FM 7-40

DEPARTMENT OF THE ARMY FIELD MANUAL

INFANTRY AND AIRBORNE DIVISION BATTLE GROUPS

HEADQUARTERS, DEPARTMENT OF THE ARMY
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FIELD MANUAL
No. 7–40

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INFANTRY AND AIRBORNE DIVISION BATTLE GROUPS

*** Units organized under TOE 7–110, 28 June 1956, will continue to use FM 7–40, 11 January 1950, until reorganized under D-series TOE. With this exception, this manual supersedes FM 7–40, 11 January 1950, including C 1, 23 October 1951; C 2, 17 March 1952; and C 3, 2 December 1952; FM 7–20, 17 March 1950, including C 1, 13 October 1950; C 2, 24 October 1951; C 3, 2 December 1952; and C 4, 18 November 1955; and TT 7–40–2, March 1957.**

CHAPTER 1

GENERAL

Section I. INTRODUCTION

1. Purpose and Scope

a. This manual is a guide for battle group commanders, their staffs, and subordinate unit leaders in preparing their commands for and employing them in combat. It is also a guide for commanders of supporting units and for staff officers of higher headquarters whose duties may include making recommendations for battle group employment.

b. This manual is applicable without modification to nuclear and nonnuclear warfare.

c. This manual is applicable to both the infantry and airborne division battle groups. The parts of the manual that pertain exclusively to one or the other type battle group are so specified. The illustrations do not reflect the 4th rifle platoon in the rifle company of the airborne division battle group. The reader must compensate for this when using the illustrations.

d. This manual should be used in conjunction with FM's 7–100, 57–30, 57–100, 100–5, 101–5, and 101–10. Certain considerations for special operations (cold weather, jungle, mountain, desert) will be found in the manual pertinent to the type operation.

2. Mission

The mission of the battle group is to destroy the enemy by fire, maneuver, and close combat.

3. Characteristics

a. The battle group is a combat unit of combined arms. Its balanced ratio of weapons, personnel, organic communication, and equipment enables it to accomplish a great variety of combat missions as part of the infantry-airborne division with its organic means alone. The battle group's command and staff structure is flexible enough to accept a considerable augmentation of its forces.

b. Some elements of the battle group have organic vehicular mobility. The overall level of mobility of the battle group varies from the mobility provided by organic or attached vehicles to that of the dismounted soldier of the rifle companies. The battle group can achieve complete

vehicular mobility by the attachment of personnel carriers and/or trucks. The airborne division battle group is completely air transportable in medium transport aircraft. The infantry division battle group is air transportable in a combination of medium and heavy transport aircraft.

4. Capabilities

a. The battle group is capable of—

(1) Providing base of fire and maneuver elements.

(2) Destroying or capturing the enemy by fire, maneuver, and close combat.

(3) Operating in all types of terrain and under varying climatic conditions.

(4) Conducting independent operations on a limited scale.

(5) Providing indirect fire support and antitank protection for organic and attached units.

(6) Seizing and holding terrain.

b. With appropriate support, the battle group is capable of—

(1) Operating independently under corps or field army control.

(2) Operating as motorized, mechanized, or air-transported infantry.

(3) Performing reconnaissance and security missions for larger forces.

c. The airborne division battle group, when provided airlift, is capable of conducting frequent airborne assaults with minimum marshaling and planning.

5. Organization

a. The major units of the infantry and airborne division battle groups are shown in 1 and 2, respectively, figure 1. For a detailed analysis of organization and armament, see Tables of Organization and Equipment 7–12D, 7–17D and 7–10D (infantry division battle group) and 7–31D, 7–32D, 7–37D and 6–28D (airborne division battle group).

b. The battle group commander may find it necessary or desirable to decentralize the control of supporting units under his command by attaching them to his subordinate units. The attachments may be complete or limited; e.g., for operational control. An attachment may be made for operational control if the attached unit can be provided logistical support by its parent unit. If the attached unit operates beyond supporting range of its parent unit, the attachment must be complete. It must carry its own maintenance support. Throughout this manual, the term "attached" is used exclusively. In application to tactical operations, it must be interpreted as "attached" or "attached for operational control" according to the requirements of a particular situation.

Section II. GENERAL CONSIDERATIONS FOR NUCLEAR WARFARE

6. Introduction

a. Although nuclear weapons are not absolute, they provide the battle group commander with a decisive means (when employed with other elements of combat power) for influencing the outcome of a battle. Combat planning is based on the support of nuclear, chemical, and biological weapons and the possibility of radiological contamination, unless other command guidance is received. Nevertheless, the battle group must not habitually depend on their use for support.

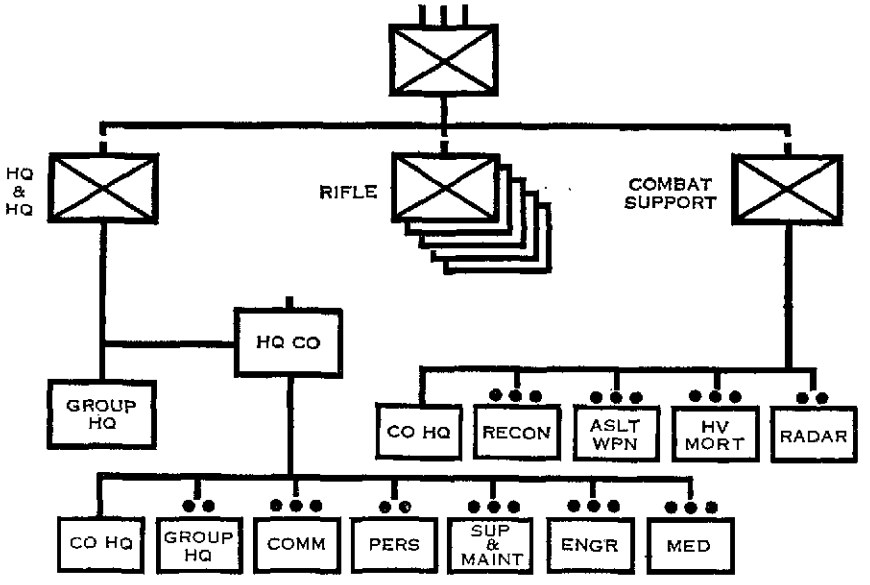
b. Terrain is of vital concern in all types of warfare. Its use may vary with the type. In nuclear warfare, the concentration of large bodies of troops on easily identifiable terrain features must be avoided. Critical terrain may be controlled by securing the approaches to it, by keeping it under constant surveillance, by contaminating it, or by occupying it.

c. Nuclear warfare is characterized by sudden and drastic changes in the tactical situation. This demands an alert and flexible system of command, with firm, centralized direction, decentralized execution, and a doctrine that stresses initiative and flexibility by subordinate commanders. Unit commanders will have opportunities for decisive action, but the opportunities will generally be of limited duration. For this reason, all commanders must be prepared to act instantly and aggressively. Advanced planning to provide for contingencies, including the maintenance of a complete unit SOP, must be practiced.

d. The concentration of troops and equipment must be avoided as a general practice. Nevertheless, it is inevitable that forces must concentrate on occasion to accomplish a particular mission. On such an occasion, commanders concentrate their forces at the last moment, execute missions rapidly, and quickly disperse to avoid presenting a lucrative target.

e. All echelons of command are authorized and encouraged to request nuclear fire support appropriate to the target and mission. When a unit is supported by nuclear weapons, the commander of that unit has authority to call for delivery of the weapons regardless of the echelon controlling the delivery system, but he must first coordinate their employment with the highest echelon that will be affected by their use. Nuclear weapons may be allocated with restrictions as to employment; e.g., requirements for notifying adjacent headquarters and aviation units operating in the area in time for them to take safety precautions.

f. The battle group strives for mobility which is superior to that of the enemy through proper utilization of available aircraft, personnel carriers, trucks, and the ability of units to execute timely movements



1. Infantry division battle group.

Figure 1. Infantry and airborne division battle groups.

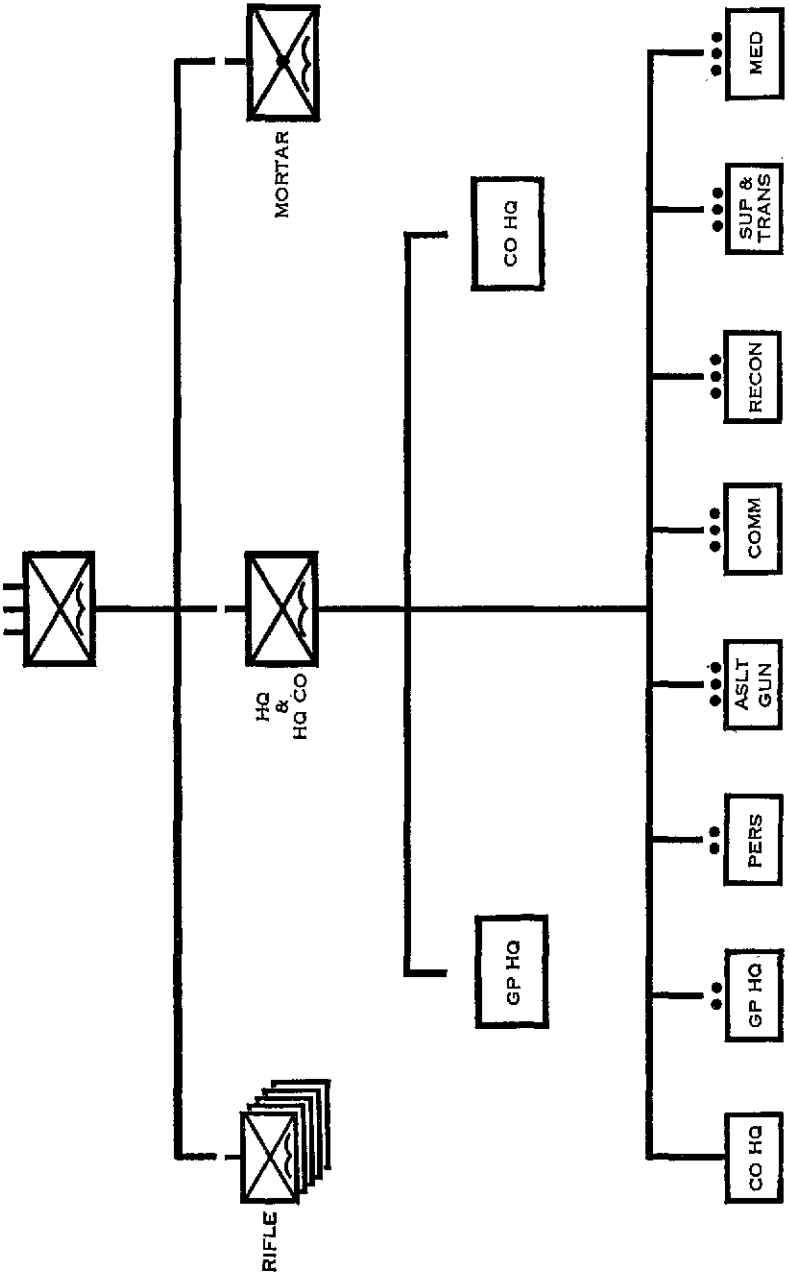
on foot. In many instances, foot movement may be the only means of attaining superior mobility.

g. Because of possible limitations in the number of nuclear weapons available, they must be employed with care to insure their most effective use. Plans for the use of nuclear and nonnuclear fires are integrated to achieve maximum effect from both. The plan for coordinated fires must be flexible enough to facilitate changes which may be required in case nuclear support is withdrawn. All commanders are continually on the alert to create or locate enemy targets suitable for nuclear attack and to request fires on them.

h. Nuclear warfare places a high premium on—

(1) *Dispersion.* As a criterion, all commanders accept the maximum dispersion that is consistent with the accomplishment of the mission. They must not use arbitrary distances or the radii of effects of a weapon of a specific size to determine the degree of dispersion. Commanders at all echelons consider the following factors in determining the degree of dispersion that can be accepted.

(*a*) Mission.
(*b*) Terrain.
(*c*) Weather.
(*d*) Availability and types of fire support.
(*e*) Availability of air support.



2. Airborne division battle group.

Figure 1—Continued.

(*f*) Availability of air defense.
(*g*) Communication capabilities and limitations.
(*h*) Relative mobility of the opposing forces.
(*i*) Comparative reconnaissance and surveillance capabilities of the opposing forces.
(*j*) Enemy air and nuclear capabilities.

(2) *Mobility.* The greater the mobility of a command, the greater the dispersion it can accept. The need for speed in maneuvering and exploiting nuclear weapon effects places a great emphasis on tactical mobility.

(3) *Communication.* Communication means must permit control at all levels of command under conditions of wide dispersion and rapid maneuver. Unit commanders and staffs should have a thorough understanding of the capabilities and limitations of the available means of signal communications and electronic warfare, and communications operating personnel must be trained in the employment of electronic counter-countermeasures to minimize the effects of enemy jamming.

(4) *Morale.* Nuclear warfare strains individual and unit morale to the maximum. It is essential to teach the soldier what to expect and how to protect himself.

(5) *Leadership.* Leaders, including junior officers and noncommissioned officers, must be prepared to cope with situations which will tax to the utmost their resourcefulness, ingenuity, perseverance, stamina, and moral fiber. Great emphasis must be placed on initiative and independent leadership on the part of junior officers.

(6) *Intelligence.* Combat operations in a nuclear environment place a premium on combat surveillance for comprehensive and timely intelligence. Surveillance means are integrated at the unit level that will provide for optimum employment and expeditious reporting.

7. Protective Measures

Protective measures are passive or active. Passive protective measures in nuclear warfare fall in two categories: defense against the detection of troop dispositions by the enemy and defense against the effects of enemy nuclear fires.

a. Defense against enemy detection of troop dispositions may be accomplished through—

(1) Dispersion.
(2) Frequent and rapid movement.
(3) Use of camouflage and concealment.
(4) Movement and operations during periods of low visibility.
(5) Deception.

b. Defense against the effects of a nuclear detonation may be accomplished by using—

(1) Column or line formations.
(2) Dispersion.
(3) Cover afforded by digging.
(4) Armor protection.
(5) Frequent moves.

c. See FM 21–40 for a discussion of active protective measures.

8. Reorganization After Nuclear Attack

Commanders must insure that their commands are prepared at all times to withstand an enemy nuclear strike. They do this by indoctrinating individuals, by preparing and rehearsing SOP's to cover foreseeable situations, and by assuming dispositions which are the least susceptible to nuclear weapon effects consistent with the accomplishment of the assigned mission. In the event of an enemy nuclear strike, commanders must take immediate steps to—

a. Notify higher headquarters.

b. Insure or reestablish command control.

c. Accomplish the assigned mission.

CHAPTER 2

THE COMMANDER, STAFF, AND COMMAND POST(S)

Section I. THE COMMANDER AND DEPUTY COMMANDER

9. General

a. The commander is responsible for everything the battle group does or fails to do. He meets his responsibilities by planning, by making timely decisions, by issuing orders, and by personal supervision. This requires a thorough understanding of the combat and service elements in the battle group, including their tactical and technical employment and their capabilities and limitations, as well as an understanding of the capabilities and limitations of other arms and services that may be associated with the battle group.

b. The commander inspires confidence in his subordinates by sound, decisive action, and by his ability to lead and command men. By aggressive action, he favorably influences the performance of individuals and elements in his command.

c. The commander maintains his unit at a high degree of training, discipline, and combat efficiency, and requires high standards of administration. He promotes esprit within the battle group and cooperative action in its various elements. He encourages initiative, ingenuity, and aggressiveness in all units. To foster self-reliance and initiative, he allows his staff and unit commanders maximum freedom of action in carrying out his orders. He prescribes standing operating procedures covering the normal action to be taken in routine matters.

