in retrograde should possess mobility superior to (or at least equal to) that of the enemy. If mobility resources are not adequate for the entire force, the portion having mobility superior or equal to that of the enemy is used to hold and harass the enemy. Elements can withdraw from an enemy possessing a greater means of mobility by employing such measures as covering forces; using nuclear and/or nonnuclear fires; maintaining control of the available routes; rein-

forcing available obstacles; and providing deception. These measures offset the enemy's advantage in mobility.

b. Proper Use of Terrain. Terrain has a definite influence on all retrograde operations. Good observation and fields of fire are desirable so the enemy can be engaged at long ranges. Natural and manmade obstacles including barrier systems, minefields, and demolitions (in combination with the effective use of chemical agents and atomic demolition munitions) are exploited to protect exposed flanks and impede enemy movement. Concealment and cover are sought when selecting assembly areas and routes of movement. Road nets are exploited, especially by armor and mounted forces, to expedite movement and to facilitate control of the operation. Road nets are denied to the enemy.

c. Maintain Freedom of Action. Close combat is avoided unless required to accomplish the mission. Freedom of maneuver is essential to rapidly exploit any situation unfavorable to the enemy, to shift forces to meet enemy attacks, to secure the flanks and rear, and to take maximum advantage of terrain. A decisive engagement is avoided except at the option of the withdrawing force.

d. Detailed Centralized Planning—Decentralized Execution. Retrograde operations are characterized by detailed centralized planning and by decentralized execution. Communication and control are difficult in retrograde operations. When communications with the parent unit are lost, subordinate unit commanders must act independently until centralized control is regained.

e. Nuclear Weapons. The possession as well as the use of nuclear weapons by retrograde forces effects a degree of resistance in itself, for it forces caution on the enemy by discouraging his massing. If the enemy masses sufficient strength to force a passage at major natural or artificial obstacles, he becomes vulnerable to a nuclear attack which (when exploited by limited offensive action) inflicts greater damage on the enemy force.

f. Passive Protection. The nature of retrograde operations (extended frontages, infiltration tactics, movement under conditions of reduced visibility, linear formations, rapidly changing situations) provides a degree of passive protection from nuclear weapons during the operation. The probability of enemy interdiction of road nets along the routes of withdrawal demands planning for alternate routes.

g. Routes of Withdrawal. Control of routes of withdrawal is essential to effective retrograde operations. A retrograde operation rarely can be conducted without the civil population becoming involved in the operation. Control and evacuation of civilians must be considered in all plans for such a movement to avoid traffic disorder and congestion which might restrict the freedom of movement of the withdrawing force. Route priorities are planned for all units to provide an orderly shifting of forces with due consideration for their mission and capabilities.

h. Priority Requirements. An aggressive enemy can be expected to follow any retrograde movement relentlessly and to strike withdrawing columns from all directions. For this reason, mobile security forces, continuous reconnaissance, rapid movements, and air and antitank defense become priority requirements.

i. Army Aviation. Army aircraft may be used effectively to move units engaged in a retrograde operation. Commanders can achieve better control and obtain more timely information by supervising the operation from Army aircraft. When forces are heavily engaged, armed/attack helicopters may be utilized to assist them in disengaging and to cover their withdrawal. Aerial observers may conduct reconnaissance to determine conditions of roads and bridges to the rear and locate bypasses and alternate routes in case bridges are destroyed. Aircraft may be used to move supplies and equipment and to evacuate patients.

j. Morale. A retrograde movement is a planned operation with a positive purpose. This fact must be emphasized to the troops engaged in the operation. Rumors are countered by keeping troops informed to prevent disorganization and maintain morale. Forceful leadership, strict discipline, control, and prior planning are necessary to insure that the intent of the operation is recognized and executed fully. For instance, command groups re-

main well forward to assist in maintaining morale.

k. CBR. In retrograde operations, CBR and flame weapons can be used effectively against mass attacks which threaten to overrun positions. Persistent chemical agents and pre-positioned atomic demolition munitions are effective for contamination of terrain after a withdrawal by friendly forces. The enemy may avoid the contaminated area and be forced into unfavorable terrain, or the enemy may cross the contaminated area and accept casualties.

7–4. Control Measures

Basic control measures for a retrograde operation may include sectors, boundaries, routes of movement, phase lines, checkpoints, traffic control posts, and a series of delaying positions.

a. Control measures prescribed for a withdrawal are based on the situation under which the withdrawal is expected to occur. When the withdrawal is conducted during periods of reduced visibility with a probability of enemy pressure, highly restrictive control measures are essential. If conducted during daylight under enemy pressure, control measures generally are limited to those prescribed for a delaying action.

b. A delaying action will include designated delaying positions, sectors, and routes of movement if road arteries are limited and priority for their use is required. The division may confine control measures to sectors and phase lines with provisions for retention of positions for a specified period of time or until certain situations occur. Under these circumstances, the brigade may subdivide the sectors for control of attached maneuver units and establish delaying positions or phase lines.

c. A retirement does not visualize organized enemy opposition during its conduct. Control measures normally are limited to routes of movement, phase lines, and traffic control posts.

d. Designation of control measures must include the consideration that unnecessary restrictions inhibit initiative, flexibility, and improvisation by subordinates. Prescribed control measures should be limited to those essential to security, direct phasing of the operation, and maintenance of integrity of the command.

7–5. Planning

Planning of a retrograde operation is centralized and as detailed as time and resources will permit. Sequence of planning is similar to that of a defensive operation. The commander's decision and concept for retrograde operations contain essentially the same elements as for the defense; and, in addition, should include the manner of withdrawal, security during movement, time phasing, and occupation of subsequent position(s) to the rear. In the development or refinement of plans for a retrograde operation, the essential elements must include provision for positive and effective coordination, complete control of routes of movement, control of civilian personnel to the rear, responsiveness of all resources, and means of permitting flexibility in the operation.

a. A retrograde operation places primary reliance on radio communication. The use of wire should be planned to compensate for possible enemy electronic countermeasures. As a minimum, planned wire systems should include trunks along routes of movement of major subordinate command and control elements and integrated systems on all delaying and covering positions. The plan of operation should be made known to the most subordinate leaders, consistent with security, as a precaution in the event of loss of contact. Concurrent with planning, liaison should be established with adjacent elements to provide for mutual support, flank security, and unity of effort. Reserves are employed to prevent envelopment of withdrawing forces.

b. Control of routes of movement normally is exercised by division or higher level. Frequently, however, military police are made available to the brigade for this purpose. Under this condition, the brigade must establish a route control system. All elements in the zone of movement respond to route control measures.

c. Appropriate arrangements are made for reconnaissance by representation from subordinate units. Elements expected to perform supporting tasks in the operation are made as

self-sufficient as practicable consistent with the mission to be executed. Plans for providing support to operational elements of the command are integrated thoroughly into the overall plan.

d. In developing the plan for the operation, careful consideration is given to maximum flexibility. Essentially, the mission and contributing tasks are fixed. Alternate plans are developed to meet probable changes that may affect the principal plan, and all aspects are analyzed so that maximum freedom of action is given subordinate commanders under contingency situations.

Section II. WITHDRAWAL

7–6. General

A withdrawal is an operation in which a deployed force disengages from the enemy. Certain elements remain in contact with the enemy to prevent his unrestricted followup of the main force and, if possible, to inflict maximum damage on his formations by fires or appropriate maneuver action. In a division withdrawal, the brigade may control all or part of the withdrawing elements or provide a covering force as security for the forces engaged in the withdrawal. These operations are classified as withdrawal under enemy pressure and withdrawal not under enemy pressure. The techniques of implementation and execution are based on the type of withdrawal to be conducted (fig. 7–1 and 7–2).

a. Essentially, a withdrawal conducted when not under enemy pressure is planned and based on secrecy and deception, whereas the withdrawing unit must fight a series of delaying actions when the withdrawal is conducted under enemy pressure.

b. Normally, the time and conditions for a withdrawal are prescribed in directives from a higher command. When the decision for the type of withdrawal rests with the brigade commander, he is guided by weighing losses expected from a withdrawal under enemy pressure against those he will accrue in waiting for conditions to withdrawal when not under enemy pressure. In arriving at such a decision and in the conduct of a directed force withdrawal, use should be made of smoke and all other resources to create deception.

7–7. Planning

Planning for a withdrawal involves close attention to detail, thorough briefing, and reconnaissance by all subordinate elements. Consistent with security requirements, commanders should have their subordinate leaders reconnoiter the area in which they are expected to operate. Elements expected to operate on independent missions are permitted to conduct reconnaissance in any case. Planning and directives for the operation must include the following essential elements.

a. Time and priority of withdrawal of subordinate units.

b. Sectors, phase lines, routes of withdrawal, and traffic control measures to be employed.

c. Provisions for security and covering forces and the locations of each.

d. Provisions to prevent compromise of the intention to withdraw.

e. Organization for combat and time-phasing of attachments and support.

f. Provisions for disposal or destruction of supplies and equipment (except medical) in a manner and at a time which will not compromise the plan of withdrawal.

g. Provisions for combat support and combat service support during the operation.

h. Provisions for locating, treating, and evacuating all patients prior to the withdrawal.