10. Exercise of Command

a. The battle group commander exercises command through his unit commanders. He prescribes policies, missions, and standards for the battle group. By personal visits to his units and by formal or informal inspections, he insures that his policies and missions are executed properly and that his standards are attained.

b. The commander is responsible for the combat effectiveness of his unit and the personal well-being of individuals in his command. He insures combat effectiveness by developing sound plans and orders, adequately supervising the execution of orders and training, fostering esprit, insuring a high state of morale, making effective use of available personnel and supplies, keeping personnel in good physical condi-

tion, and promoting a high quality of leadership. He insures the personal well-being of individuals by looking after their physical comfort, promoting confidence in and respect for their leaders, providing a sense of accomplishment, and fostering good mental attitudes and a sense of security. By his personal actions and by directing and supervising his staff, he insures that a continuous and effective effort is made to attain the highest possible standard in these matters.

11. Relations With Staff

a. The commander uses his staff to acquire information for him, to make estimates, to prepare detailed plans for implementing his decisions, to coordinate plans and operations, and to relieve him of other details so that he may freely visit his units to supervise their activities personally and obtain personal knowledge of their problems.

b. The commander maintains a close personal relationship with his staff officers, encourages them to express their ideas, and keeps them fully informed of his policies. He insures that a feeling of mutual respect and confidence exists between the staff and the troops, and that the staff is capable and understands its responsibilities to him and the troops. Responsibility for command cannot be delegated, but the commander must delegate the responsibility for staff functions to his staff.

12. Relations With Unit Commanders and Troops

a. The relationship of the battle group commander with his unit commanders is direct and personal. He encourages them to deal directly with him whenever they desire to do so. He makes inspections and informal visits to his unit commanders and troops, and talks to individuals and groups. These visits promote confidence, respect, loyalty, and understanding. They give the commander a first-hand knowledge of the tactical situation and of unit morale and capabilities.

b. Attached units are subject to the decisions and orders of the battle group commander. An attached unit commander is an adviser to the commander on the employment of the attached unit. The battle group commander's relations with attached units are the same as his relations with organic units.

13. Relations With Commanders of Supporting Units

a. The battle group commander keeps commanders of supporting units informed of the situation and of the support needed. When a unit of another arm or service supports the battle group, but is not attached, he may request, but cannot order, the desired assistance. The supporting unit commander should regard the request as an order unless it conflicts with orders of his own commander.

b. The commander of a supporting unit advises the battle group commander on the capabilities and limitations of the supporting unit

and recommends how it may be employed to serve the needs of the supported unit.

c. The battle group commander insures that there is adequate communication and liaison between his battle group and units operating with or in support of it. He keeps supporting units informed of the battle group's movement and plans and of the locations of its forward elements and command posts. Supporting commanders frequently accompany the battle group commander on reconnaissance.

14. Conduct in Combat

a. The battle group commander uses all the means at his disposal to accomplish his mission. His plans, orders, and supervision insure that the actions of all units contribute effectively toward that end. When additional units, weapons, or equipment are required to accomplish the battle group's mission, the commander takes action to obtain them. He coordinates the efforts of his command with the efforts of adjacent and supporting units.

b. The battle group commander goes where he can best direct and control the entire battle group. He may be at an observation post with the main attack element, at his command post, or anywhere else in his area of operations where his presence is required. Before he leaves the command post, he orients his staff on plans to be made or action to be taken if the situation changes. He tells the staff where he is going. When he is away from his command post, he keeps in contact by radio, telephone, or other means. If he issues orders while away from his command post, or if he obtains information of the general situation, he informs his staff and commanders at the first opportunity.

c. After an action starts, the battle group commander influences the battle by a judicious use of supporting fires, by shifting maneuver elements, and by making his presence felt at critical points.

15. Deputy Battle Group Commander

a. The deputy battle group commander is the second in command. He keeps himself abreast of the situation and of the commander's policies so that he can assume command when necessary without interrupting the battle group's operation.

b. The duties of the deputy commander are designated by the commander. They may include, but are not necessarily limited to—

(1) Commanding a task force.

(2) Assisting the commander by commanding or supervising a portion of a defensive sector; commanding or supervising part of the attacking force; commanding a counterattack force; commanding or supervising forces on one axis; commanding a security force.

(3) Serving as adviser to the commander in formulating policy and plans.
(4) Supervising training within the battle group.

Section II. THE UNIT STAFF

16. General

a. The unit staff consists of the executive officer, and the S1, S2, S3, and S4. They assist the commander in the exercise of his duties. The commander and his unit staff should work and think as an entity.

b. See FM 101–5 for a discussion of staff organization and procedure.

c. A staff officer organizes and trains his assistants to function during his absence; frequently, one or more of the other staff officers will act for him while he is away. Before he leaves the command post, he acquaints himself with the tactical situation and determines what he can do on the trip to assist other staff officers and unit commanders. He announces his itinerary and probable hour of return.

d. Figure 2 shows the general relationship between the battle group unit and special staffs. Though not indicated in the diagram, special staff officers have direct access to all members of the unit staff on matters within the primary responsibilities of the unit staff officers concerned. In the interplay of staff relationship—

(1) The unit staff insures that the special staff is informed of the plans, policies, and decisions of the command. It obtains information, estimates, and recommendations from the special staff and uses this data in preparing integrated reports, estimates, recommendations, and plans for the commander. Staff officers, both unit and special, must keep each other informed on matters of common interest.
(2) A special staff officer usually deals with the commander through an appropriate unit staff officer but, at times, technical considerations of a particular problem may make it desirable for him to present information and recommendations directly to the commander. No general rule can be prescribed for determining which procedure will be followed for specific occasions. Whenever a special staff officer has direct contact with the commander, he must inform the appropriate unit staff officer of the information he gave and received and the recommendations he made to the commander.

17. The Executive Officer

a. General. The executive officer is the commander's principal staff assistant and adviser on staff matters. He transmits the commander's decisions to the staff sections and to subordinate units when applicable. He does this in the name of the commander.

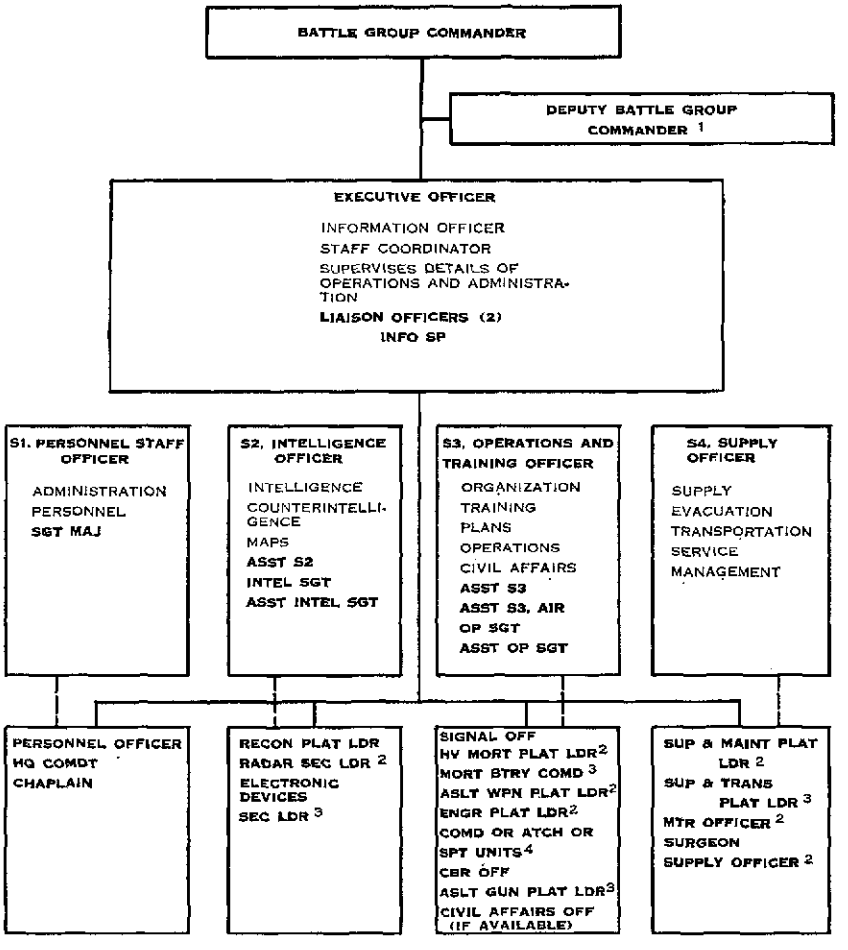


Figure 2. Relationship between unit and special staffs.

b. Duties. The executive officer's specific duties vary with the individual commander, but ordinarily he performs duties in the unit staff similar to those of the chief of staff on a general staff (FM 101–5). In addition, the executive officer is responsible for the conduct of the troop and public information program. He—

(1) Determines the information needs of the battle group.

(2) Acts as the commander's adviser on all matters pertaining to public information.

(3) Supervises and coordinates the publication of unit newspapers and other unit news periodicals.

c. Location. There is no specified location for the executive officer during combat. The commander designates a location for him that is appropriate. It is generally accepted that his place is with the main command post, where he can keep abreast of the situation and better coordinate staff actions. Normally, the commander and executive officer should not both be absent from the command post at the same time. In any battle group movement, the executive officer normally moves with the last command post echelon, the commander going with the first.

18. Personnel Staff Officer (S1)

a. The S1 is charged with staff responsibility for administration and personnel management within the battle group. He is assisted by a personnel officer (warrant officer), the sergeant major, and such enlisted assistants as are authorized in the appropriate TOE. The S1, sergeant major, and designated assistants are located within the command post.

b. The S1 is responsible for the staff supervision of duties charged to the personnel officer. In the field, the personnel officer and his group are normally in the division rear echelon (administration center), but they may be with the battle group field trains.

c. The S1 performs, in general, the functions of the personnel officer (G1) on a general staff and functions similar to those performed by the adjutant general and the commander's personal staff (FM 101–5). He may also perform the personnel functions of those special staff officers who are not present in a battle group staff, such as the inspector general, judge advocate, provost marshal, educational development officer, and special services officer.

d. The sergeant major assists the S1 in matters pertaining to personnel and administration, and supervises the work of the clerical personnel in the headquarters. He routes correspondence received to the interested staff sections. He holds periodic meetings with the first sergeants of the battle group to disseminate administrative information. In addition, he supervises the enlisted personnel of the headquarters in matters pertaining to personal appearance and discipline.

19. Intelligence Officer (S2)

a. The primary responsibility of the intelligence officer is to keep the commander and all interested agencies and sections fully informed on matters pertaining to combat intelligence and counterintelligence. He collects, evaluates, and interprets information to determine the effects of weather, terrain, the enemy, and civilian population on the mission, and insures that information and intelligence are disseminated

expeditiously to higher, subordinate, and adjacent units. The S2 also has some operational functions pertaining to agencies concerned in the collection, evaluation, interpretation, and dissemination of information and intelligence. He or the assistant S2 should be a qualified nuclear weapons employment officer.

b. In addition to performing duties in the unit staff similar to those of the G2 as outlined in FM 101–5, the battle group S2—

(1) Prepares the daily battle group patrol plan (coordinating with the S3).

(2) Plans, supervises, and briefs reconnaissance patrols; briefs combat patrols on the terrain, weather, and enemy situation; debriefs combat and reconnaissance patrols; and insures the preparation and dispatch of patrol reports (coordinating with the S3).

(3) Supervises battle group surveillance activities and prepares the surveillance plan (coordinating with the S3).

(4) Plans and supervises the operation of the reconnaissance platoon on intelligence missions (coordinating with the S3).

(5) In coordination with S3, plans and supervises the operation of the radar section (infantry division battle group)/electronic devices section (airborne division battle group).

(6) Supervises the operation of attached intelligence specialist teams.

(7) Maintains a current intelligence estimate and situation map, insures that important items of information and intelligence are recorded in the unit journal, and prepares intelligence summaries and intelligence portions of operation orders and annexes, operational situation reports, and the unit SOP.

(8) Coordinates radiological survey operations, maintains the radiological survey situation map, interprets radiological survey data, provides fallout information to the commander and staff, and disseminates radiological fallout information according to established procedures for handling intelligence.

20. Assistant Intelligence Officer (Assistant S2)

The assistant intelligence officer assists the S2 as directed. He represents the S2 in his absence. He acts as the S2 Air for the battle group and coordinates requests for immediate visual and photo air reconnaissance with the S3 Air. He forwards these requests to the division G2. He prepares and forwards preplanned requests for visual and photo air reconnaissance. He actively supervises target acquisition activities and the activities of the intelligence sergeant (infantry division battle group only).

21. The Operations and Training Officer (S3)

a. The operations and training officer has staff responsibility for

matters pertaining to the organization, training, and combat operations of the battle group. He should be a qualified nuclear weapons employment officer. His specific duties are similar to those prescribed for the G3 in FM 101–5, except that he does not have responsibility for the information and education programs.

b. At battle group level, the S3 is responsible for civil affairs activities.

22. Assistant Operations and Training Officer (Assistant S3)

The assistant S3 is the principal assistant of the S3 and performs specific duties assigned to him by the S3. He is best employed to assist in planning functions and to relieve the S3 of some of his administrative workload by assembling data and preparing reports. He is prepared to assume the duties of the S3 and acts for him in his absence.

23. S3 Air

a. The S3 Air is an assistant S3. As a member of the Army air-ground system, he coordinates the employment of close air support with the battle group ground operations. He coordinates closely with the fire support coordinator.

b. Specifically, the S3 Air—

(1) Prepares standing operating procedures for air-ground operations (coordinating with S2 Air).
(2) Prepares the air support portion of the fire support plan.
(3) Prepares or processes requests for immediate and preplanned close air support.
(4) Recommends and disseminates information on the location of the bomb line.
(5) Assists the S2, if required, by forwarding requests for immediate tactical air reconnaissance.
(6) Supervises joint recognition and identification procedures within the battle group.

24. Supply Officer (S4)

a. The S4 plans, coordinates, and supervises the operation of supply, evacuation, transportation, and services (maintenance, bath, laundry, etc.) within the battle group. By coordinating with other staff officers of the battle group and by detailed planning, he insures that his services adequately support the tactical plan of the battle group and that they function according to the orders of higher commanders.

b. The S4 coordinates and supervises the activities of the following operating personnel:

(1) The supply and maintenance platoon leader/supply and transportation platoon leader.
(2) The motor officer (infantry division battle group).

(3) The surgeon.
(4) Supply officer (inf div BG).
(5) The battle group supply sergeant (abn div BG).

c. The other specific duties of the S4 are similar to those prescribed for the G4 in FM 101–5.

Section III. THE SPECIAL STAFF

25. Surgeon

The battle group surgeon is a medical officer who is assigned to battle group headquarters. He controls the employment of the medical platoon and attached medical units. His specific duties are similar to those listed for the surgeon in FM 101–5.

26. Signal Officer

The signal officer coordinates and exercises technical supervision over the training and activities of communication personnel throughout the battle group. He exercises operational control over the communications platoon of Headquarters and Headquarters Company. He keeps himself informed of current, future, and planned activities of the battle group. He bases his action on the policies of his commander and the standing operating procedure of the next higher unit. Under the staff supervision of, and in coordination with, the S3, he prepares plans and recommendations for the employment of all signal communications and electronic warfare means. His principal duties are similar to those listed for the signal officer in FM 101–5. In addition he—

a. Coordinates with the S1 to select the exact location for the command post.

b. Coordinates with the S2 on the location of observation posts and on communication security measures.

c. Obtains current signal operation instructions (SOI) and standing signal instructions (SSI) from higher headquarters. He prepares and distributes extracts of the SOI and SSI.

d. Prepares for the commander's approval orders and codes, as authorized, and the battle group communication SOP.

e. Submits recommendations for paragraph 5 of the battle group operation order.

f. Coordinates with the platoon leader of the battle group area support platoon/area communication center platoon at the forward signal center.

g. Exercises operational control over any elements of the division signal battalion attached to the battle group.

27. Headquarters Commandant

The headquarters commandant (the company commander of the

headquarters and headquarters company) utilizes headquarters company personnel in the performance of his duties. His duties are similar to those listed for the headquarters commandant in FM 101–5. In addition he—

a. Supervises the custody and evacuation of prisoners of war and the selection of the prisoner of war collecting point (coordinating with the S1, S2, and S4).

b. Supervises the custody and return of stragglers to organizations.

c. May command the quartering party (coordinating with the S1).

28. Fire Support Coordinator

a. In the infantry division battle group the fire support coordinator is the commanding officer of the direct support artillery battalion; in the airborne division battle group he is the mortar battery commander. The fire support coordinator works closely with the battle group S3 who has unit staff supervision for fire support matters.

b. The liaison officer is the fire support coordinator's principal assistant and represents him when he is absent from the battle group.

c. The fire support coordinator's duties include—

(1) Advising the commander and staff on all fire support matters.
(2) Preparing the fire support portion of the battle group SOP.
(3) Preparing battle group fire support plans and artillery fire plans.
(4) Coordinating all supporting fires (in conjunction with the S3).
(5) Keeping other artillery units informed of the battle group situation.
(6) Planning and coordinating air defense according to the policy established by higher headquarters and the battle group commander's directives.

29. Chaplain

a. The battle group chaplain is the senior chaplain assigned to the battle group. He is the principal adviser to the commander on religion and morality in the command, including the morals and morale of personnel. He supervises and coordinates the religious and moral program of the command.

b. His duties are similar to those listed for the chaplain in FM 101–5. See also AR 165–15 and FM 16–5.

30. Liaison Officers

a. Liaison officers normally function under the direction of the executive officer or his representative. The battle group commander may make them available for use as assistants to the S3 or other staff sections when they are not engaged in liaison activities.

b. The S3 is responsible for briefing and debriefing these officers.

c. For duties of liaison officers, see FM 101–5.

31. Personnel Officer

a. The personnel officer heads the personnel section of the battle group. This section is composed of the personnel sergeant and designated clerks from headquarters and headquarters company (FM 7–21 and FM 57–21). The section maintains the company and battle group records, reports, rosters, returns, files, and correspondence prescribed by AR 345–5. The personnel officer is designated as assistant adjutant. In combat, his group is separated from the battle group headquarters and may be located at the division administration center or with the battle group field trains.

b. The personnel officer is charged with the preparation, maintenance, and safekeeping of all records, documents, correspondence, and personnel statistics that are not required to be kept at company or battle group command posts. He—

(1) Administers all individual personnel records of which he is custodian.

(2) Acts as custodian of company funds when the companies go into combat or when, in the opinion of the battle group commander, funds might be lost because of casualties. He receipts for the funds and for all papers pertaining to them. (He has no authority to make disbursements.)

(3) Furnishes the disbursing officer with military pay vouchers as required.

(4) Assists unit commanders in the preparation of rosters and personnel requisitions and lists required by higher headquarters.

(5) Advises and assists unit commanders in the assignment and classification of personnel, using records maintained under his supervision.

(6) Trains personnel to replace clerk who operate with the battle group staff.

32. Supply and Maintenance Platoon Leader/Supply and Transportation Platoon Leader

The supply and maintenance platoon leader/supply and transportation platoon leader commands his platoon and, as the agent of the S4, operates the battle group field trains (FM 7–21 and FM 57–21). He keeps informed of supply and maintenance plans and uses the personnel of the platoon to execute them.

33. Motor Officer (Inf Div BG)

The motor officer advises the commander and his staff on motor

transportation, and exercises technical supervision over the operation and maintenance of all motor transportation in the unit and over the training of motor transportation personnel. He operates the combat trains under supervision of the S4 (FM 7–21).

34. CBR Officer

a. The battle group commander designates a qualified officer to act as the chemical, biological, and radiological warfare officer. (The company executive officer, headquarters and headquarters company may be so designated.) As the CBR officer, he advises the commander and staff on the aspects of CBR warfare. In performing his duties as CBR officer, he is under the staff supervision of the S3. He maintains liaison with the division chemical officer. He prepares the CBR SOP, insuring that the capabilities of the reconnaissance and engineer platoons are used to advantage in his plan.

b. The CBR officer also—

(1) Supervises CBR training in the use of decontaminating means available in the battle group (coordinating with the S3).
(2) Inspects and makes recommendations as to the status of CBR individual and organizational supplies and equipment (coordinating with the S4).
(3) Supervises the installation and maintenance of CBR defensive measures for the protection of personnel, equipment, and supplies.
(4) Supervises the decontamination of personnel, equipment, and supplies.
(5) Supervises the CBR reconnaissance of routes and areas to be used.
(6) Makes recommendations for the employment of CBR agents, weapons, and equipment.
(7) Coordinates with the S2 to obtain information of the enemy's use of CBR agents and equipment.
(8) Coordinates the use of organic and special CBR detection devices.
(9) Coordinates with the S1 on the allocation of CBR trained personnel.
(10) Supervises monitoring personnel engaged in radiological and chemical survey operations (coordinating with the S2).

c. For additional details, see FM 3–5, FM 7–21, FM 21–40, and FM 57–21.

35. Combat Support Company Commander (Inf Div BG)

In addition to commanding his company, the combat support company commander performs other duties as directed by the battle group commander. Such duties may include, but are not limited to—

a. Supervising and controlling rear area security.

b. Manning the alternate battle group command post.

c. Operating a task force headquarters.

36. Commanders of Attached and Supporting Units

Commanders of attached and supporting units are advisers to the battle group commander and staff on matters pertaining to the employment of their units. They—

a. Submit plans and recommendations for the employment of their units based on their current combat capabilities.

b. Coordinate their activities with the proper battle group agencies and those of higher and adjacent units.

37. Assault Weapon Platoon Leader/Assault Gun Platoon Leader

The assault weapon platoon leader/assault gun platoon leader recommends to the battle group commander methods of employing his platoon (FM 7–( ) "Combat Support Company, Infantry Division Battle Group" (when published) and FM 57–21).

38. Engineer Platoon Leader (Inf Div BG)

When an engineer company is not in support of or attached to the battle group, the engineer platoon leader serves as a special staff officer, advising the commander on engineer matters. See also FM 7–21.

39. Reconnaissance Platoon Leader

The reconnaissance platoon leader recommends to the commander methods of employing his platoon. See also FM 7–( ) "Combat Support Company, Infantry Division Battle Group" (when published) and FM 57–21.

40. Other Special Staff Officers

Tables of organization do not provide special staff officers such as safety, claims, and postal officers. The battle group commander appoints one of his officers, as required, to serve in a special staff capacity in addition to his other duties.

Section IV. COMMAND POST OPERATIONS

41. General

a. All communications are centered at the command post. The battle group commander, the unit staff, necessary special staff officers, liaison officers, and necessary enlisted assistants constitute the group which operates from the command post. The command post is organized to furnish the necessary space and facilities for this group.

b. Under conditions of nuclear warfare, it is highly desirable to establish an alternate battle group command post. Such a command post is established at the discretion of the battle group commander. It must be prepared to assume control whenever the main command post is not able to function due to enemy action. Personnel to man the alternate command post may come from the headquarters of the combat support company or from units as directed by the battle group commander. Minimum communications that will assure retention of control must be located in the alternate command post.

42. Location

a. The command post is located to facilitate control of the battle group. Considerations that influence its location are troop dispositions, routes of communication, communication requirements, type of tactical operation, space required, cover, concealment, and security. Entrances to towns and villages, crossroads, and other prominent terrain features which may attract enemy fire are avoided. Alternate locations are selected to which the command post may be moved, if necessary. In the attack, the initial location is well forward to avoid early displacement and to facilitate control. In wooded or rolling terrain, it is usually located farther forward than in terrain offering less cover and concealment. In defensive situations, it generally is located towards the rear of the defensive area to avoid displacement in the event of a local enemy penetration.

b. If not prescribed by a higher commander, the general location of the command post is prescribed by the battle group commander. The S3 makes recommendations for its location after consultation with the signal officer (who suggests the general location from a communication viewpoint) and with the S1 (who suggests possible locations from the quartering viewpoint). The battle group commander then designates the general location by reference to some terrain feature which is easily located on the ground and on the map. The S1, in conjunction with the signal officer, selects the exact site. Guides are posted to direct personnel to the command post and vehicles to the parking area. Tactical marking signs may be used in addition to guides.

c. During combat operations, the battle group commander may form a command group to operate forward of the command post. Such a group is considered a subdivision of the command post. It has no fixed composition, but consists of personnel who can best assist the battle group commander in a given situation. Normally, this will be the S2, S3, fire support coordinator or his representative, forward air controller, and necessary liaison and communication personnel, along with vehicles equipped with command radio facilities. The command group maintains continuous communication with the command post to insure rapid

exchange of information on new developments in the situation, and rapid transmission of new or supplementary orders from higher headquarters and other pertinent information and directives. By operating with a command group, the battle group commander can more closely supervise combat operations, which enables him to make decisions promptly and change plans as required.

d. During movement, when the battle group is mechanized and/or motorized, the command group normally operates near the head of the main body or the head of the battle group force making the main attack. The command post is located toward the rear of the battle group formation in a position which promotes security and facilitates effective communication with other elements of the command.

43. Establishment and Interior Arrangement

a. The S1 determines the interior arrangement of the command post in coordination with the signal officer and the headquarters commandant. He recommends the space or area to be occupied by the commander and each staff section and coordinates with other activities on their location. Installations should be dispersed and dug in to insure minimum destruction or disruption of operations by enemy attack.

b. The message center is located near a natural entrance to the command post where incoming messengers can find it easily and outgoing messengers can be dispatched quickly.

c. The motor park is established in a concealed location accessible to vehicles. It is located so that its possible detection from the air will not disclose the location of the command post proper.

d. Radio sets are sited to give the best transmission and reception and with consideration for the possibility of the enemy pin-pointing the location with direction-finding equipment. Sets with remote control facilities may be sited without regard to the location of the user. Radio vehicles are parked at the radio station.

e. The panel display and message drop and pickup area is located near the radio station. The area should be fairly level, free from high weeds and brush, and not near high trees or bodies of water.

f. The switchboard is installed near incoming wire circuits, away from noise and interference and near the perimeter of the command post. Its location should afford cover and concealment.

44. Operation

a. The command post is organized for continuous operation. All installations operate in shifts, so that personnel can get needed rest.

b. Normally, incoming messages go first to the message center. Here they are receipted for, and are sent to the sergeant major in the S1 section, who then supervises their circulation within the command post.

He routes them first to the staff section most interested in their contents, then to other staff sections for their information. Each staff officer who receives the message initials it and indicates any action he takes.

c. All incoming messages are addressed to the commanding officer, but they seldom are sent to him directly. It is the duty of the staff to act on messages and, when necessary, inform the commander of their contents without delay.

d. Outgoing messages are delivered to the message center in duplicate. The originator of important messages affecting the unit or staff section insures that a summary is entered in the unit journal. The messages are processed and recorded at the message center. When a receipt or acknowledgment has been obtained for the original copy, the message center clerk enters the time he receives the receipt or acknowledgment and his signature on the duplicate copy of the message and places it in the message center dead file. The message center dead file is turned over to the S1 or his representative at frequent intervals for inclusion in the journal file, if required.

45. Displacement

a. The command post is displaced when necessary to maintain control of battle group units.

b. When a displacement is contemplated, the S3 coordinates with the battle group signal officer and the S1 and recommends to the commander (or, frequently, the executive officer) a new general location and a time for displacement. When the displacement is directed, the S1 coordinates with other staff officers of the battle group as follows:

(1) With the S2 to determine the weather forecast, road conditions and trafficability, and the location of guerrilla activity and bypassed enemy.
(2) With the S3 to determine the general location, troop disposition, tactical plans, and the time that the new area will open.
(3) With the S4 to determine road priority and transportation.
(4) With the signal officer as to the time the quartering party will depart.
(5) With the headquarters commandant concerning the physical movement of the command post, arrangements for security and guides, and the time that the quartering party will depart.

c. The quartering party, consisting of the quartering officer (normally the S1 or headquarters commandant), his enlisted assistants, the security element, guides, and the signal officer and his enlisted assistants, moves to the general location to select the exact site. After selecting the exact site and designating the location of each installation, the quartering party posts guides to direct incoming personnel into the

proper area. Personnel at the old command post are notified when arrangements are completed.

d. The command post displaces in two echelons. Usually, the first consists of the battle group commander, S2, S3, liaison personnel, and certain enlisted personnel. The second echelon continues to operate under control of the executive officer. The first echelon moves to the new area and prepares for operations. Division headquarters and organic, attached, and supporting units are notified as soon as possible (preferably in advance) of the exact location and time of opening of the new command post. When it is ready to operate, the executive officer is notified. The new command post opens and the old command post closes simultaneously. The second echelon then joins the first echelon. A guide is left at the old command post location for a short time to direct messengers to the new command post.

46. Reestablishment

Plans are prepared and units are trained for the action to be taken if the unit headquarters is totally or partially destroyed. These plans minimize confusion and the time needed to reestablish control. They provide for the immediate assumption of command by the senior officer present and for the formation of a replacement staff. If an alternate command post has been established, the new unit headquarters will be formed there. Appropriate parts of the plans are included in standing operating procedures.

CHAPTER 3

ADMINISTRATION

Section I. GENERAL

47. Basic Considerations

The battle group's supply and maintenance operations are performed by its supply and maintenance platoon/supply and transportation platoon, while personnel activities are handled by the personnel section. See FM 7–21 and FM 57–21 for the mission, capabilities, organization and individual duties of personnel of the supply and maintenance platoon/supply and transportation platoon and the personnel section.

48. Effects of Enemy's Use of Nuclear Weapons on Administration

a. Logistical Aspects. Following a nuclear attack, battle group units are reequipped and resupplied from the nearest available sources (battle group or division). Supply personnel are primarily concerned with assisting unit commanders in preparing their units to effectively continue the mission.

(1) Medical self-aid is practiced in all units. Personnel requiring evacuation are held at casualty collecting points or aid stations where they are sorted and screened before evacuation. Evacuation from the battle group is a division responsibility.

(2) Battle group transportation is used for evacuation and resupply on a priority basis. Unit and route priorities prescribed in plans are implemented. Only those vehicles engaged in (or in support of) damage control activities and those required for tactical operations are permitted to enter the battle group area.

(3) Decontamination activities are limited to those essential to continuing support of the battle group mission. Engineer decontaminating equipment may be used to assist in the decontamination.

(*a*) The following have high priority for decontamination; the exact priority depends on the situation confronting the unit:

1. Routes within the contaminated area.

2. Communication equipment.

3. Weapons.
4. Supply installations
5. Evacuation facilities.

(*b*) The following have high priorities for repair and reconstruction:
1. Signal communication and transportation facilities.
2. Medical facilities.
3. Supply installations.
4. Field fortifications.