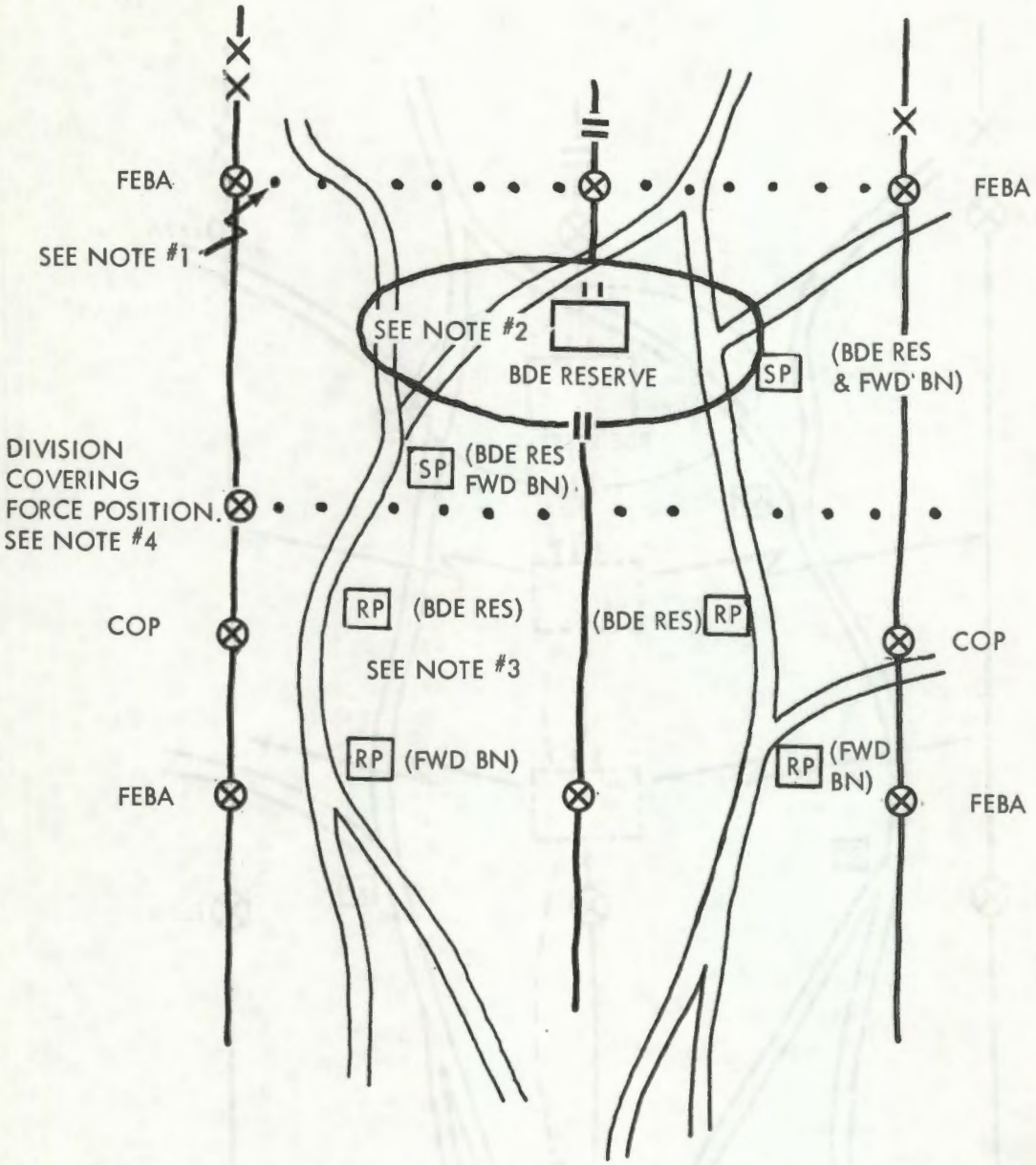
i. Location of position to be occupied following the withdrawal and disposition of forces.

j. Provisions for breaking contact.

k. Subsequent missions.

7–8. Conduct of a Withdrawal When Not Under Enemy Pressure (fig. 7–1)

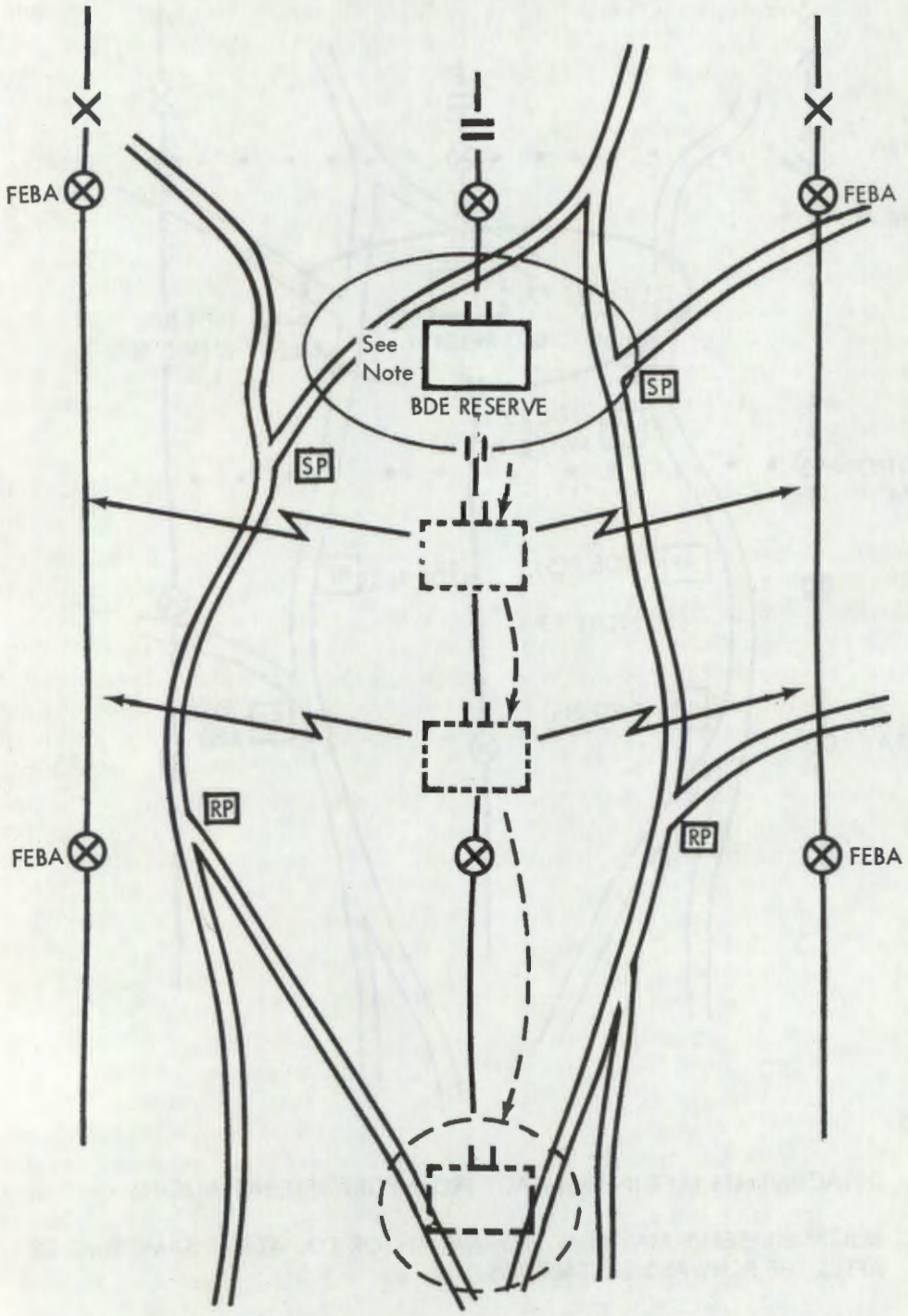
The brigade commander prescribes the strength and disposition of forces to be left in contact upon withdrawal of the main force. In addition, he designates a brigade-level command element to control the operation and



NOTES:

1. DETACHMENTS LEFT IN CONTACT FROM FORWARD BATTALIONS.
2. BRIGADE RESERVE MAY BE WITHDRAWN PRIOR TO, AT THE SAME TIME OR AFTER THE FORWARD BATTALIONS.
3. BRIGADE RESERVE WOULD BE GIVEN RELEASE POINTS AS SHOWN IF THEY WERE TO OCCUPY THE COP.
4. DIVISION IS PROVIDING A COVERING FORCE.

Figure 7–1. General scheme, brigade withdrawal not under enemy pressure.



NOTE: Brigade reserve acts as covering force after forward battalions have withdrawn through their initial position.