(4) Unit commanders are responsible for damage control operations in their own areas. They insure that all measures possible are practiced to minimize the effects of a nuclear attack. The two most important measures, so far as supply operations are concerned, are placing the field trains and combat trains where they will receive the maximum degree of protection from the terrain, and keeping all supplies, except classes II and IV, mobile when possible (mounted on vehicles).

b. Personnel Aspects.

(1) *Immediate action following the attack.*

(*a*) The senior officer or noncommissioned officer in each unit gains control of his unit immediately so he can continue the assigned mission.

(*b*) Commanding officers estimate losses and report their findings to higher headquarters. The S1 notifies G1 of the estimated losses and makes arrangements to secure replacements by emergency requisition. Replacements may be made by individual or unit.

(*c*) Each company makes a detailed check of its losses as soon as possible to obtain accurate loss figures for its daily strength message to higher headquarters.

(*d*) Each company reports radiation exposure of each platoon to the battle group headquarters for use in predicting future radiation casualties.

(2) *Recovery and disposition.* The recovery of bodies in a contaminated area is deferred until it is safe for burial details to enter the area. Burial details wear protective clothing. When dealing with large numbers of bodies, it may be more practical to bury them in place than to evacuate them, even when the bodies are not contaminated. If they are buried in place, additional recovery and disposition personnel from higher headquarters may be required to assist in identifying the bodies. Graves are appropriately marked and reported to headquarters.

Section II. SUPPLY

49. Supply and Maintenance Platoon/Supply and Transportation Platoon

The supply and maintenance platoon/supply and transportation platoon of headquarters company performs supply, maintenance, (this function in the airborne division is performed by the maintenance battalion support group), and transportation functions for the battle group. The platoon is commanded by a platoon leader who is the agent of the supply officer (S4).

50. Battle Group Field Trains

The battle group field trains are the focal point for supply operations. They are operated by the supply and maintenance platoon/supply and transportation platoon leader. They are located where they can efficiently provide logistical support for the battle group. The activities within the field trains are under the overall supervision of the S4. See also FM 7–21 and FM 57–21.

51. Headquarters, Supply and Maintenance Platoon/Supply and Transportation Platoon

This headquarters is an installation organized to facilitate the control and flow of supplies to the battle group field trains, combat trains or direct to the combat elements. Its personnel consolidate unit requests as required, post and annotate them, and prepare requisitions for forwarding to division. In general, activities within the field trains are supervised from the supply and maintenance platoon/supply and transportation platoon headquarters. See also FM 7–21 and FM 57–21.

52. Functions of Supply Within the Battle Group

Supply within the battle group involves three separate functions: determining supply requirements; requesting supplies; and receiving and distributing them. At times supplies may be temporarily stored until they can be distributed or they may be held as small mobile reserves to support the tactical situation. It is the responsibility of all commanders to insure that the determination of requirements is realistic and economical, and reflects only actual needs for efficient unit operation and maintenance; that requests are submitted on time; that supplies are promptly procured; that they are properly safeguarded; and that they are distributed to the right units at the right time in the right amounts and in serviceable condition.

53. Classes of Supply

See FM 7–21 and FM 57–21.

54. Requesting and Distributing Procedures

See FM 7–21 and FM 57–21.

55. Aerial Resupply

See FM 57–30 and FM 57–35.

56. Garrison Operations

Normal garrison administrative operations are performed within the battle group as prescribed in applicable regulations.

Section III. EVACUATION AND TREATMENT

57. General

The medical platoon of headquarters company furnishes medical service to include emergency medical treatment, evacuation of patients within the battle group area, and technical supervision of hygiene and sanitation measures.

58. Organization, Functioning, and Employment

See FM 7–21 and FM 57–21.

Section IV. TRANSPORTATION AND SERVICE

59. Transportation

a. Ground transportation for the infantry division battle group consists of vehicles ranging from ¼-ton to 5-ton size. The airborne division battle group's ground transportation is limited to vehicles ranging from ¼-ton to 2½-ton capacity. The 2½-ton trucks are not normally included in an airborne assault unless linkup is proposed.

b. Vehicular traffic control within the battle group area is a responsibility of the S4. He exercises control through the headquarters supply and maintenance platoon/supply and transportation platoon, implementing traffic control measures as required.

c. The availability of vehicles is an important planning consideration and every effort is made to utilize all transportation services to the maximum. The infantry division transportation battalion's light truck company can provide transportation for one infantry division battle group; additionally, its two personnel carrier companies can provide transportation for nine and one-half rifle companies (assuming 100 percent availability of carriers). (See FM 55–37.)

60. Maintenance

a. The infantry division battle group can perform within its capabilities second echelon maintenance on ordnance and signal equipment (FM 7–21).

b. The airborne division battle group's organic maintenance capability is limited to that first echelon maintenance that can be performed by the user (FM 57–21).

61. Mess Management

Unit messes normally operate with the units in garrison and while in reserve. At other times they operate under battle group control. See FM 7–21 and FM 57–21 for information regarding field messing.

Section V. UNIT RECORDS AND REPORTS

62. Unit Journal

A unit journal is the official chronological record of events affecting the battle group. One journal is maintained for each staff section or one for the entire headquarters, as directed by the commander or higher headquarters. If only one journal is maintained for the entire headquarters, the S1 is normally responsible for it. The purpose, use, and form of the unit journal are discussed in FM 101–5.

63. Worksheet

Each unit staff officer keeps notes of information pertaining to his section on a worksheet. It provides an orderly and readily available means of recording information for use in the preparation of reports, orders, estimates, and plans. For an example and further discussion of the worksheet, see FM 101–5.

64. Reports

Reports are used as a basis for planning. The type and scope of staff and unit reports vary with the requirements of the commander, higher headquarters, and the purpose of the report. For further discussion, see FM 101–5.

CHAPTER 4

TROOP MOVEMENTS

Section I. GENERAL

65. Introduction

Troop movements are classified as either administrative or tactical. Administrative troop movements are those conducted when ground contact with the enemy is remote and when there are no security or secrecy requirements beyond those necessitated by enemy aircraft or long-range weapons. Movements made under combat conditions are tactical, and special security measures become important.

66. Methods of Movement

To accomplish its missions, the battle group must plan and execute movements by foot, motor, air, rail, and water. Regardless of the method employed, detailed planning, precise scheduling, and strict control are the means to insure that elements of the battle group reach the destination at the proper time and in condition to perform their assigned tasks effectively.

Section II. PREPARING AND PLANNING FOR MOVEMENTS

67. Standing Operating Procedure

a. A standing operating procedure facilitates the planning and conduct of troop movements. The battle group commander establishes the necessary procedures for the battle group as a whole and requires the company and battery commanders to establish similar procedures for their units.

b. Some of the routine items that can be included in the SOP are the composition of serials and march units, rates of movement, formations, time intervals and distances, organization of quartering and reconnaissance parties, and reporting instructions. Orders for a particular movement modify or amplify these SOP's to fit the requirements of a particular situation.

68. Planning

The basic considerations in planning any movement are: the mission; what is to be moved (troops and equipment); and the type,

number, and characteristics of transport available for the move. Regardless of the type of movement undertaken, its success depends largely upon the thoroughness with which it is planned. A successful move is characterized by the efficient employment of the available means of transportation, adherence to prescribed routes and schedules, and the ability of the unit to accomplish its assigned mission upon arrival at the destination. Plans for all movements include the—

a. Organization of troops.

b. Packing, marking, and loading of equipment.

c. Assembly of troops and assignment to transportation.

d. Provision for mess, medical care, and rest en route.

e. Reassembly of troops and equipment at the destination.

f. Security measures.

69. Training

Practice in planning, loading, and conducting all types of movements is essential to reduce wasteful motion and to perfect standard procedures. Every opportunity is taken to integrate movement training of various types with other training. The supervision of such training provides the battle group staff with useful data and experience.

70. Warning Order

The battle group commander issues a warning order for a movement as early as possible to give his units maximum time for preparation. The warning order alerts the units and specifies the type of movement and the approximate departure time. It may also include other pertinent information which does not conflict with secrecy requirements.

71. Route Reconnaissance Party

a. As soon as possible after receiving the warning order, a route reconnaissance party is dispatched to confirm and supplement data obtained from map studies, higher headquarters, and air reconnaissance. The route reconnaissance party for the infantry division battle group is usually made up from elements of the reconnaissance and engineer platoon. In the airborne division battle group, division may make engineer personnel available for this party. It has three main functions:

(1) To obtain detailed information of the route.

(2) To determine the amount of engineer work necessary along the route.

(3) To determine the number of guards and guides required.

b. Instructions to the route reconnaissance party specifically state the extent and nature of the information required and the time and place the report is to be submitted.

c. When time does not permit the party to complete its examination of the entire route before the march begins, it is dispatched as much in advance of the column as possible.

72. Quartering Party

a. A quartering party precedes the battle group to a new destination to facilitate its arrival and reception by making necessary administrative arrangements. The quartering party usually consists of the S1 or the headquarters commandant, a representative of S4, the signal officer, a representative from each company, and necessary communication, medical, and security personnel.

b. The duties of the quartering officer are to—

(1) Select the specific site, if this has not been determined definitely, and arrange for its occupancy.

(2) Allot portions of the battle group area to each subordinate unit.

(3) Select locations for the command, communications, and administrative installations.

(4) Make sanitary inspections and preparations.

(5) Insure that each unit is guided from the release point to its assigned area.

c. The headquarters commandant is responsible for posting route markers and guides along the route.

73. Trail Party

The trail party follows the march column. It includes the personnel and vehicles necessary to assist the trail officer in—

a. Inspecting the vacated area, and correcting and reporting any deficiencies.

b. Preventing straggling.

c. Placing necessary guards, flags, or lights to warn traffic approaching from the rear.

d. Picking up guides and route markers.

e. Disposing of disabled vehicles and their loads.

f. Providing medical care.

74. Organization of Battle Group Column

a. The battle group column is organized into serials to facilitate control by the battle group commander and to simplify the issuance of orders. Units that occupy the same general initial location and can be governed by the same set of instructions as to start point, route, destination, rate of march, etc., are organized in one serial.

b. Serials are subdivided into march units. The number of march units is determined by the probable future mission of the battle group and the number of vehicles which can be controlled readily by a single commander during the march.

c. Serials are given numerical or alphabetical designations in the sequence of their expected arrival at the destination. They retain their command unity so far as possible. March units may be given numerical or alphabetical subdesignations.

75. Road Movement Order

The battle group road movement order may be either written or oral. A complete order designates the route, critical points, destination, schedule, rate, time intervals, formation, organization of the column, serial commanders, and other details not covered by standing operating procedure. Road movement tables and strip maps usually accompany the movement order as annexes and appendixes. (See FM 101–5 for a sample movement order, and FM 101–10 for a sample road movement table, road movement graph, and strip map.)

76. Initial Point

The initial point is the point where the column is formed by the successive arrival of serials and march units. It is a distinguishable terrain feature on the route of march that all units can reach without countermarching and without crossing the route of another unit.

77. Release Point

The release point is a distinguishable terrain feature on the route of march near the destination where control of specific elements of the column reverts to their respective commanders. Guides from the quartering party meet the incoming column at the release point to insure an uninterrupted movement into the new area.

Section III. FOOT MARCHES

78. General

The battle group's tactical success depends largely upon the foot marching capability of its troops because, without reinforcements, it has no other means of sustained mobility. The troops must be conditioned early to strenuous marches and their proficiency must be maintained. Some of the battle group personnel can ride on organic vehicles, but the number is limited by the capacity of the vehicles after organic equipment has been loaded.

79. *Organization and Conduct of Foot Marches*

See FM 21–18.

Section IV. MOTOR MOVEMENT

80. General

a. Although the battle group cannot be completely motorized without the attachment of reinforcing vehicles, it may conduct a combined foot and motor march or shuttle its foot elements in successive echelons by organic vehicles.

b. Maximum use is made of multiple routes when available. Motor movements are often conducted during darkness to provide secrecy.

81. Nonorganic Transportation

a. When reinforcing transportation is attached to the battle group, the battle group commander is ordinarily given the following information:

(1) The number and type (or capacity) of the vehicles.
(2) The regulating point(s) and the times when the vehicles pass to and from his control.

b. A staff officer and guides from battle group units meet the incoming vehicles at the regulating point and dispatch them to the units to be entrucked.

82. Supervision of the Column

a. Although the position of the column commander's command post is designated in the movement order, he himself moves where he can best control his unit. Army aircraft are useful during marches for control and liaison.

b. The command posts of serial and march unit commanders usually move at the head of their respective elements, but there is no fixed position for the commanders. A control officer at the head of each serial and march unit is responsible for leading his unit over the designated route at the prescribed rate of march.

c. Staff officers assist the commander in supervising the movement by verifying the route of march at frequent intervals, especially when changes of direction are made; by insuring that adequate intervals are maintained; by seeing that guides are properly posted and instructed; and by determining and eliminating the cause of any unauthorized halt.

d. Military policemen may be attached to the battle group to establish traffic control posts. They enforce movement priorities, transmit orders, and control other traffic.

83. Time Interval

Serials and march units are separated by time intervals prescribed in the road movement order. Properly selected time intervals dis-

perse the column and prevent congestion at critical points along the route.

84. Halts

Usually, a 15-minute halt is made after the first 45 minutes of marching and a 10-minute halt is made at 2-hour intervals thereafter. All march units halt simultaneously. Vehicles clear the roadway during a halt. Guards should be at the head and tail of each march unit to control passing traffic. One man from each vehicle, other than the driver, watches for signals within the march unit. At prolonged halts for maintenance, rest, and feeding, locations are selected which permit dispersion off the road.

85. Communication During the March

Communication within the march column normally is maintained by radio and messengers, supplemented by visual and sound signals. Messages may be delivered to march unit commanders as they pass traffic control posts. Communication between the battle group and adjacent columns and with higher commanders is ordinarily governed by the standing operating procedure of the division.

Section V. RAIL MOVEMENT

86. General

Orders directing a movement by rail indicate the station of entrainment, the date and time of arrival and/or departure, the destination, and the purpose of the movement. The battle group commander is responsible for the preparation of plans and tables regulating the entrainment and departure of the elements of this command. Details of the move are coordinated with the transportation officer of the area in which the movement originates. In a theater of operations, all contacts with civilian or foreign railroads are made through the transportation officer.

87. Preparatory Measures

a. When notified of an impending movement by rail, the battle group commander—

(1) Appoints a rail movement staff to plan and coordinate the overall movement.

(2) Completes as much planning as possible before he receives the movement order.

b. Upon receipt of the movement order, the battle group commander—

(1) Gives full written details of the movement to the local transportation officer who arranges for the necessary rail transportation.

(2) Appoints a train commander for each train in the movement.
(3) Dispatches advance or quartering parties.

88. Supplemental Information

For technical and logistical data and for planning forms and tables, see FM 101–10; for duties and responsibilities of personnel and reference data concerning entraining and detraining, see AR 55–145.

Section VI. AIR MOVEMENT

89. General

With the exception of elements of the reconnaissance platoon, the infantry division battle group is air transportable. The airborne division battle group is entirely air transportable. The battle group keeps a current record on personnel and equipment to facilitate rapid planning for and conduct of air movements.

90. Details of Air Movement

See FM 57–30, FM 57–35, and TM 57–210.

Section VII. WATER MOVEMENT

91. General

Troops and their combat equipment and supplies may be loaded tactically on the same ship or may be distributed among several ships or convoys, depending on the mission contemplated after landing.