Figure 7-2. General scheme, brigade withdrawal under enemy pressure.

carry on such communication traffic as will approximate normal operations. Under certain circumstances, such as anticipated enemy pressure, and in the absence of such action at division level, brigade will establish a covering position utilizing the brigade reserve (FM 61–100).

a. As soon as a concept of operation is reasonably firm, the commander issues a sufficiently detailed warning order to permit reconnaissance and planning by subordinate commanders during daylight hours.

b. To insure that the withdrawal is accomplished as expeditiously as practicable, elements not immediately essential to the operation are designated for infiltration to the rear to prevent road congestion when the main force withdraws.

c. Withdrawal plans normally provide for the simultaneous withdrawal of all forward committed battalions. Those elements designated as detachments left in contact (DLIC) become, thereafter, a separate force under brigade control. In designating forces to be left in contact, every effort should be made to provide mobility superior to that of the enemy.

d. To insure adequate control of the operation and provide for orderly movement, elements located in the areas of major subordinate units are attached to these units prior to initiation of the withdrawal.

e. Withdrawal of DLIC should be initiated in sufficient time to permit their withdrawal without pressure.

f. When division or the controlling headquarters provides a covering force, the reserve is withdrawn prior to movement of the forward elements. Under this condition, the brigade reserve starts organization and preparation of positions to be manned by the brigade after withdrawal. When the main elements have passed through the covering force, it assumes the mission of, and conducts the appropriate actions for, a brigade COP. Normally, a portion of the brigade reserve is left in position to represent the reserve communication system, simulate normal activities of the full brigade reserve, and assist withdrawal of the DLIC. When a covering force is not provided from the directing headquarters and the brigade commander considers a covering force necessary, it is constituted from the brigade reserve and assumes positions securing the main elements.

g. At battalion and lower level, assembly areas frequently are designated to insure control of forces prior to forming a march column. An assembly area normally is not used at brigade level.

h. If the withdrawal is discovered, the brigade elements conduct the action as a withdrawal under enemy pressure. Planning should provide for such contingency, and all subordinate leaders must be made aware of the alternate plans.

7–9. Conduct of a Withdrawal Under Enemy Pressure
(fig. 7–2)

A withdrawal conducted under enemy pressure is based on elements fighting, while moving, to the rear, using delaying tactics. Terrain permitting, this action is accomplished best by mechanized and armor elements. If a force conducting a withdrawal under enemy pressure contains both infantry and mechanized infantry, the mechanized elements are employed in the delaying action as a covering force with the infantry occupying delaying positions during enemy forward movement. A high degree of coordination and skillful employment of obstacles and terrain is essential under these conditions. Authority for withdrawal should rest with the lowest echelon of command consistent with the requirements for a coordinated effort.

a. Control measures used for a withdrawal under enemy pressure are similar to those for a withdrawal not under enemy pressure.

b. Since higher headquarters may or may not provide a covering force, the brigade commander may elect to use his reserve as a covering force or to withdraw without providing a covering force. This decision is based on the following considerations:

(1) Availability of forces to constitute a covering force.

(2) Availability of time to deploy a covering force.

(3) Availability of suitable terrain on which to employ a covering force.

(4) Location of any covering forces provided by higher headquarters.

(5) Enemy capability to attack.

c. When simultaneous withdrawal is not practicable, the commander must determine the order of withdrawal. The decision must be based on determining which plan best preserves the integrity of the force and best contributes to the accomplishment of the mission. Generally speaking, the least engaged units are withdrawn first.

Section III. DELAYING OPERATIONS

7–10. General

A delay is an operation in which a force under pressure trades space for time while inflicting maximum punishment on the enemy without becoming decisively engaged.

a. Delay may be accomplished on either successive positions or alternate positions (figs. 7–3 and 7–4). Continuous delay is inherent in both methods of delay. Four basic factors influence selection of the method to be used:

(1) *Width of sector compared to forces available.* In order to delay on alternate positions, the command must have sufficient forces to permit the employment of forces on two delaying positions simultaneously. If forces are insufficient, delay on successive positions is required.

(2) *Relative combat power of opposing forces.* In a delay it is expected that the enemy will have the advantage in relative combat power. As the ratio of combat power increases in favor of the enemy, the more the successive delay is favored.

(3) *Relative mobility of opposing forces.* Although a delaying force seeks to degrade the mobility of the enemy by controlling routes and avenues of approach, if the enemy does possess a marked advantage in mobility, this advantage may be overcome to some extent by employing alternate delay—since, in alternate delay, a large part of the movement of friendly forces is made out of contact with the enemy.

(4) *Number and location of delaying positions in depth compared to the duration of the delaying operation.* The commander must consider how many suitable delaying positions are available in depth throughout his assigned sector; he must determine how much delay can be obtained on each position comparing delaying on alternate positions and delaying on successive positions. Because a reserve normally is not available on each position in alternate delay, the commander may decide not to remain on each delaying position for as long a period of time as would be possible if delaying on successive positions were employed. If only one suitable delaying position is available in the sector, delay on successive positions is indicated.

b. Planning a delay is highly centralized; executing a delay is decentralized to the lowest level at which specific missions are assigned. Movement of delaying forces is coordinated to preserve security and command integrity. Commanders at lower echelons frequently are given authority to execute offensive maneuver against enemy forces, provided such action does not endanger accomplishment of the brigade mission.

c. Organization of delaying positions is similar to that of the defense and includes a security area, a forward defense area, and a reserve area. When a wide sector is assigned to the brigade, a COP normally is not feasible, in which case emphasis is placed on local security.

7–11. Planning

a. The order for the delaying action which the brigade receives from a higher headquarters usually will specify boundaries, phase lines, the time schedule for the delay, the initial delaying position, and the line along which the delay will terminate. It also may include interim delaying positions.

b. The brigade commander evaluates the sector in which the delaying action is to be conducted in relation to trafficability, obstacles, key terrain, road networks and routes of withdrawal, defensibility, and the width of the area.

c. If the width and other characteristics of the sector on delaying positions preclude an even distribution of delaying forces, the brigade commander should assign priority to the

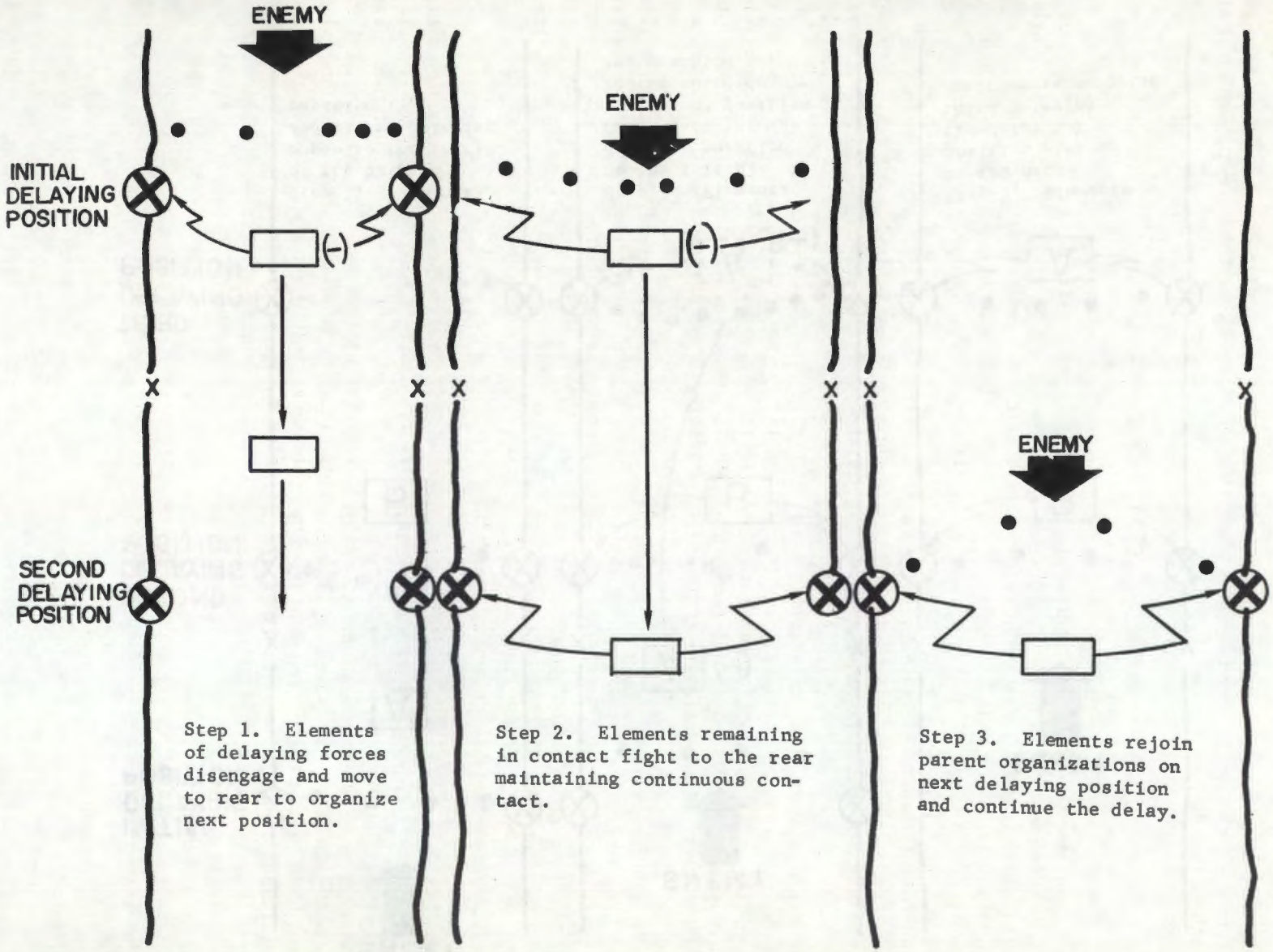


Figure 7–3. Brigade delaying on successive positions.