92. Plans

The battle group commander prepares plans for loading and unloading elements of the battle group according to the policies established by higher headquarters. He establishes direct coordination with the transportation officer at the earliest moment to expedite unit preparation. For details, see FM 55–110 and AR 220–20.

CHAPTER 5

THE OFFENSE

Section I. GENERAL

93. Mission

The mission of the battle group in offensive action is to close with and destroy or capture the enemy. The battle group accomplishes its mission by a combination of fire, maneuver, and shock action. Firepower is provided by nuclear and nonnuclear weapons organic to or in support of the battle group. Maneuver is accomplished by movement of the companies of the battle group in ground or air vehicles, or on foot. Shock action is the cumulative effect of firepower and the assault of maneuvering forces. The maneuvering forces move under the protection of supporting firepower to close with the enemy, then exploit the effects of the supporting fires by destroying or capturing him.

94. Types of Offensive Action

The battle group may conduct or participate in four basic types of attack maneuver: envelopment, penetration, turning movement, and frontal attack. For a detailed discussion of these maneuvers, see FM 100–5.

95. Passage of Lines and Relief in Place

a. Passage of Lines. Offensive operations may include a passage of lines to continue momentum with fresh troops, change the direction of the attack, exploit an enemy weakness with reserve forces, or start an offensive in a previously stabilized sector. The units concerned must coordinate to insure a rapid, secret, and controlled passage. Troop concentration is minimized to avoid the formation of lucrative nuclear targets.

b. Relief in Place. See section VIII, chapter 6.

96. Basic Considerations

The following basic considerations are applicable to battle group offensive operations. They are not hard-and-fast rules that can be used in every situation. The battle group commander chooses the ones that he can adapt to a particular action.

a. In the planning stage, all of the enemy's capabilities are considered

and provisions are made to counteract those which can prevent or hinder the accomplishment of the mission. Active reconnaissance, systematic classification of information, and logical deduction form the basis for a proper tactical decision. A degree of risk must be accepted in any case, but the risk can be calculated. The plan should foresee and provide for a next step in case of success, partial success, or failure. The formation for the operation should be quickly adaptable to these probable steps.

b. Even though neither enemy nor friendly forces are employing nuclear weapons, it may be within the capabilities of the enemy to do so. Considering this puts emphasis on three factors: protection, mobility, and time. Protection may be provided by both passive and active means. Mobility may be increased by the maximum use of trucks, personnel carriers, tanks, and aircraft. Time, in warfare, plays an important role and has increased significance in nuclear warfare. All actions must be planned and executed with speed.

c. The plan is made to fit the experience and training of subordinate commanders and units. Subordinates must comprehend to be able to comply. Operations that are simple to well-trained forces may seem complicated to untrained units. This does not imply that details should be omitted; but if the selected course of action is simple, it can be amplified and modified to meet a changing situation.

d. The commander chooses an unexpected place and time for the main attack. To attack habitually at a certain hour or in the same manner, sets a pattern which an alert enemy will be quick to detect. Every precaution is taken to preserve secrecy. Full use is made of cover, concealment, and deception.

e. The use of firepower is carefully planned to assist the scheme of maneuver. Where firepower can be used to a better advantage by altering the scheme of maneuver, consideration is given to readjusting the scheme. Fires are planned so that they can be massed at critical localities and shifted to other locations where they may become needed. Firepower should not be used uneconomically, but commanders should not hesitate to substitute firepower for manpower to accomplish a mission.

f. The secondary attack(s) may be made on a broad front to contain the maximum of the enemy's force. All available firepower is used to neutralize and immobilize the enemy so he cannot concentrate at the decisive point. An effort is made to deceive him as to the location of the main attack by making the secondary attack(s) appear strong.

g. Any intermediate objective designated by the battle group commander must contribute to the attainment of the final objective.

h. The majority of the available maneuver strength and firepower of the force is directed toward the principal objective. Once the aim is

decided all efforts are made toward its fulfillment until the situation changes and requires a new estimate and consequent change in objective.

i. In adopting a formation, the first consideration is the feasibility of launching the attack from a column. This provides the best opportunity for developing a vague situation, uses the minimum amount of manpower with the firepower available to the battle group in any given situation, and offers more protection against enemy nuclear attack.

j. A course of action is selected that offers alternate ways of reaching the objective. The battle group commander can seldom foresee the exact course of his attack. He issues specific directives for that portion of the action he can anticipate, while planning other contingent courses. Thus, he can favorably dispose uncommitted forces to seize opportunities.

k. The commander assigns clear-cut missions to the maneuver elements and allocates the means and delegates the authority to carry them out. He does not unnecessarily restrict the actions of subordinate units, and he assigns only those control measures needed to accomplish the mission.

l. The commander insures that provisions for communication are complete, including communication between maneuver and fire support units and between all combat and service elements involved. Communication standing operating procedures, modified according to circumstances, should be made the subject of intensive training. Subordinate commanders should be allowed to work out the details of mutually coordinating their communications.

m. Security forces are kept to a minimum. The most usual abuse of this consideration is the attempt to insure against all risks by assigning too much of the force to security duties which have no direct effect on accomplishing the mission. A small force can reconnoiter a large area and insure the security of the main force by providing early warning.

n. The commander is ready to exploit success by issuing contingent instructions to reserves before the enemy has time to react effectively. The calculation of the proper time and place to bring about surprise is part of the commander's estimate of the situation and is an important aspect of planning. Though the enemy may know that an attack is imminent, tactical surprise is achieved if he is unable to counter the blow.

o. Once a course of action has been chosen, the bulk of the unit's effort is concentrated on carrying it out.

(1) The proper use of reserves is one application of this consideration. When information is lacking or the enemy's weaknesses cannot be determined, the battle group commander employs

the smallest practical force initially. He withholds reserves from the action mainly so he can employ them at a decisive time and place. As the attack progresses, he uses his reserves to further the advantages gained by the most successful elements. He keeps the reserves as mobile as possible so they can concentrate effectively.

(2) Another application of this consideration is the use of firepower to help achieve mass. To do this, the commander must control his fire support so he can employ it rapidly at a critical point. All fire support elements are prepared to fire on important areas and to protect reorganization.

p. After the attack is launched, its momentum is maintained until the objective is seized. When the initiative is gained, sustained offensive action insures maximum exploitation of any mistakes the enemy makes and any weaknesses in his position. The attack is exploited where enemy resistance is weakest.

q. To renew an attack that has failed, the commander seeks a new direction of approach. This offers the best prospect of insuring a decisive effect on the enemy for two reasons: first, the enemy may have had an opportunity to reinforce his area, particularly his original front; second, an attack from a different direction may throw him off-balance temporarily. In addition, the continuation of an attack through a stalled friendly unit is usually both tactically and psychologically unsound.

97. Main and Secondary Attacks

a. When the plan calls for two or more companies in the attacking echelon, the commander may utilize a main and secondary attack(s). Seizure of the objective assigned to the main attack force must offer the most promise of decisive results. The main attack force may be weighted by attaching to it the majority of the tanks and other available supporting units, by employing nuclear fires to favor its maneuver, by assigning priorities for the employment of nonnuclear fires, and by positioning the reserve to facilitate its commitment to support the main attack. The most advantageous avenue of approach is usually assigned the main attack force.

b. A secondary attack(s) is usually planned to assist the main attack. It is given adequate means to accomplish its assigned mission. If it becomes more successful than the main attack, it may become the main attack. Due to terrain conditions and enemy defenses, a commander may plan to have a unit make the main attack initially until a certain condition is created or a certain area is reached, then convert a secondary attack to the main attack.

c. A commander may weight his attacks equally and await develop-

ments in the enemy and friendly situations prior to determining the main attack.

98. Fire Support

a. Nuclear and nonnuclear (including chemical) fires are coordinated to give the greatest possible support to attacking companies. The fire support plan is closely integrated with the scheme of maneuver. The capability of rapidly massing fires is sought at each echelon. Plans provide for additional nuclear and/or nonnuclear fires and modifications in the scheme of maneuver to take care of failure of nuclear weapons to produce the predicted effects. Fire planning at all echelons is concurrent. All plans are speedily integrated into a comprehensive battle group plan of nuclear and nonnuclear fires. Every effort is made to expedite this planning process and the subsequent assignment of fire missions to fire support units.

b. Because of the magnitude of nuclear fires, they may strongly influence the scheme of maneuver, and the scheme of maneuver may be designed to exploit nuclear weapons or to cause the enemy to form into remunerative targets.

c. Troop safety is considered in planning and delivering nuclear and chemical fires. The commander announces the acceptable risk for planning guidance. Whenever possible, nuclear fires are used to break through strong enemy positions to avoid severe casualties. If the employment of nuclear weapons endangers his troops, the commander may redispose his forces, use several small yield weapons instead of one or two large ones, or move the Desired Ground Zero (DGZ) away from friendly troops. If he cannot take these actions, he may place nuclear fires on enemy reserves and supporting units while he attacks and breaks that portion of the crust of the enemy defense which is not affected by the nuclear strikes, supported by nonnuclear fires and quick-acting chemical agents. When employing toxic chemical agents, downwind effects, troop masking requirements, and traversal of impact areas are essential troop safety considerations.

d. Blowdown from nuclear fires creates obstacles in forested areas and cities. This tends to force attacking troops to slow down and mass. If the attack must pass through these areas, it may be desirable to reduce or eliminate nuclear fires. Toxic chemical agents can be employed for nonpersistent casualty effect in target areas where the creation of obstacles from nuclear weapons would place undesirable restrictions on maneuver. The possibility of danger from induced radiation, radioactive fallout, and fires started by thermal radiation is also considered when the scheme of maneuver is developed. Engineers move well forward with the attack echelon to assist in either clearing located contaminated areas or to assist the attacking force in bypassing them.

e. To obtain the greatest advantage from nuclear weapons, their initial effects should be vigorously exploited. Any hesitancy may permit the enemy to regroup, reorganize, or send reinforcements into the area. The need for vigorous exploitation is impressed on all units and individuals and is emphasized in training. The scheme of maneuver and plans for the placement of nuclear fires are designed to favor this rapid exploitation. Exploitation is conducted with due regard to information gained from damage assessment.

f. To take full advantage of the power of nuclear weapons, it is desirable for the size and type of the weapon to be commensurate with the size and type of the target. Nevertheless, a nuclear weapon may be employed on a target of any size and type which may jeopardize or unduly delay the accomplishment of the attack mission, even if it overkills or expends some of its effects on unoccupied areas. This is especially true in an attack when the accuracy or completeness of intelligence of enemy positions is uncertain.

g. The use of nuclear weapons for scheduled or on-call fires is determined when planning the attack. Known enemy positions that will be encountered early by attacking forces, and enemy reserves that may be able to reinforce forward enemy positions are usually targets for scheduled nuclear fires. Known enemy positions that are not fully occupied and other areas that may become appropriate for attack with nuclear fires are planned as targets for on-call fires. Known locations of mobile enemy reserves and enemy nuclear delivery means that can materially influence the accomplishment of the mission are attacked with scheduled nuclear weapons to gain maximum effects. Enemy positions deep in the rear which warrant nuclear attack are generally either included in the battle group plan as targets for on-call fires or are engaged by division with scheduled or on-call fires. Some of the available nuclear weapons should be held in reserve for targets of opportunity.

h. For details of fire support planning, see chapter 9.

99. Reserve

a. A reserve is constituted to provide flexibility, security, and a means to influence the action. It consists of the maneuver elements not in the attack echelon. In the offense, it is employed primarily to facilitate the accomplishment of the battle group's mission or to exploit success. It constitutes an important means for the battle group commander to influence the action after the attack is underway and it must be held for employment at the decisive moment. The commander commits as much of his reserve as is needed to perform the task he assigns. He provides it with adequate fire support.

b. The reserve is employed on one or more of the following missions:

(1) An attack to exploit a temporary or newly discovered enemy weakness.

(2) An attack from a new direction on an enemy position which, because of its strength, has halted or threatens to halt the advance of the attacking echelon.
(3) An operation against the hostile rear area to extend an envelopment or exploit a successful envelopment.
(4) The assumption of the mission of an attacking element that has become disorganized, depleted, or for any reason has been rendered ineffective.
(5) The reduction of enemy resistance that may have been bypassed by the attacking echelon or that may have subsequently developed to the rear of the attacking echelon.
(6) The protection of the battle group's flanks and rear.
(7) The maintenance of contact with adjacent units.
(8) The assistance of adjacent units when such action favors the accomplishment of the battle group mission.

100. Tactical Control Measures

The battle group commander uses any combination of the control measures listed below to aid in executing the attack concept.

a. Assembly Area. Assembly areas are used to prepare units for the attack. The battle group commander usually assigns dispersed company assembly areas to lessen nuclear vulnerability. They should be well to the rear of the line of departure in covered and concealed positions located so as to facilitate execution of the scheme of maneuver. Necessary resupply, liaison, coordination, attachments, orientation, and other preparations are made in the assembly areas.

b. Objective.

(1) The division commander normally designates the principal objective(s) to be seized by the battle group. It is usually critical terrain which furnishes observation, blocks avenues of approach, and facilitates the deployment of forces to its rear and the continuation of the attack. The objective may be a center of communication; such an objective has great importance in fluid situations because of its importance in controlling the speed of advance. If the commander, in his concept, plans to seize the battle group objective with more than one company, he subdivides the battle group objective to clearly delineate to subordinate commanders that portion of the battle group objective for which they are responsible.
(2) The battle group commander may assign intermediate objectives to companies. He assigns the minimum number necessary to insure that the attack progresses in accordance with his concept because their use may slow the attack, restrict the maneuver of subordinate units, and cause excessive massing. The battle group commander prescribes the action to be taken

by a company after it seizes its objectives. A terrain feature may be designated as an intermediate objective if—

(*a*) Its occupation by the enemy will interfere with the progress of the attack.

(*b*) It is anticipated that prolonged and difficult combat on or about it will be necessary before the battle group can proceed to its main objective.

(*c*) Seizing it would facilitate control of subordinate units where observation is limited or where, for any other reason, difficulty in control can be anticipated.

(*d*) It is needed for positioning subordinate units and weapons for the purpose of closely coordinating an attack by more than one company against a strong enemy position.

(3) The area designated as an objective must be seized and controlled. When the area is large, the battle group frequently seizes only the dominant terrain within it and controls the rest of the area by fire from this vantage ground. Attacking units normally disperse after seizing an objective, and consolidate in areas which control the approaches to it.

c. Zone of Action.

(1) A zone of action is an area bounded by the line of departure, final objective, and boundaries on one or both flanks. Boundaries on unexposed flanks are specified but the boundary on an exposed flank may not be specifically designated. Each unit has complete freedom of maneuver and fire within its assigned zone. When the commander of a unit desires to enter or fire into the zone of an adjacent unit, he coordinates the matter with the adjacent unit commander and notifies the next higher commander of the action.

(2) A zone is used primarily to control the fires and maneuver of adjacent attacking companies, or to denote responsibility when an area is to be cleared of enemy forces. If a zone must be cleared, the commander who assigns it so states. If clearance of the zone is not required, bypassed resistance is reported to the next higher commander.