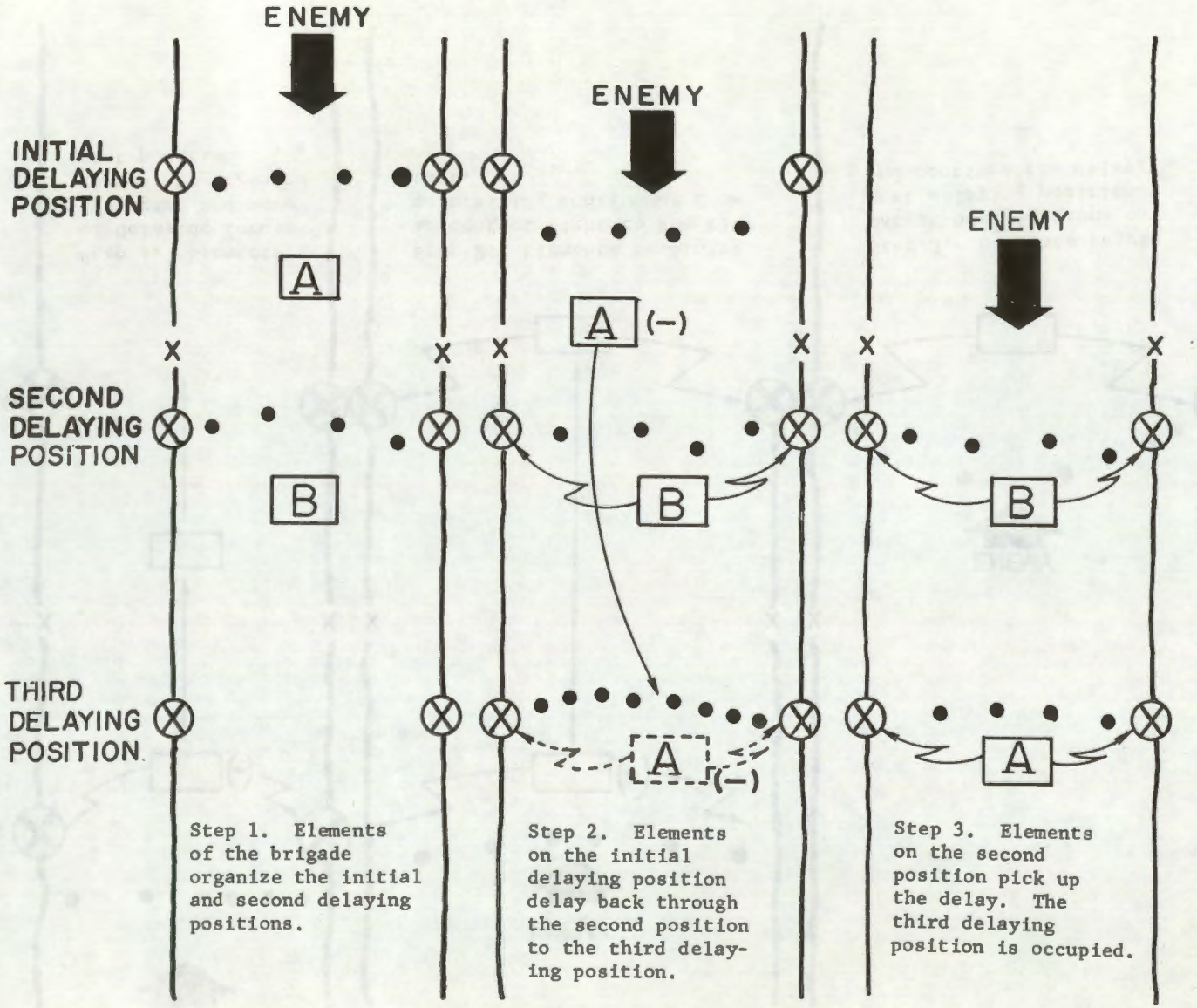


Figure 7–4. Brigade delaying on alternate positions.

most likely approaches and provide for surveillance (in conjunction with mobile forces) on others. In wide sectors, consideration should be given to the use of forces in conjunction with natural and artificial obstacles in developing delaying positions.

7–12. Conduct

The brigade commander strives to maintain continuous contact with the enemy, to include engaging all targets presented within range of fire delivery means, and performing reconnaissance forward of delaying forces consistent with the mission and security.

a. The delaying position is defended in the same manner as in a defensive operation, but forces should avoid decisive combat. If the delaying element is forced to give ground, the reserve of the maneuver element of which it is a part may initiate a limited objective attack to relieve the pressure. A delaying position is not abandoned solely on the basis of a penetration unless it is of such a magnitude as to endanger the entire position.

b. At a prescribed time, or when the delaying position becomes untenable, the brigade commander orders a withdrawal. If the position is not threatened at the prescribed time for withdrawal, and further delay will contribute to the operation, the commander informs the higher headquarters and retains his position.

c. As early as practicable, the brigade commander should establish liaison with elements to his rear and begin planning for withdrawing through the cover provided. Adequate gaps through the covering positions are provided to prevent massing of forces during passage.

Section IV. RETIREMENT

7–13. General

A retirement is a retrograde operation in which a force avoids combat under existing conditions by conducting an orderly withdrawal according to its own plan and without pressure by enemy forces. A withdrawal from action becomes a retirement after the main force has disengaged from the enemy and march columns have been formed.

7–14. Conduct

a. A retirement is conducted in a formation appropriate to axes of movement and the expected dispositions of forces at the destination with such security as is dictated by the situation. The operation may be conducted as an administrative move or a tactical move. If the movement is not covered or if a threat from enemy forces is considered possible, the brigade will be organized to meet the threat.

b. A retirement is accomplished most effectively on multiple routes. On most occasions after the brigade has passed through the covering force, road passage is on a priority basis, and arteries and time of use are dictated.

c. The brigade commander may designate march objectives or require that subordinate elements do so based on his scheme of operation.

d. A retirement is controlled best by attaching smaller units to major subordinate elements to distribute forces over available road nets. Helicopters may be employed to assist in retirement.

Section V. RELIEF OPERATIONS

7–15. General

a. When tactical operations are prolonged, periodic relief of committed units may be required to maintain combat effectiveness; to reequip, retrain, or rehearse for specialized operations; or to conserve fighting power. Such reliefs are accomplished by a relief in place, a passage of lines, or a withdrawal through a rearward position. The entire brigade may participate in a relief operation, or it may direct and control reliefs of subordinate units.

b. The congestion inherent in these operations requires that every precaution be taken to reduce vulnerability to enemy attack during the operation. Close coordination of plans and cooperation between units executing the relief are essential.

c. For a detailed discussion of relief operations, see FM 61–100.

7–16. Basic Considerations

The following considerations are common to the planning and execution of all types of relief:

a. Adequate time must be provided for planning, reconnaissance, and establishing liaison. Early issuance of warning orders is mandatory.

b. Plans must be detailed, yet simple.

c. The relief plan includes tactical cover and deception and utilizes all practical measures to provide secrecy.

d. When possible, reliefs are conducted during periods of reduced visibility.

e. The time or circumstances when command passes from the relieved to the relieving commander must be agreed upon by the two commanders concerned or resolved by the next higher commander.

f. The relief must be executed as rapidly as control and secrecy permit.

7–17. Relief in Place

a. A relief in place is an operation in which all or part of a unit is replaced in a combat area by an incoming unit. A relief in place may be conducted to continue the defense or to prepare a subsequent attack.

b. When a relief in place is conducted to continue the defense, the relief is accomplished as nearly as possible on a unit-per-unit, man-per-man, weapon-per-weapon basis. The commander of the relieving unit must make his dispositions conform to the plan of the commander who is being relieved. After the relief is completed, the relieving commander may make changes in the plans for defense.

c. When a relief in place is conducted to resume the attack, the relieving commander may relieve on an area basis because his primary mission is to prepare an attack. He assumes responsibility for the defense of the area, but he may redispose and redeploy his forces to facilitate the resumption of the attack. He may change troop dispositions and position his major subordinate units to assist his plan of attack or permit a change of direction of the attack.

7–18. Passage of Lines

a. A passage of lines is an operation in which an incoming unit attacks through a unit that is in contact with the enemy. A passage of lines also may be executed to relieve an overcommitted unit or depleted unit.

b. The unit in contact remains in place and supports the incoming unit until its fires are masked. The unit passed through then may remain in place or be committed to other action.

c. The unit in contact provides the passing unit with combat service support as follows:

(1) Evacuation of patients and POW.

(2) Civilian and straggler control.

(3) Use of areas and facilities, e.g., water points and medical facilities.

(4) Route priority and traffic control.

(5) Evacuation of disabled vehicles, consistent with the capabilities of the unit in position.

7–19. Withdrawal Through a Rearward Position

a. A withdrawal through a rearward position is an operation in which a unit effecting a retrograde movement (withdrawal) passes through the sector of a unit occupying a rearward defensive position.

b. The principles outlined for a withdrawal (para 7–6—7–9) or a passage of lines (para 7–13 and 7–14) are applicable to a withdrawal through rearward position.

7–20. Considerations Affecting the Choice of Relief Prior to Attack

a. Relief in Place. If sufficient time is available, the relief in place prior to an attack should be employed when:

(1) The unit being relieved is required in another area.

(2) The capability of the enemy is such that the troop density involved in a passage of lines constitutes an excessive risk.

(3) The attacker requires more knowledge of the terrain and the enemy situation.

b. Passage of Lines. The passage of lines is preferred prior to an attack when:

(1) There is insufficient time for a relief in place.

(2) More flexibility is desired in the selection of the formation for the attack.

(3) It is desired to mass the fire support of both units in a particular area.

(4) A major change in the direction of attack is planned.

(5) Continuous offensive pressure against the enemy is desired.

(6) Speed is required.

(7) Exploitation of all the capabilities of the attacking unit is desired.

CHAPTER 8

OTHER TACTICAL OPERATIONS

(NATO STANAG 2027, 2099; CENTO STANAG 2027, 2099; SEATO SEASTAG 2027, 2099; ABCA SOLOG 62)

Section I. INTRODUCTION

8–1. General

The infantry brigades have the capability to conduct tactical operations under any condition of terrain and climate and in any intensity of warfare, although they may have to be augmented with special equipment and undergo specialized training.

8–2. References

Appendix A lists manuals which cover in detail the tactical operations discussed in this chapter.

Section II. AIRBORNE AND AIRMOBILE OPERATIONS

8–3. Joint Airborne Operations

a. Employment of the Brigade. The airborne brigade conducts joint airborne operations using all or part of the brigade as an independent force or as part of a larger force.

b. Liaison. The brigade establishes liaison as soon as it receives its warning order for an airborne operation. This liaison is established with field army headquarters or the joint force headquarters, Air Force tactical airlift units, other supporting forces, and the linkup force.

c. Planning. See FM 57–1 and FM 61–100.

d. Brigade Orders.

(1) The brigade commander issues a warning order as soon as possible so subordinates can make their plans and preparations concurrently. The warning order may include special security measures and advance information of the number and types of aircraft allocated to the brigade.

(2) Brigade plans and orders give battalion commanders the following additional information peculiar to an airborne operation:

(*a*) Assault objectives and sectors of responsibility.

(*b*) The location and assignment of drop zones and/or landing areas.

(*c*) Requirements for special reports not covered by SOP.

(*d*) Coordinating instructions for the ground phases of the operation.

(*e*) Data for the air movement plan to include location of loading areas and/or departure sites, allocation of aircraft, composition of aircraft serials, flight route diagrams, and the time for loading, takeoff, and arrival at the destination. Data for priority of movement, phaseback of units, and logistical support also are included.

(*f*) Data on marshaling, including special security measures to insure secrecy.

(*g*) Details of air-sea rescue, when applicable.

(*h*) Details of time and place of arrival and the use of troops and equipment in the followup echelon, when applicable.

(*i*) Organization of, and instructions to, the rear echelon.

(*j*) The supply and medical support plan, including special measures for air resupply and air evacuation of patients.

(*k*) Air defense support for the operation.

e. Brigade Reserve. The initial reserve usu-

ally is small in order that the assault forces may have maximum combat power for accomplishing their missions. When assault tasks have been accomplished, additional forces may become available as reserves. The brigade reserve must be available for possible employment during the initial phase; therefore, it will enter the airhead as part of the brigade assault echelon.

f. Conduct of the Joint Airborne Operation.

(1) When marshaling has been completed, the air movement is made to the drop zones and/or landing areas.

(2) Immediately upon landing, the brigade units secure assault objectives. Security elements move directly to the assigned areas and accomplish their mission.

(3) The attack phase of the airborne operation is conducted as described in chapter 5.

(4) The defense of the objective area is conducted essentially as described in chapter 6. When the brigade must defend a large area, the brigade commander may organize his defense around strongpoints, generally of battalion-size. Gaps between these strongpoints must be covered by fire and continuous surveillance of all types. Emphasis is placed on aggressive engagement of attacking aircraft with available weapons in accordance with rules of engagement.

g. Combat Service Support. Each assault battalion of the brigade takes elements of its combat trains with it. In the assault, the brigade has attached to it combat service support units of the support command which are phased into the objective area as soon as the tactical situation and availability of aircraft permit. Followup supplies are delivered as close as possible to battalions of the brigade. As the objective area is consolidated and secured, the brigade trains assume normal functions.

8–4. Airmobile Operations

a. Employment of the Brigade. Infantry brigades conduct airmobile operations as a routine part of land combat. The mechanized brigade, less its heavy equipment, can conduct airmobile operations when provided airlift support from corps or field army aviation units. However, its use for this purpose is infrequent (FM 57–35 and FM 61–100).

b. Basic Considerations.

(1) With normal aircraft availability, the organic airlift aviation of the airborne and infantry divisions can airlift one company in a singlelift. Therefore, the brigades of these divisions normally conduct only company-size airmobile operations. Larger operations require corps or field army aviation support.

(2) The aviation group of the airmobile division can airlift the assault elements of two airmobile battalions and three artillery batteries simultaneously with normal aircraft availability.

(3) When authorized, a pathfinder detachment(s) augments the division aviation unit(s) to provide terminal guidance. Within the lifting unit, specially trained guidance (unit terminal guidance) personnel may be used in airmobile operations when consistent with security aspects and especially at night or during other periods of reduced visibility. Personnel from the units that routinely conduct airmobile operations also are trained for this purpose and may be used in place of regular pathfinder detachments.

(4) When possible, routes flown by aircraft should avoid areas occupied by enemy forces. All means of intelligence are employed to determine the flight routes. Pathfinders are used to provide navigational assistance and air traffic control in the objective area.

(5) Airmobile operations normally are unsuited for the direct assault of heavily defended objectives.

(6) A daylight operation permits more effective air and artillery support then one conducted at night and facilitates assembly of troops and equipment. However, darkness aids tactical surprise and reduces the effectiveness of enemy fire.

c. Planning Airmobile Operations.

(1) The airmobile operations plan is developed in reverse sequence as follows:

(*a*) Ground tactical plan.
(*b*) Landing plan.
(*c*) Air movement plan.
(*d*) Loading plan.
(*e*) Staging plan.