(3) Boundaries defining a zone of action extend only as far as the particular situation requires. They are usually drawn along easily recognized terrain features in such a manner that dividing critical terrain features is avoided where possible. The zone should include desirable approaches to the objective(s) and allow for maximum dispersion and freedom of action.

d. Axis of Advance. An axis of advance indicates the general route or direction of movement of a unit. It is designated graphically by a labeled arrow. The axis may follow a well-defined terrain feature,

such as a road or ridgeline, which will provide the most suitable approach for the main attack. A unit advancing on an axis is not required to clear the area along the axis, and may bypass enemy forces which do not threaten the accomplishment of its mission. The higher commander is informed of such bypassing. Obstacles may be bypassed based on similar considerations. Commanders should insure that deviation from the assigned axis does not interfere with the maneuver or fires of adjacent units.

e. Direction of Attack. A direction of attack is more restrictive than an axis of advance. It designates the specific direction or route which the main attack or center of mass of the unit will follow. It is designated by an unlabeled arrow. Because of its restrictive nature, it is used only when the battle group commander considers it essential to specifically direct a company's movement to insure the accomplishment of a closely coordinated scheme of maneuver.

f. Line of Departure.

(1) The line of departure coordinates the departure of attack elements. It should be easy to recognize on the ground and on the map, should be generally perpendicular to the direction of attack, and should have approaches that are covered and concealed from enemy observation and direct fire weapons. The line of forwardmost friendly positions is frequently the line of departure, especially in a fast-moving situation where the location of friendly units at the time of attack cannot be predetermined.

(2) The battle group commander may select a line of departure different from that specified by division, providing his leading elements cross the division line of departure at the time specified by division.

g. Time of Attack. The time of attack is the time leading elements of attacking companies cross the line of departure. A dawn attack has the advantage of permitting movement forward under cover of darkness and the exploitation of fires in daylight, but repeated dawn attacks set a pattern, and the enemy can take advantage of this with retaliatory measures. When nuclear weapons are employed in preparation for an attack, their delivery is closely coordinated with the time of the attack. The time of attack is designated to follow detonation of nuclear weapons as closely as possible. This permits troops in shelters to form for and move into the attack at the proper time.

h. Phase Line. A phase line extends completely across the zone or likely area of action. It is located on an easily recognizable terrain feature such as a ridgeline, stream, or road. The phase line is used to control the forward movement of units, which report arrival at (and sometimes clearance of) phase lines, but do not halt unless so ordered. A phase line may be used to limit the advance of attacking elements.

i. Other Control Measures.

(1) Check points may be used to facilitate control. They are indicated on an overlay or may by circling and numbering several easily recognizable terrain features such as crossroads, isolated buildings, stream junctions, hills, bridges, and railroad crossings. Check points may be selected throughout the zone of action or along an axis of advance or direction of attack. By reference to them, a subordinate commander may rapidly and accurately report his successive locations, and a higher commander may designate objectives, lines of departure, assembly areas, or other localities to subordinate commanders.

(2) Contact points, indicated graphically by numbered squares, are designated between units or axes where the commander desires the units to make physical contact. Contact points may also be used to delineate areas of responsibility in specific localities when boundaries are obviously unsuitable; for example, between elements of a flank guard.

(3) Ideally, attacking companies move continuously without using attack positions, but when they *are* used, company commanders normally select them. The battle group commander may designate the attack positions when he must maintain extremely close control in operations such as night attacks and river crossings. Ideally an attack position should be close to the line of departure and in defilade from enemy observation and fires. An attack position is used for last minute coordination and deployment.

(4) A nuclear safety line is also used as a control measure (par. 317).

101. Frontages

a. The frontage of a battle group or company in the attack may refer to the width of an assigned zone or to the lateral dispersion of the battle group or company at a particular phase of an operation. The desirable width of the zone or area of operation depends on the mission, enemy dispositions and capabilities, terrain, and the combat power available (based on the strength and mobility of the attacking unit and the type and range of supporting weapons). Generally, it is desirable that the entire frontage be within range of weapons controlled by or available to the battle group. When clearance of a zone is required, frontages are normally less than when clearance is not necessary. Attacks in close terrain may have relatively narrow frontages.

b. When nuclear weapons are being used, frontages are increased both to permit greater dispersion and to give proper scope to the in-

crease in the combat capability of the battle group when it is reinforced with nuclear firepower.

102. Deception

Active and passive means of deception are practically unlimited and should be used by the battle group to the maximum practicable extent to reduce casualties and achieve surprise. Demonstrations (which involve a show of force but no advance against the enemy), feints (normally limited objective attacks executed by a small proportion of the total force), and secondary attacks can mislead the enemy as to the time and location of the main attack. These maneuvers may force the exposure of enemy positions and fire support. Smoke may be used to draw enemy attention to areas where nothing of importance is occurring or, conversely, to conceal actual operations. Helicopterborne attack demonstrations in enemy rear areas may serve to draw enemy reserves away from areas of planned penetrations. Camouflage prior to and during the attack is an effective passive deceptive measure.

Section II. EMPLOYMENT OF SUPPORT UNITS

103. Organic Support Units

a. Heavy Mortar Platoon (Inf Div BG).

(1) The platoon is usually employed in general support, being positioned where it can support the main attack. Its fires are integrated with and its fire direction center (FDC) is tied into the artillery battalion supporting the battle group. The FSC plans the fires of the heavy mortar platoon and integrates them with those of the artillery battalion.

(2) When the situation or mission does not permit the employment of the heavy mortar platoon in the manner described in (1) above, it may be employed as a complete unit or by section in direct support or by attachment.

(3) Artillery and heavy mortar platoon forward observers normally transmit fire requests direct to their respective FDC's.

(4) The battle group commander prescribes heavy mortar platoon missions, general position areas (or position in a formation), and method of use pursuant to his concept and based upon recommendations of the platoon leader.

(5) For details of employment, see FM 7-( ) "Combat Support Company, Infantry Division Battle Group" (when published).

b. Mortar Battery (Abn Div BG).

(1) The mortar battery is usually employed in general support of the airborne division battle group when its range and communications permit the effective massing and shifting of its

fires. Resupply is simplified by this employment. When the situation does not permit the employment of the mortar battery under centralized control, it may be employed (by platoon) in direct support of or attached to one or more elements of the battle group to provide them with close and continuous fire support. Under such circumstances, the platoons should be augmented as necessary by survey, communication, and fire direction personnel.

(2) The battle group commander prescribes missions, general position areas (or position in a formation), and priority of fires for the battery, pursuant to his concept and the recommendations of the battery commander.

(3) For details of employment, see FM 6–18.

c. Assault Weapon Platoon (Inf Div BG).

(1) The battle group commander achieves maximum flexibility with the assault weapon platoon by employing it in a varicty of ways. No hard and fast rule is used in employing this weapon in the attack. The commander may employ the entire platoon or elements of it in general or direct support, or he may attach it by squad to attacking units. The commander's concept and organization for combat are the determining factors.

(2) In the attack this weapon is usually employed well forward where it can engage enemy armor as soon as a threat develops. The battle group commander usually attaches one or more squads to the unit(s) making the main attack. He may attach the remaining squads to (or place them in direct support of) unit(s) making the secondary attack, or he may hold them in general support so they will be readily available for use where armor threats develop.

(3) In movements to contact or fluid situations, when enemy contact is remote or obscure, the commander retains the major portion in general support well forward so he can commit it when and where needed.

(4) Security elements, such as flank guards, may have one or more squads attached.

(5) For details on employment, see FM 7–( ) "Combat Support Company, Infantry Division Battle Group" (when published).

d. Assault Gun Platoon (Abn Div BG).

(1) This platoon is desirably employed in general support of the battle group so that the platoon can be shifted rapidly to engage enemy armor in any part of the battle group zone. When routes of movement throughout the zone are very limited, it may be preferable to attach all of the platoon to one company or by sections to two or more companies. Attachment

may also be desirable when one company is operating independently and needs the support of all or part of the platoon.

(2) The assault gun platoon forms the basis for the battle group's organic antitank defense and is employed to cover areas where enemy armor is likely to appear. As a secondary mission, it may provide fire support to attacking companies.

(3) The battle group commander, advised by the assault gun platoon leader who may act as his antitank adviser, prescribes general position areas (or location in a formation) and missions for the platoon. Primary attention is given to areas not covered by friendly tanks.

(4) For details of employment, see FM 57–21.

e. Reconnaissance Platoon.

(1) The reconnaissance platoon performs reconnaissance and provides security for the battle group. It is organized to be employed generally as a unit. It may engage in limited offensive, defensive, and delaying actions in the performance of its missions.

(2) In the attack, the platoon may—

(*a*) Patrol or screen a flank.

(*b*) Maintain contact between elements of the battle group or with adjacent units.

(*c*) Reconnoiter areas or routes, to include checking for CBR contamination.

(*d*) Maintain contact with a withdrawing enemy force.

(*e*) Establish OP's.

(3) For details on employment, see FM 7–( ) "Combat Support Company, Infantry Division Battle Group" (when published), and FM 57–21.

f. Engineer Platoon (Inf Div BG).

(1) This platoon is most effectively employed when placed in general support but directed to accept missions from the direct support or attached divisional engineer company. This provides for better overall coordination and supervision of engineer effort. It also provides a means for the battle group engineer platoon leader to obtain additional technical assistance, heavy equipment and operators, bridging material, and other logistical support.

(2) The platoon may be placed in support of a unit making the main attack. Tasks assigned to the platoon may include assistance in breaching or clearing obstacles and making hasty repair to roads, trails, fords, culverts, and bridges. The platoon may be required to provide security by obstacle construction for flank protection during the attack and all-around obstacle construction during consolidation. Platoon personnel assist

in breaching and installing minefields, preparing and firing demolitions, and may perform limited decontamination tasks.

(3) For details on employment, see FM 7–21.

g. Radar Section/Electronic Devices Section.

(1) In the attack, this section is usually retained in general support. In movements to contact, the commander may attach one or more teams to reconnaissance elements so they can detect enemy activity well to the front and flanks.

(2) For details on tactical employment, see FM 7–( ) "Combat Support Company, Infantry Division Battle Group" (when published), and FM 57–21.

104. Nonorganic Support Units

a. Tank Units.

(1) One or more companies of tanks may be attached to the battle group for offensive operations. Making proper use of the firepower, mobility, shock action, and control facilities of his attached armor, requires careful and adequate planning on the part of the battle group commander. By cross-attaching tank platoons and infantry platoons, the commander can take maximum advantage of the tank company headquarters with its excellent control and command capabilities. He thus creates an additional maneuver element that affords him greater flexibility and strengthens a good portion of his command.

(2) In dismounted operations with attached tanks, it is obvious that infantry cannot be "geared" to the speed of the armor. It may be desirable to attach the majority of the tanks to the main attack, while utilizing the tank company minus with attached infantry as an element of the reserve. Certain situations may favor the formation of a strong, tank-heavy reserve to exploit infantry success or enemy weaknesses uncovered by the attacking infantry.

(3) The commander of a mechanized or motorized battle group forms tank-heavy or infantry-heavy company teams according to his analysis of the mission and situation. In fluid operations over open terrain of good trafficability, tank-heavy teams often lead. In close terrain or against strong enemy antitank obstacles and weapons, infantry-heavy teams normally lead and tank-heavy units are committed when the terrain and enemy situation permit their effective use.

(4) Enemy armor threats on the flank may prompt the battle group commander to place tanks with reserve companies to provide flank protection in depth.

(5) A tank platoon is usually the smallest tank unit attached to a company of the battle group.

(6) When mechanized flamethrowers are attached to the battle

group, they may be further attached as required to assist rifle companies in the assault, particularly against fortifications and buildings. These vehicles may be employed singly.

(7) For additional guidance on the tactical employment of the tank battalion organic to the infantry division, see chapter 6, FM 17–33.

b. Artillery.

(1) *Field artillery (inf div BG).*

(*a*) Normally a divisional field artillery battalion is employed in direct support of a committed battle group. This battalion obtains, as required and available, artillery fires from higher and adjacent units. The battle group may have field artillery attached when effective centralized control of the artillery is not practical.

(*b*) The fires of the battle group heavy mortar platoon (par. 103*a*) are usually integrated with those of the artillery battalion supporting the battle group.

(*c*) For details concerning fire support, see chapter 9.

(2) *Field artillery (abn div BG).*

(*a*) A division artillery howitzer battery is normally attached to each battle group to support its operations in the assault phase. More than one howitzer battery may be attached to the assault battle group if it is required. One or more nondivisional light and/or medium field artillery batteries or battalions may also be attached to a battle group in the assault phase. Attached artillery normally moves by air in the assault echelon with the unit to which it is attached. The battle group includes attached artillery in its landing plan. Artillery occasionally may move by air in the followup echelon and become attached to a battle group upon arrival in the objective area. Reserve battle groups normally do not have a howitzer battery attached even though the battle group moves in the assault echelon.

(*b*) The commander of the battle group to which the artillery is attached determines an appropriate mission for each attached artillery unit. He may prescribe any of the established artillery missions. When the attached howitzer battery is part of a battery group with the mortar battery, a mission of general support for the battery group is appropriate. Direct support is seldom appropriate for an attached battery.

(*c*) Attached artillery usually reverts to division artillery control after the assault. The division artillery howitzer batteries are normally given general support-reinforcing, general support missions. A mission of reinforcing the battle

group mortar battery may be given to a howitzer battery if warranted by the situation and the availability of other fires (artillery or air). Additional fire support is available to the battle group through the howitzer battery with a general support-reinforcing or a reinforcing mission from battle group directly to division artillery.

(3) *Air defense artillery.* Air defense is usually furnished by army units under division or corps control. Air defense units may be deployed throughout the division zone. Their missions include defense against helicopterborne attack. Frequently, this mission permits the air defense unit to take under fire airborne or airlanded troops in or near their landing zones or areas. This part of the air defense mission should be carefully tied in with the battle group plans for countering these enemy forces. When the battle group is operating far from other forces, air defense units may be attached. When the enemy air threat is not a primary consideration, air defense units may be employed in a ground support role.

c. *Division Engineers.*

(1) The normal engineer support for each infantry division battle group when committed is one engineer company; for the airborne division battle group, the normal support is an engineer platoon. These units, when supplemented by additional equipment and technical supervision from engineer battalion headquarters, are capable of performing extensive combat engineering tasks. They can be either in direct support of or attached to the battle group.

(*a*) *Direct support.* The engineer unit placed in direct support of the battle group renders technical and tactical assistance by performing engineer tasks for the battle group. The battle group has no responsibility toward the supporting engineer unit and control is retained by the division engineer. Requests of the battle group commander are complied with insofar as practicable but are coordinated with the division engineer who is cognizant of the mission of the division as a whole.

(*b*) *Attached.* The engineers are attached to the battle group when the mission requires the battle group commander to have complete control of the forces or when the distance involved precludes the division engineer from exercising proper supervision. The attachment of engineers should terminate as soon as the tactical situation permits.

(2) When more than one engineer company is required in support of a battle group, the division engineer normally furnishes a senior staff officer to function as unit engineer. The unit engi-

neer acts as a special staff adviser to the battle group commander on all engineer matters. He is responsible for coordinating the activities of all engineer units in direct support of or attached to the battle group.

(3) In addition to combat tasks, the division engineer battalion provides maps, water, engineer supplies, and limited third echelon maintenance. All divisional engineer units are 100 percent mobile. Engineers are trained to fight effectively as infantry in emergencies if they are given additional weapon support and time to reorganize.

(4) For details of engineer capabilities, see FM 5–132.

d. Reconnaissance Units.

(1) In certain offensive operations, particularly in fluid, fast moving situations or where the battle group is operating semi-independently, a reconnaissance troop may be attached to the battle group for reconnaissance, security, or economy of force missions.

(2) Reconnaissance elements are seldom attached to companies, but instead are used to benefit the entire battle group by—

(*a*) Providing flank security.

(*b*) Acting as a forward covering force.

(*c*) Making route or area reconnaissance.

(*d*) Maintaining contact with adjacent units.

(*e*) Conducting feints and demonstrations.