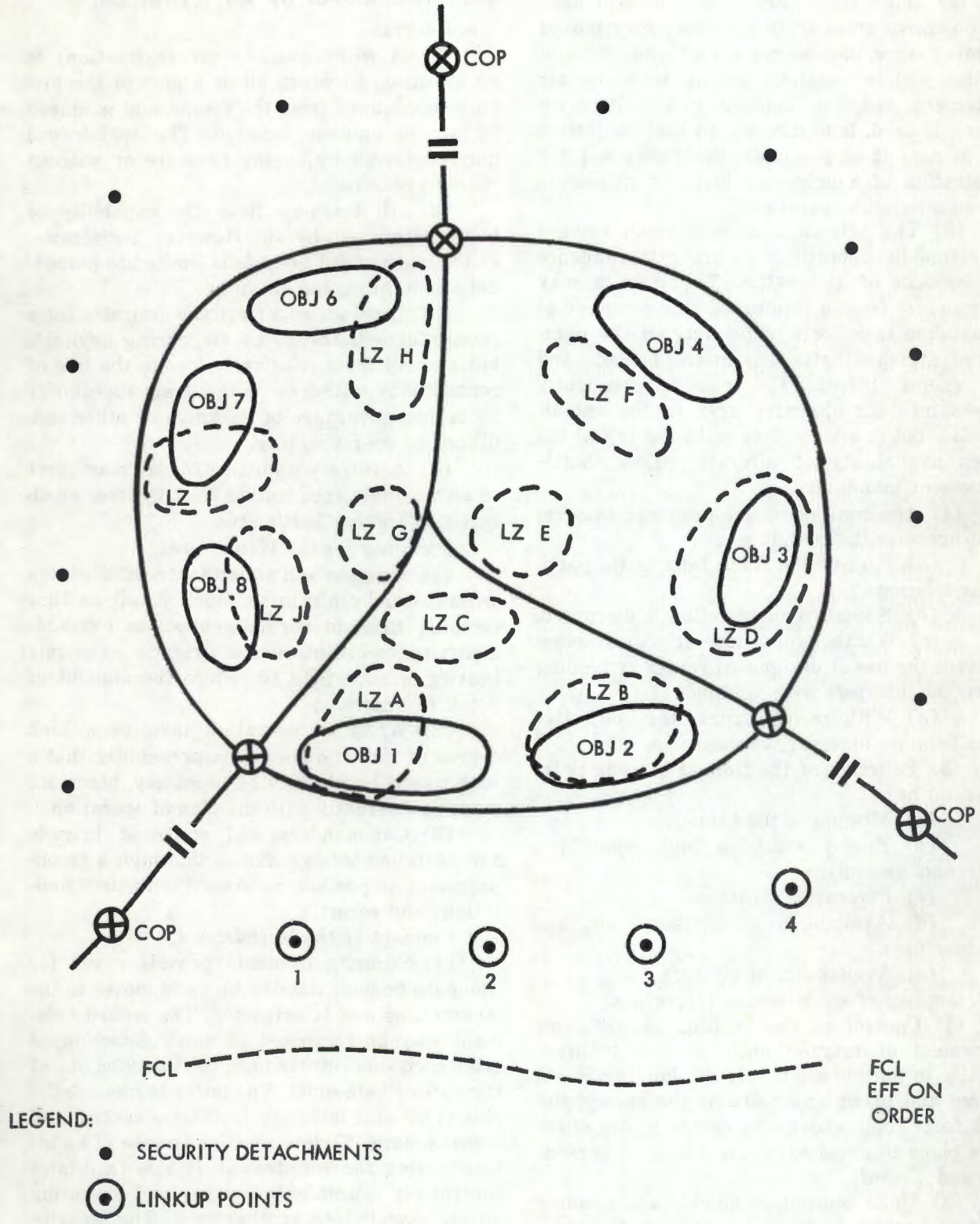


Figure 8-1. Scheme of maneuver, airmobile operation.

(2) When troops are airlanded on or near the objective area, assembly areas may not be required since, in most cases, unit integrity and control will be retained during both the air movement and the landing phase. Security forces, if used, land directly on their objective (or as near it as possible). See figure 8–1 for illustration of a brigade scheme of maneuver for an airmobile operation.

(3) The brigade retains a small reserve on airmobile operations in order to influence the conduct of the battle. The reserve may vary in size from a reinforced rifle company to a battalion task force, depending on the number of attached battalions in the brigade and the enemy threat. The reserve frequently moves into the objective area in the assault echelon, but it seldom does so in the initial lift when availability of aircraft makes shuttle movement mandatory.

(4) Alternate plans are prepared to cover contingencies that result when:

(*a*) Part of the force fails in its particular mission.

(*b*) Signal communication is disrupted.

(*c*) Weather conditions or enemy action prevent the use of designated routes or landing areas, or interfere with landings.

(*d*) Withdrawal from the objective area becomes necessary or desirable.

(5) Selection of the time of landing is influenced by:

(*a*) Mission of the brigade.

(*b*) Enemy situation and capabilities (air and ground).

(*c*) Forecasted weather.

(*d*) Availability of artillery, air, and nuclear fires.

(*e*) Availability of aircraft.

d. Conduct of an Airmobile Operation.

(1) Control of the loading, takeoff, and movement of brigade units is decentralized, usually to battalion level. If the landing is observed and taken under fire by the enemy, the task force commander may decide to use alternate plans to avoid excessive losses of personnel and aircraft.

(2) Units reorganize quickly and conduct a ground attack to seize objectives in the area.

(3) For detailed discussion of airmobile operations, see FM 57–35.

8–5. Withdrawal by Air (Extraction)

a. General.

(1) A withdrawal by air (extraction) is an operation in which all or a part of the brigade disengages from the enemy and is moved by air to another location. The withdrawal may be forced by enemy pressure or without enemy pressure.

(2) All brigades have the capability of being withdrawn by air. However, withdrawal of the mechanized brigade is limited to personnel and light equipment only.

(3) Local air superiority is desirable for a successful withdrawal by air during daylight, but a small force relatively close to the line of contact may withdraw without air superiority by taking advantage of darkness or other conditions of poor visibility.

(4) A force withdrawn by air may move to an assembly area behind friendly lines or directly to another battle area.

b. Planning for the Withdrawal.

(1) Brigade and subordinate units plan a withdrawal by air in as much detail as time permits. Brigade normally allocates available airlift to subordinte units. Brigade plans rely heavily on unit SOP to reduce the amount of detail in orders.

(2) When an operation involves a high degree of risk and there is a probability that a withdrawal by air may be necessary, plans are made concurrently with the plan of operation.

(3) Commanders and staffs at brigade and battalion levels make as thorough a reconnaissance as possbile consistent with time limitations and security.

c. Conduct of the Withdrawal.

(1) Security elements provide cover for the main body as it assembles and moves to the pickup zone and is extracted. The security element may be composed of small detachments from each subordinate unit, or it may be one of the subordinate units. The latter is more desirable since unit integrity facilitates control and assures more effective reaction in case of an attack during the withdrawal. It also facilitates control for a unit withdrawing and executing an air assault into another area. The security element assumes the task of securing the defensive position, to include the pickup zone, at

a time designated by the commander of the unit conducting the withdrawal.

(2) Supporting fires, close air support, mines, and obstacles are exploited to prevent the enemy from pursuing the withdrawing force.

(3) During a withdrawal under enemy pressure, emphasis is placed on secrecy and the simulation of normal activity as long as possible.

(4) On arrival in the loading area, units complete preparations for loading and form into aircraft load groups. Tactical loading may be sacrificed for speed and maximum use of the capacity of aircraft.

(5) As soon as the main body of the brigade completes its withdrawal, the covering force begins its withdrawal. The withdrawal of the covering force is under brigade control.

d. For further details on withdrawals by air, see FM 57–35 and FM 61–100.

Section III. LINKUP OPERATIONS

8–6. General

A linkup involves the juncture of two ground forces. It may be conducted as a part of the following operations: airborne or airmobile operations; an attack to assist, or the breakout of, an encircled force; or an attack to join a force of infiltrators. The brigade may participate in linkup operations as a part of a larger force, or it may conduct operations within its own resources.

8–7. Planning for Linkup

Planning for linkup must insure close coordination of the efforts of the linkup force and the force with which linkup is made (the stationary force). Plans are prepared and coordinated in advance and include the following:

a. The command relationship of forces involved in a linkup operation must be established prior to the operation to clearly delineate responsibilities. The stationary force may be attached to the linkup force or the linkup force may be attached to the stationary force. In addition, both forces may come or remain under control of a higher commander. The headquarters directing the linkup establishes the command relationship.

b. Command and staff liaison is accomplished before and during the operation. Information and plans are exchanged early in the planning phase. As linkup becomes imminent, additional liaison personnel may be exchanged to insure coordination of fires and any changes in tactical plans; Army aviation may be used to facilitate this exchange.

c. A system of mutual recognition is devised to preclude the possibility of friendly troops firing on one another. This system may include pyrotechnics, arm bands, panels, vehicle markings, lights of a distinctive pattern and/or color, colored smoke, infrared and radar devices, arm-and-hand signals, and use of a password.

d. Communication plans are coordinated to include establishment of nets and exchange of call signs, authentication procedures, radio frequencies, SOI, SSI, and radio equipment if required.

e. Schemes of maneuver are exchanged to include current and planned location of friendly elements. Control measures are established in advance to include use of linkup points, boundaries, axes of advance, and delineation of objectives if appropriate. Linkup points are selected at easily recognizable points at which physical contact between the two forces is expected to occur. Sufficient linkup points are established to accommodate possible changes in the scheme of maneuver. Checkpoints and phase lines also may be used to determine by reference the location of one or both forces and thereby facilitate control.

f. Coordination of fires is accomplished by exchange of fire support plans and by use of control measures such as no-fire lines, fire coordination lines, and fire support coordination lines.

g. Assistance from the stationary force is provided to the linkup force to facilitate linkup and reduce the time of passage through positions of the stationary force. Obstacles are removed (where appropriate) immediately prior

to linkup, and lanes through barriers are opened. Guides provided by the stationary force assist in traffic control through and within the defense positions. The linkup force must be informed fully of all minefields and other obstacles in front of and within the stationary force defense sector.

h. Actions to be taken following linkup are established in advance. The linkup force may reinforce or assume the defense of the area, conduct a coordinated attack with the stationary force, or pass through or around the stationary force and continue the attack.

i. Alternate plans are considered in view of the possibility that the linkup force may be unable to reach the stationary force in the prescribed time. For such a contingency, plans should provide for fire support, close air support, and aerial resupply for the stationary force.

8–8. Combat Service Support

Combat service support requirements may be greater than those for an ordinary attack, if the linkup force must anticipate and provide for the needs of the stationary force. Planning should provide for the possible use of aviation to perform such missions as resupply of the stationary force and evacuation of patients.

Section IV. AMPHIBIOUS OPERATIONS

8–9. General

The division normally is the smallest organization of combined arms and services employed as the landing force echelon for conduct of amphibious assault landings and execution of a scheme of maneuver ashore.

a. The brigade, when reinforced, may be organized and equipped to conduct amphibious operations. The brigade participates in an amphibious operation as the Army component or an element of it and conducts its operations in accordance with the principles, doctrine, and procedures for unified and joint operations (FM 5–144 and FM 31–11).

b. The amphibious operation includes planning, embarkation of troops and equipment, rehearsals, movement to the objective area, and final assault of the objective. Assault includes final preparation of the objective and assault landing of troops and accompanying supplies and equipment.

8–10. Types of Amphibious Operations

The brigade may participate in any of the following types of amphibious operations:

a. An amphibious assault to establish a landing force on a hostile shore to conduct further combat operations, to obtain a site for an advanced naval or air base, or to deny the use of an area or facilities to the enemy.

b. An amphibious withdrawal for the purpose of redeployment or evacuation.

c. An amphibious demonstration conducted to deceive the enemy by a show of force, with the expectation of deluding the enemy into a course of action unfavorable to him.

d. An amphibious raid involving a swift incursion into or a temporary occupancy of an objective, followed by a planned withdrawal. The purposes of such raids are to inflict loss or damage, secure information, create a diversion, or capture or evacuate individuals and materiel.

8–11. Organization for Embarkation and Command Afloat

In amphibious operations, the division is organized as an embarkation group. The brigade will constitute an embarkation unit when part of the division or an embarkation group when operating as an independent unit. Through this organization, the landing force commander exercises direction and control of both the planning and execution of embarkation of the landing force. The organization for embarkation generally follows the tactical organization.

8–12. Operations Ashore

The maneuver battalions of the brigade, appropriately reinforced, form the assault landing teams of the assault echelons of the force. The ground tactics during the operations ashore after the beachhead has been secured are substantially the same as for any ground operation.

8–13. Combat Service Support

The prime objective in planning for support is the timely and adequate support of tactical operations to establish the brigade ashore. Combat service support operations ashore, normally handled by a shore party, initially are decentralized and controlled by assault landing team commanders to include the battalion and brigade. Commanders are relieved of these combat service support responsibilities as soon as possible. Assault units are reinforced to provide an interim combat service support capability until such time as this support can be provided by the next higher echelon.

8–14. River Crossings

A river crossing is an offensive operation differing from other offensive actions primarily in the application of techniques. However, it usually requires specialized crossing equipment and trained personnel. For detailed considerations of river-crossing operations, see FM 31–60 and FM 100–5.

8–15. Raids

a. The brigade may be ordered by higher headquarters to conduct raids, or the brigade commander may conduct them on his own initiative. It is desirable for the force to be highly mobile and to be composed of all arms. A task force with a battalion as its nucleus is particularly suitable for a brigade raiding force.

b. Since permanent retention of terrain in the enemy area is not contemplated, a raiding force plan of withdrawal must be made in advance. Easily identified rallying points should be designated for use in case unforeseen situations do not permit execution of the original plan of withdrawal.

c. For details on raids, feints, demonstrations, and ruses, see FM 61–100.

Section V. COMBAT IN FORTIFIED AND BUILT-UP AREAS

8–16. Combat in Fortified Areas

Whenever possible, fortified positions are contained by minimum forces, while the main force continues the advance to seize more distant and decisive objectives (FM 31–50).

8–17. Combat in Built-Up Areas

a. Attack.

(1) An assault of a built-up area is controlled closely and includes designation of objectives that divide enemy defenses.

(2) The advantages gained through the use of nuclear weapons and intensive nonnuclear bombardments must be weighed against the creation of obstacles to the assault elements. Nonpersistent chemical weapons may be used to inflict casualties without creating obstacles.

(3) Measures to control or evacuate the civilian populace are essential.

b. Defense.

(1) The defense of a built-up area is organized around key terrain features and key portions of a built-up area which preserve the integrity of the defense and provide ease of movement to the defender. Subterranean systems may facilitate the movement of forces and provide protection against nuclear attack. They are incorporated in the organization of the defense. Maximum use is made of rubble and other obstacles. Defenses are prepared in depth to facilitate continuous defense throughout the area.

(2) Plans should provide for the control and evacuation of the civilian populace and the use of friendly elements in the preparation of defensive positions.

Section VI. BRIGADE IN STABILITY OPERATIONS

8–18. General

a. Stability operations are those types of internal defense and internal development operations and assistance furnished by the Army component of the Armed Forces to maintain, restore, or establish a climate of order within which responsible government can function effectively and without which progress cannot be achieved.

b. These operations include situations that

range from support of the friendly country against incipient subversive activities and guerrilla operations to active participation in a war of movement between organized forces of the insurgent movement and those of the legally constituted government. The insurgent force frequently receives support from an outside power either openly or covertly.

8–19. Brigade Stability Operations

a. A brigade is particularly well suited for stability operations. To gain maximum effectiveness, intensive training must be completed in counterguerrilla operations to include civil affairs operations, intelligence operations, psychological operations, populace and resources control operations, and advisory assistance operations, as well as area orientation and language training. This training should include a thorough orientation on the roles and missions of the nonmilitary agencies and other military services engaged in internal defense and internal development operations.

b. Infantry brigade missions in stability operations include extensive reconnaissance operations, closing with and destroying enemy tactical forces, and defending installations and base complexes.

c. While most of the tactics and techniques discussed in this manual are generally applicable to stability operations, there are additional considerations imposed upon all forces operating in a stability operations environment.

(1) Reconnaissance in force must be stressed. When enemy units are operating in smaller than platoon size, counterguerrilla force platoons may conduct reconnaissance in force, using the combat power provided by artillery and other fire support. If large guerrilla forces are located, small units should maintain contact and attempt to fix the enemy force until reserves and/or firepower can be employed to assist in the capture or destruction of the enemy (para 5–33).

(2) The brigade must exploit all possible intelligence means to provide early warning which will permit rapid response to a fast-moving and ever-changing situation.

(3) In stability operations, the employment of fire support and maneuver must be conditioned by the requirement not to harm the population.

(4) Civil affairs operations may be accentuated.

(5) The obvious indications of victory (i.e., enemy killed and wounded, weapons captured, terrain taken) often will be absent, whereas the indications of defeat (i.e., friendly killed and wounded, weapons and equipment lost) always will be evident.

(6) Morale problems incident to conditions described in (5) above and to fighting an elusive, hard-to-identify enemy, restricted by considerations for the safety of the population, preservation of property, and the psychological impact of operations, will be major considerations.

d. In stability operations, the brigade may be employed as a subordinate element of the division or, with appropriate augmentation, as an independent combat force or in an advisory training role to support and assist host country forces. A brigade may be designated in contingency plans as a backup force for stability operations.

e. The brigade may provide advisory assistance ranging from furnishing mobile training teams (MTT) to training selected host country personnel and units. The brigade may be committed as a brigade backup force as outlined in FM 31–23.

f. For further discussion of stability operations, see FM 31–16, FM 31–22, FM 31–23, FM 33–1, FM 41–10, and FM 100–20. FM 30–31 and FM 30–31A contain detailed information on intelligence activities in stability operations.

Section VII. BRIGADE IN RIVERINE OPERATIONS

8–20. General

a. A riverine area is a land environment dominated by water lines of communications with an extensive network of rivers, streams, canals, swamps, paddies, or muskeg extending over broad, level terrain, parts of which may be

inundated periodically or permanently. It may include sparsely populated swamps or forests, rivers and streams that have steep banks densely covered with tropical trees or bamboo, and relatively flat and open terrain. A large agrarian population may concentrate along the waterways. Open tides may affect riverine areas both near the ocean and far inland.

b. Riverine operations include all military activities designed to achieve and maintain territorial control of a riverine area by destroying enemy forces and restricting or eliminating enemy activities. The basic nature of riverine operations is ground combat in a land environment dominated by water lines of communications. Therfore, a characteristic of riverine operations is the extensive use of joint waterborne forces in conjunction with groundmobile and airmobile forces in a predominantly land battle.

c. Riverine operations are not amphibious operations, although some of the principles and techniques of amphibious operations can be adapted readily to riverine operations. A riverine operation is distinct in that it continually uses specialized watercraft, equipment, or techniques, and usually takes place where amphibious operations are not practical.

d. The significant difference between riverine and conventional operations is that, in the former, one or more elements of the force utilize existing waterways as the primary line of communications. Military forces equipped and trained to operate on rivers and canals, together with airmobile and overland forces, provide an added dimension to mobility and firepower.