(*f*) Sweeping areas on the flank to eliminate disorganized resistance.

e. Transportation.

(1) Truck and personnel carrier units are frequently attached to the battle group. Terrain permitting, they provide the speed and resupply capability essential to the fluid, aggressive, deep-reaching attacks that are so suitable for nuclear war.

(2) Personnel carriers are usually allocated on the basis of four per rifle platoon, one per company command group, and one per battle group command group. As far as possible, organizational integrity of personnel carrier squads and platoons is maintained in attaching them to rifle companies.

(3) The battle group commander normally uses available personnel carriers to mechanize one or more complete companies, rather than partially mechanizing two or more companies, so that the mechanized company(ies) can fight as a unit.

(4) When the battle group commander can mechanize fewer than two complete companies, he may mechanize only the company making the main attack, or he may mechanize reserve elements to aggressively exploit successful attacks of dismounted companies.

(5) Trucks have limited value for transporting personnel in the attacking echelon because of their vulnerability and limited cross-country mobility. They may be used effectively, however, for movement to forward assembly areas or attack positions, for motorizing reserves, for resupply and evacuation, and for transportation in pursuit and movement to contact operations.

(6) The battle group commander insures that an adequate proportion of attached transportation is allocated for logistical support of the battle group's operation.

f. Army Aviation.

(1) The battle group commander uses attached or supporting aircraft for—

(*a*) Frontal, flank, and rear security.

(*b*) Reconnaissance, to include aerial radiological survey.

(*c*) Radio relay.

(*d*) Wire laying.

(*e*) Fire direction.

(*f*) Resupply.

(*g*) Evacuation.

(*h*) Movement of troops for vertical envelopments, raids, and security missions.

(2) The battle group commander and staff should be familiar with the capabilities and limitations of rotary- and fixed-wing aircraft, and take full advantage of their capabilities.

(3) See chapter 8 for information on airborne operations.

Section III. PLANNING THE ATTACK

105. General

a. The plan of attack includes a scheme of maneuver and a plan of fire support.

b. Sound and timely planning of the attack is of great importance. Delays or improperly conceived plans increase the vulnerability of the battle group and jeopardize chances for success. In nuclear war, with emphasis on speed and aggressiveness, the time available for planning may be short. Consequently, all commanders must use to the maximum the logical steps and thought processes incorporated in troop leading steps (app. II) and the estimate of the situation.

106. Division Considerations

a. The division commander assigns the battle group a mission, usually the seizure of a terrain objective. On occasion, the mission may involve reaching a phase line or destroying a specific enemy force. The division commander designates the control measures necessary to insure that

the battle group accomplishes its mission in accordance with his concept of the operation and without disrupting the activities of other units.

b. He frequently assigns a line of departure, time of attack, and boundaries or an axis of advance. These measures, in conjunction with the objective(s), provide the framework within which the battle group operates. The division commander may also designate phase lines and checkpoints for use in the control of fire and maneuver during the attack.

c. The division commander attaches to, or places in support of, the battle group, tanks, engineers, artillery, transportation, and other elements required by the battle group mission. Tanks and transportation elements are usually attached, while other units support the battle group but remain under centralized division control. Artillery, engineers, and other elements may be attached when the battle group is to operate beyond effective supporting distance of the division.

107. Factors Affecting Plan of Attack

a. Mission. The assigned mission affects the battle group's employment by dictating its task(s) which, in turn, must be translated into missions for subordinate and supporting units. All planning is oriented toward accomplishment of the mission.

b. Enemy. All available information of the enemy's location, strength, morale, and composition is considered during attack planning. Enemy positions, obstacles, and fire support as well as his nuclear, air, CBR, and reinforcement capabilities will affect the battle group's maneuver routes, formations, organization for combat, plan of fire support, and security measures.

c. Terrain and Weather. Critical terrain, observation and fields of fire, cover and concealment, obstacles, and avenues of approach affect the plan. Trafficability must be considered in selecting approaches for mechanized troops. The effect of weather on visibility and soil conditions is considered in deciding the best course of action.

d. Troops Available. This term refers to all combat power available to the battle group, to include maneuver elements, fire support, logistical support, and attached and supporting elements. The disposition of the battle group and adjacent units, and time and space factors must also be taken into consideration in attack planning. Classes I, III, and V supplies usually are of primary importance.

e. Explanation of Nomenclature. For convenience and brevity, the factors defined in *a* through *d* above are referred to collectively as METT.

108. Scheme of Maneuver

a. General. The scheme of maneuver is the detailed plan for the placement and movement of subordinate units in carrying out the mission. It is designed to place various elements of the attacking force

into advantageous position with respect to the enemy and/or the objective with minimum casualties. It may be designed to force the enemy to mass into a remunerative nuclear target.

b. Approaches and Objectives.

(1) Upon receiving the division order, the battle group commander analyzes the factors of METT and selects likely approaches to the objective area. He then subdivides the final objective, if necessary, and selects any intermediate objectives which are required. His aim is to close with the enemy in the shortest possible time to reduce vulnerability to enemy fires.

(2) In selecting approaches, the battle group commander considers terrain which permits rapid movement combined with minimum vulnerability. An approach may be along high dominating terrain, a valley, or a combination of both. If a valley or low ground approach is used, it is essential that high ground overlooking the zone be either seized or neutralized.

(3) The requirements for speed of movement and seizure of commanding ground are often in conflict. The battle group commander may plan to bypass high terrain, neutralizing it with nuclear or other weapons and assigning its seizure to the reserve. If terrain is so dominating that its occupation by the enemy will endanger the mission, and if other measures will not counteract the threat, the terrain may be designated as an intermediate objective.

(4) When enemy resistance is weak or discontinuous, speed of movement has priority. High ground is seized or cleared by security detachments, assisted by nuclear or other fires as necessary, while the main body continues on its primary mission by the fastest means available.

c. Determination of Main Attack and Secondary Attack(s). The approach affording the greatest probability of success becomes the scene for the main attack, and combat power is allocated and positioned to favor the forces using this approach. If a secondary attack(s) is used, it is planned to assist the main attack. Frequently, the battle group will employ only one company in the assault echelon, in which event there is no secondary attack. When two or more approaches offer equal opportunities, the commander may not designate main and secondary attacks, but plan means for weighting either attack according to the way the situation develops.

d. Organization for Combat.

(1) Elements of organic and attached supporting units are attached to, or placed in support of, companies of the battle group as necessary to enable the companies to accomplish their missions. The attachments are based on a consideration of METT.

(2) The battle group commander usually establishes a command group as described in paragraph 42, and he may include the commanders of attached, supporting, and reserve units. The commander may direct the deputy battle group commander to accompany a portion of the attacking elements, in which case the deputy commander may use a part of the staff to assist him. The group with the deputy commander must be accompanied by communication personnel and equipment. It maintains communications with the battle group commander and is prepared to assume direction of the operation if enemy action destroys the ability of the command group to remain in control.

(3) When tank units are attached to the battle group they are employed as described in paragraph 104*a*. Tank-heavy teams are usually commanded by a tank company commander; infantry-heavy teams by an infantry company commander.

(4) Generally, elements of like mobility are grouped together. For instance, employing infantry mounted in personnel carriers along with tanks enhances the value of both elements.

(5) Disposition of forces—single column (fig. 3).

(*a*) The battle group commander prescribes the organization for combat and the formation in his order. He places the supporting elements where they can best perform their support missions.

(*b*) When it is anticipated that an enemy position can be attacked and reduced by one company soon after crossing the line of departure, the lead company deploys as required by its mission, usually having two platoons in the attacking echelon.

(*c*) When contact is imminent, but exact enemy dispositions have not been ascertained, the lead company organizes an advance party consisting of a reinforced platoon. When two or more platoons in a mechanized operation can move on separate parallel routes, they can furnish a broad band of security to the front. If one road is blocked by the enemy or is otherwise unsuitable for movement, the battle group can continue movement on the accessible route.

(*d*) Reconnaissance elements, either organic, attached, or organized from rifle companies, may precede the lead company.

(*e*) *1.* The assault weapon platoon (infantry division battle group is usually employed in general support to provide antitank protection for the column. Squad(s) may be attached to the lead company and to flank security elements.

2. The assault gun platoon (airborne division battle group)

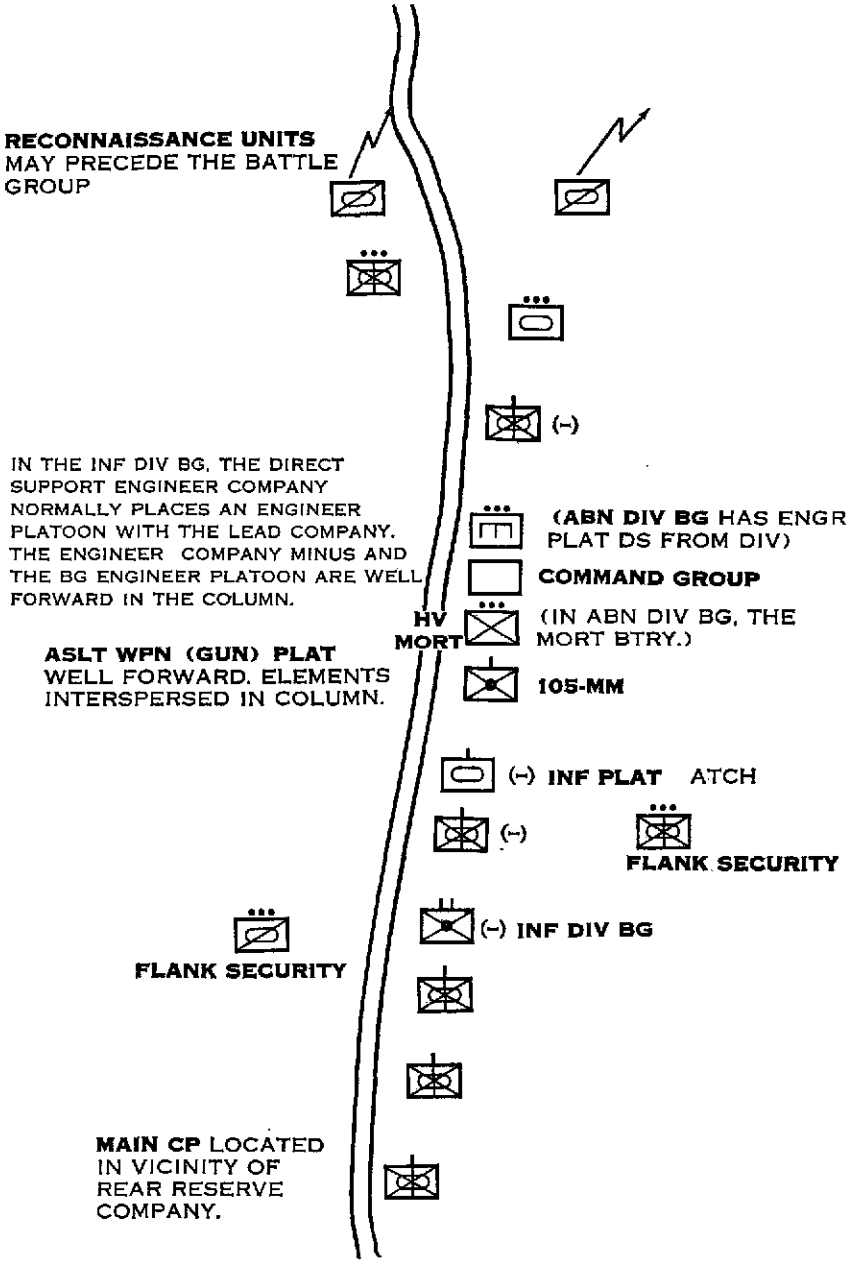


Figure 3. Type formation for mechanized battle group in a single column.

is usually retained in general support to provide antitank protection for the column. Elements may be attached to the lead company if tanks are not available.

(*f*) *1.* The heavy mortar platoon (infantry division battle group) and at least a portion of the direct support artillery battalion are located well forward in the column to provide fire support for the lead elements. The battle group commander retains control of these fires when feasible.

2. The mortar battery (airborne division battle group) and reinforcing or attached artillery are located well forward in the column to provide fire support for the lead company. The battle group commander retains control of these fires whenever possible.

(*g*) Engineers usually accompany the lead company to determine route conditions and assist in the passage of obstacles. Some of the engineers follow behind the lead company and go forward as required to accomplish engineer tasks.

(6) Disposition of forces—parallel columns. When the battle group attacks in two columns, the forces in each are essentially as described in (5) above. The following modifications in the employment of supporting units should be noted.

(*a*) Tanks are with each column, some of which may be with the lead company, the majority are usually with the column making the main attack.

(*b*) *1.* The heavy mortar platoon (inf div BG) usually marches with the column making the main attack. It is well forward and its fires are coordinated with those of the artillery battalion.

2. Due to separation of the two columns, it may not be possible to employ the mortar battery (abn div BG) in general support of the battle group. The battle group commander usually places the mortar battery in the column making the main attack.

(*c*) *1.* The bulk of the assault weapon platoon (inf div BG) marches with the column that is making the main attack. One or more squads may march with the column making the secondary attack.

2. The assault gun platoon (abn div BG) usually marches with the column that has fewer tanks to provide antitank protection. If no tanks are available, it may be attached to the main attack company.

(*d*) Engineers must be located in each column with priority to the main attack.

e. Formation.

(1) The formation for an attack is determined after considera-

tion of METT, and is selected to provide the necessary degree of—

(*a*) Preponderance of combat power over the enemy where required.
(*b*) Security (to include rapid closing with the enemy).
(*c*) Flexibility.
(*d*) Control.
(*e*) Dispersion (consistent with the foregoing factors).

(2) When a tank company or more is attached, the battle group commander may desirably form more than five maneuver elements by cross-attaching tank and infantry platoons.

(3) In general, linear formations (three or more companies in attack) maximize frontal firepower and allow the majority of the battle group to close rapidly with the enemy. Columnar formations (one company in the attack) maximize flank security and flexibility (due to strong reserves), and facilitate control. The flexibility of the column formation for the dismounted battle group is, however, reduced considerably due to the time required for reserve companies to move against enemy encountered to the front. A formation of two companies in the attack, may, in nonnuclear combat, provide a balance between the advantages and disadvantages of linear and columnar formations. However, in a nuclear situation, this formation may result in an unacceptable vulnerability to weapons, especially for dismounted forces. Linear and columnar formations are less vulnerable to the effects of nuclear weapons, so they are used whenever possible under nuclear conditions. Regardless of the formation used under nuclear conditions, it incorporates the maximum dispersion between elements consistent with the performance of the mission. The degree of dispersion of the battle group is primarily affected by the distances and intervals between elements, though pure linear or columnar formations will tend to provide more effective disperson.

(4) The following factors favor a column formation:

(*a*) Deep objectives.
(*b*) Vague enemy information.
(*c*) Strong flank security requirement.
(*d*) Restrictive terrain or poor visibility.
(*e*) A need to concentrate supporting fires in one area.
(*f*) Initial enemy resistance can be eliminated by one company.
(*g*) Nuclear fire support.
(*h*) Mobility.

(5) The following factors favor a linear formation:

(*a*) Shallow objectives.
(*b*) Secure flanks.
(*c*) Multiple approaches.

(*d*) Fire support adequate to support all attacking companies.
(*e*) Lack of a requirement for strong reserves.
(*f*) A mission of clearing a zone.
(*g*) Need to close rapidly with the enemy with the bulk of the battle group.
(*h*) Dismounted operation.