8–21. Brigade Operations

a. Conduct. Brigades conduct riverine operations as an encirclement or a series of encirclements. In addition to the ground forces moving to the area of operations by Navy watercraft and Army assault boats, other units move overland by foot march, truck, or armored personnel carriers, and by air in helicopters or transport aircraft. The fleeting nature of hostile targets makes rapid response by reaction forces essential. Extensive air reconnaissance must be used to find hostile elements. Navy watercraft provide an excellent method of fixing and containing hostile elements by sealing off water lines of communications.

b. Movement. Normally, foot movement is used only for short distances after initial deployment by other means of transportation or when other transportation is not available or feasible. Movement by truck may be practicable on the major roads in a riverine area. Frequently trucks and troops require ferrying. Units conduct a thorough route reconnaissance, to include searching for mines and ambush sites and checking the condition of the roads, bridges, and ferries.

c. Employment. Mechanized infantry brigades in a riverine area rarely operate independently. They are employed with waterborne or heliborne forces. These units can provide an ambush or counterambush capability and can exploit success.

d. Airmobile Operations. Airmobile operations are used in a riverine area to commit blocking forces, reserves, and reaction forces, and for reconnaissance. Even though riverine areas may be inundated widely, helicopters still can land. Care must be taken to prevent off-loading troops into concealed canals. Airmobile operations in swampy areas with heavy vegetation may be limited to the employment of troops trained in rappelling or to the use of landing zones adjacent to the forested area.

e. Airborne Forces. Airborne forces may be employed in riverine operations; however, the terrain may restrict the size of the force dropped. Water depth must be considered when selecting drop zones. The airdrop of supplies facilitates movement and resupply.

f. Command, Control and Communication.

(1) During combat operations, the brigade commander normally exercises command from a command-and-control type helicopter.

(2) In addition to command and control helicopters, a command-control boat is available to establish the waterborne brigade forward of a tactical command post.

g. Fire Support.

(1) Continuous and flexible fire support is indispensable in riverine areas.

(2) Fire support will be furnished to all echelons of the force. Standard procedures will

be followed with each fire support element capable of independent fire direction. Forward observers are attached to each company, artillery liaison officers are provided to each battalion, and a fire support coordination center is established at brigade.

(3) The exploitation of all means of mobility is a key factor in planning and conducting artillery support in riverine operations. Normal tactics do not change; however, the artillery may operate somewhat differently than in other land warfare areas.

h. References. For further discussion of riverine operations, see FM 31–75 (Test) and FM 61–100.

APPENDIX A

REFERENCES

A–1. Army Regulations

320–5	Dictionary of United States Army Terms.
320–50	Authorized Abbreviations and Brevity Codes.

A–2. Field Manuals

1–5	Aviation Company.
1–15	Divisional Aviation Battalion and Group.
1–100	Army Aviation Utilization.
3–1 (Test)	CBR Combat Service Support, TASTA–70.
3–10	Employment of Chemical and Biological Agents.
3–12	Operational Aspect of Radiological Defense.
3–50	Chemical Smoke Generator Units and Smoke Operations.
5–135	Engineer Battalion, Armored, Infantry, and Infantry (Mechanized) Divisions.
5–136	Engineer Battalions, Airborne and Airmobile Divisions.
5–142	Nondivisional Engineer Combat Units.
5–144	Engineer Amphibious Units.
6–20–1	Field Artillery Tactics.
6–20–2	Field Artillery Techniques.
6–102	Field Artillery Battalion, Aerial Artillery.
6–140	Field Artillery Cannon Battalions and Batteries.
7–11	Rifle Company, Infantry, Airborne, and Mechanized.
7–20	Infantry, Airborne Infantry, and Mechanized Infantry Battalions.
8–15	Medical Service in Divisions, Separate Brigades and the Armored Cavalry Regiment.
11–50	Signal Battalion, Armored, Infantry, and Infantry (Mechanized) Divisions.
11–57	Signal Battalion, Airborne Division.
17–15	Tank Units, Platoon, Company, and Battalion.
17–36	Divisional Armored and Air Cavalry Units.
17–37	The Air Cavalry Squadron (when published).
19–1	Military Police Support, Army, Divisions, and Separate Brigades.
20–33	Combat Flame Operations.
23–17	Redeye Guided Missile System.
24–1	Tactical Communications Doctrine.
29–30	Maintenance Battalion and Company Operations in Divisions and Separate Brigades.
29–50	Supply and Service in Divisions and Separate Brigades.
30–5	Combat Intelligence.
30–16	Technical Intelligence.
30–20	Aerial Surveillance—Reconnaissance, Field Army.

(C)30–31	Stability Operations—Intelligence (U).
(S)30–31A	Stability Operations—Intelligence Collection (U).
31–11	Doctrine for Amphibious Operations.
31–16	Counterguerrilla Operations.
31–21	Special Forces Operations.
31–22	U.S. Army Counterinsurgency Forces.
31–23	Stability Operations—U.S. Army Doctrine.
31–36 (Test)	Night Operations.
(C)31–40	Tactical Cover and Deception (U).
31–50	Combat in Fortified and Built-Up Areas.
31–60	River-Crossing Operations.
31–75 (Test)	Riverine Operations.
33–1	Psychological Operations—U.S. Army Doctrine.
41–10	Civil Affairs Operations.
41–15 (Test)	Civil Affairs Support TASTA–70.
44–1	U.S Army Air Defense Artillery Employment.
44–3	Air Defense Artillery Employment Chaparral/Vulcan.
54–2	The Division Support Command.
57–1	Armed Forces Doctrine for Airborne Operations.
57–35	Airmobile Operations.
61–24	Division Communications.
61–100	The Division.
100–5	Operations of Army Forces in the Field.
100–10	Combat Service Support.
(C)100–20	Field Service Regulations—Internal Defense and Development (IDAD) (U).
100–27	U.S. Army/U.S. Air Force Doctrine for Tactical Airlift Operations.
101–5	Staff Officer's Field Manual—Staff Organization and Procedures.
101–40	Armed Forces Doctrine for Chemical and Biological Weapons Employment and Defense.

A–3. Technical Manuals

55–450–15	Air Movement of Troops and Equipment (Administrative).

APPENDIX B
CLASSES OF SUPPLY

CLASSES	DESCRIPTION
I	Subsistence.
	Subclasses [1]: A—Air (inflight rations) R—Refrigerated subsistence S—Nonrefrigerated subsistence (less combat rations) C—Combat rations [2]
II	Clothing, individual equipment, tentage, organizational tool sets and tool kits, handtools, and administrative and housekeeping supplies and equipment.
	Subclasses [1]: B—Ground support materiel [3] E—General supplies F—Clothing and textiles M—Weapons T—Industrial supplies [4]
III	Petroleum, oils, and lubricants: petroleum fuels, lubricants, hydraulic and insulating oils, preservatives, liquid and compressed gases, bulk chemical products, coolants, deicing and antifreeze compounds, together with components and additives of such products; and coal.
	Subclasses [1]: A—Air W—Ground (surface)
IV	Construction: construction materials, to include installed equipment and all fortification/barrier materials.
V	Ammunition: ammunition of all types including chemical, biological, radiological, and special weapons, bombs, explosives, mines, fuzes, detonators, pyrotechnics, missiles, rockets, propellants, and other associated items.
	Subclasses [1]: A—Air W—Ground
VI	Personal demand items (nonmilitary sales items).
VII	Major end items: a final combination of end products which are ready for their intended use (e.g., tanks, launchers, mobile machine shops, and vehicles).
	Subclasses [1]: A—Air B—Ground support materiel [3] D—Administrative vehicles [5] G—Electronics K—Tactical vehicles L—Missiles M—Weapons N—Special weapons

See footnotes on next page.

VIII.....Medical materiel, including medical-peculiar repair parts.

IX.....Repair parts (less medical-peculiar repair parts): all repair parts and components, to include kits, assemblies, and subassemblies, reparable and nonreparable, required for maintenance support of all equipment.

Subclasses [1]:
A—Air
B—Ground support materiel [3]
D—Administrative vehicles [5]
G—Electronics
K—Tactical vehicles
L—Missiles
M—Weapons
N—Special weapons
T—Industrial supplies [4]

X.....Materiel to support nonmilitary programs (e.g., agricultural and economic development not included in classes I through IX).

[1] The ALPHA Code for subclassification of classes II, VII, and IX represents materiel category designators used in supply management, with the exception of A (Air) which is used throughout all classes of supply as applicable. ALPHA Codes not utilized as materiel category designators have been assigned to the subclassification for classes I, III, and V. The subclassification materiel designators (A through T) may be used in combination with the designated subclassification, when appropriate and if desired, to define further a portion of a class of supply for planning purposes (e.g., use of class V AL to designate ammunition, air missile). Additional codes may be utilized to satisfy a specific requirement; for example, to designate reparable or nonreparable high-dollar items, or for other selective management purposes. This additional permissive coding is not to be utilized in lieu of that designated for the major classification and subclassifications.

[3] Includes gratuitous health and welfare items.

[3] Includes power generators and construction, barrier, bridging, firefighting, petroleum, and mapping equipment.

[4] Includes bearings, block and tackle, cable, chain, wire rope, screws, bolts, studs, steel rods, plates, and bars.

[5] Commercial vehicles utilized in administrative motor pools.

INDEX

Note. Entries pertaining exclusively to *separate brigades* are referenced by paragraphs 3–1 through 3–15. All other paragraph references pertain to *divisional brigades*, or to both divisional and separate brigades.

By Order of the Secretary of the Army:

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Distribution:

To be distributed in accordance with DA Form 12–11 requirements for Infantry, Airborne and Mechanized Division Brigades.

☆ U. S. GOVERNMENT PRINTING OFFICE : 1971 O - 430-507(6419A)