(6) A formation of three companies in the attack is frequently used when a combination of the factors listed in (4) and (5) above exists, providing vulnerability of the battle group to nuclear weapons will not be increased.

f. Control Measures. The control measures used by the battle group are discussed in paragraph 100. Any combination may be used, but the battle group commander avoids restricting his subordinate commanders' initiative and freedom of action by too close control.

(1) The battle group commander assigns zones to the attacking companies when there is a requirement for restricting fires and lateral movement, or when an area must be cleared. Zones are often used when two or more companies are attacking abreast in proximity. Intermediate objectives within zones are assigned as necessary to control the attack, and are located to cause minimum massing of the companies. Zones are often used for coordinated attacks against strong resistance.

(2) An axis of advance is used when conditions favor the use of a certain approach (often selected to facilitate rapid seizure of a deep objective) and/or when a requirement to specifically restrict fires and lateral movement does not exist. Weak or disorganized enemy resistance favors the use of an axis. The assignment of an axis gives general guidance to a subordinate, but allows him considerable latitude in accomplishing his mission.

(*a*) When a company is assigned an axis it adopts the formation best suited to the situation.
(*b*) When two or more axes are used by the battle group they should be far enough apart to insure freedom of maneuver on each, but close enough to permit the units on each to maneuver in support of forces on adjacent axes.

(3) Regardless of what other control measures are used during the attack, it is desirable for the battle group commander to designate boundaries between attacking companies in an objective area when two or more companies are to converge for an assault.

g. Actions in the Objective Area. The commander makes tentative plans for battle group deployment following seizure of the objective. Rapid dispersal is required. Dispersed positions must provide for defense of the objectives and also facilitate resumption of the attack.

Since formations and task groupings frequently change during the attack, the commander does not assign a specific company to a specific area in the initial attack order. He orders any company to occupy any area that appears to be the most practicable and advantageous as indicated by developments in the objective area. Division guidance regarding actions in the objective area may be in the form of a defense order or a phase line which limits the advance.

h. Typical Formations and Control Measures. See figures 4 through 7.

109. Plan of Fire Support

a. The scheme of maneuver and plan of fire support are developed concurrently and must be closely integrated. A well-coordinated fire support plan covers all supporting fires, including those of organic and attached weapons, tanks, and supporting artillery, plus tactical air and nuclear weapons. The plan is highly flexible and includes fires prior to the attack, supporting fires during the attack, and fires to support the consolidation and/or the continuation of the attack.

b. In certain situations, nuclear weapons can make the penetration a more acceptable form of maneuver than if only nonnuclear fire support is used. Nuclear fires permit the battle group to attack against disorganized and discontinuous enemy resistance.

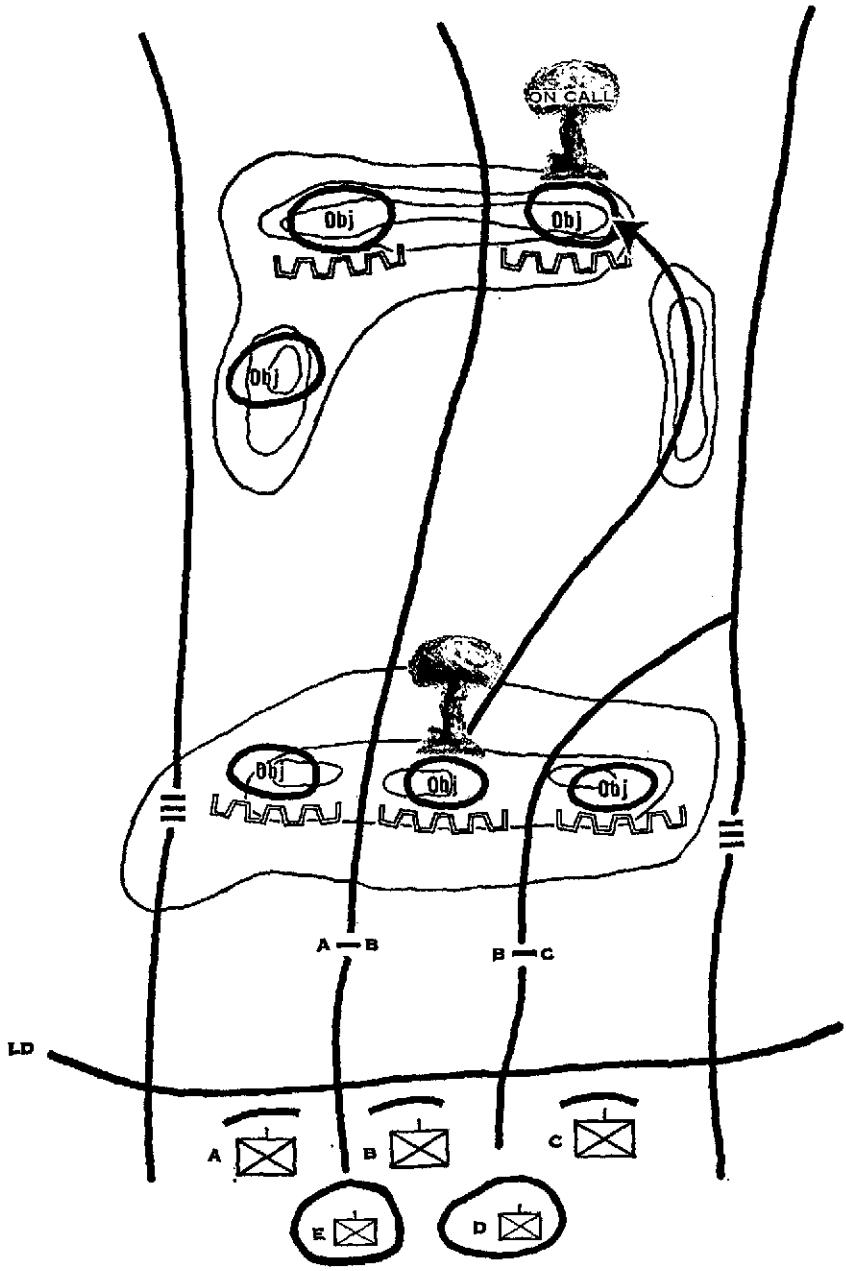
110. Security

a. General. Security in the attack is provided by the timely collection and dissemination of information, the use of security forces of ample mobility and combat power, the selection of proper formations, and the use of speed, dispersion, and deception. In planning the attack, possible enemy courses of action are considered and appropriate security measures decided upon to counter them. Army aircraft are used extensively for frontal, flank, and rear security. Whatever the type of security forces employed, they must be located where they can provide warning in time for the battle group to react effectively to the threat.

b. Frontal Security. A reconnaissance unit of higher headquarters may precede the battle group. The battle group commander maintains contact with it by radio, organic reconnaissance units, or attached or supporting Army aircraft. Organic frontal security in an attack against known enemy is provided by attacking companies. Security for movements to contact is discussed in paragraphs 128 through 130.

c. Flank Security.

(1) The flanks of attacking battle groups and subordinate companies are frequently exposed, and aggressive flank reconnaissance is needed to give adequate warning of enemy approach. Among the means used for this purpose are the reconnaissance platoon and other organic units, attached ground reconnaissance elements, and air reconnaissance. When two or more



PHASE 1. THREE COMPANIES ON LINE TO SEIZE INITIAL OBJECTIVES.

PHASE 2. TWO COMPANIES CONVERGE ON FINAL OBJECTIVE. DIRECTION OF COMPANY "A" CONTROLLED BY THE ASSIGNMENT OF AN INTERMEDIATE OBJECTIVE. DIRECTION OF COMPANY "B" CONTROLLED BY THE ASSIGNMENT OF A DIRECTION OF ATTACK.

Figure 4. Dismounted battle group in attack.

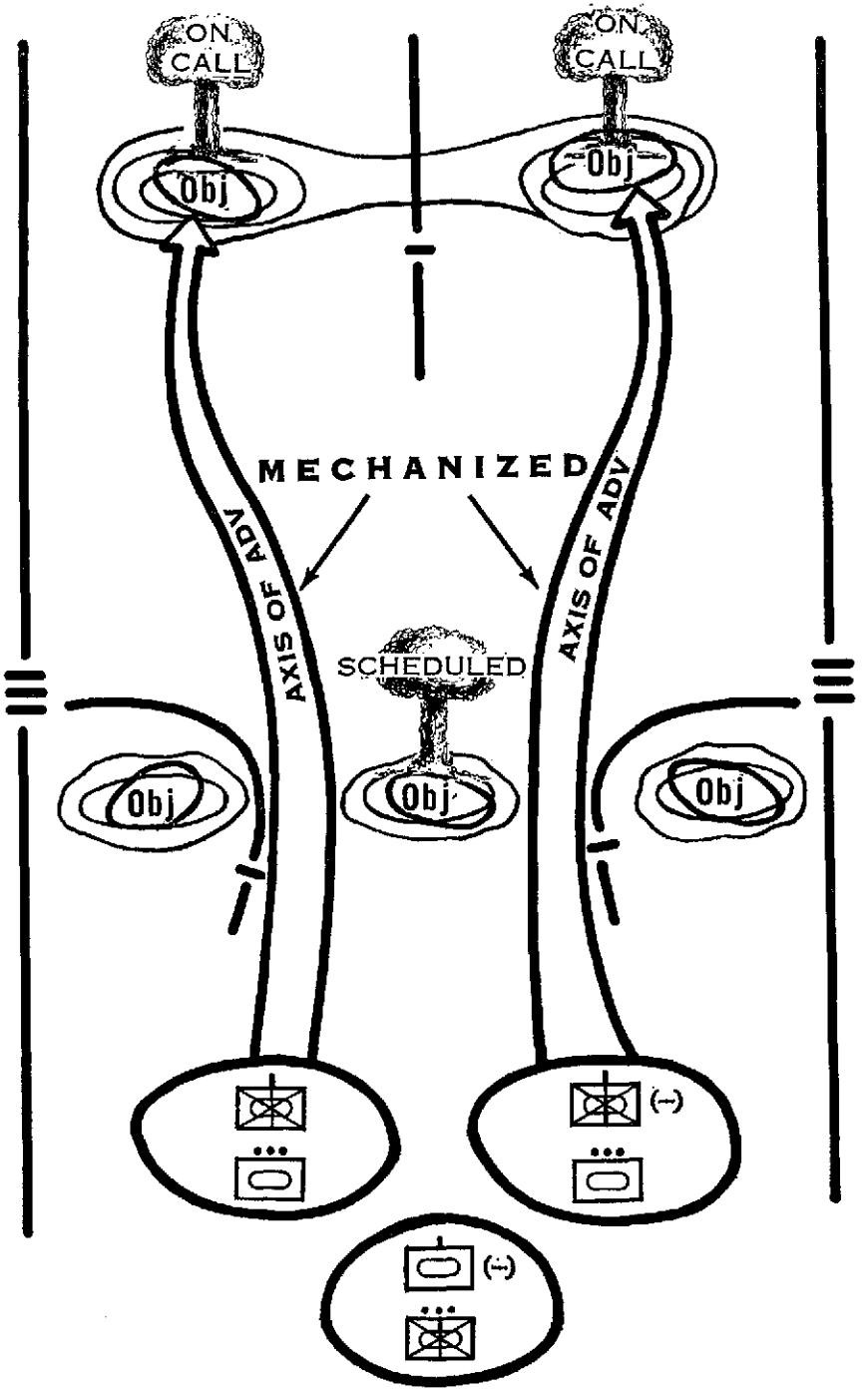


Figure 5. Three companies in coordinated attack dismounted, followed by mechanized attack.

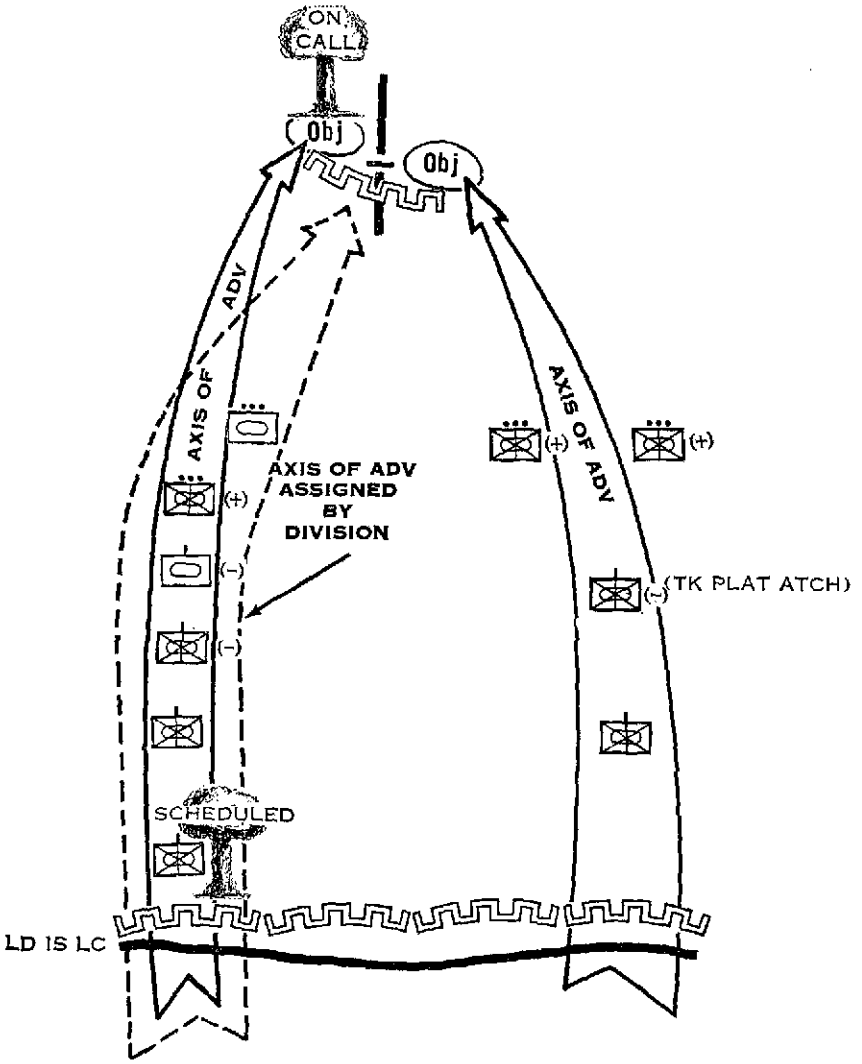


Figure 6. Attack on two axes (mechanized battle group).

companies are attacking and are separated, reconnaissance is conducted between them as well as on the flanks.

(2) The flank guard is assigned an area of responsibility extending from the rear of the leading company to the rear of a succeeding unit specified by the battle group commander. In certain situations, the area may be designated as a series of terrain features. The flank guard operates within supporting range of the battle group.

(3) The battle group or flank guard commander selects a series of blocking positions on the flank and parallel to the direction of advance. Further, a route of advance is assigned, if one is available near the line of blocking positions. The flank guard (motorized, mechanized, or air-mobile) regulates its movement with the battle group's rate of advance and, ordinarily, moves by bounds from one blocking position to the next. If the flank guard consists of two or more elements strong enough to operate semi-independently, they may leapfrog one another to successive blocking positions.

(4) A dismounted flank guard is considerably less effective than a mobile one. Usually it must march continuously or have its elements occupy a blocking position until the main body passes, then join the tail of the battle group.

(5) Where lateral movement is easier than parallel movement, elements of the flank guard may be dispatched laterally from the head of the column to designated terrain features and remain on them until the battle group passes; these elements may then pass through a portion of the battle group to perform another similar mission. Division may make helicopters available to move elements of the flank guard.

(6) When the battle group moves alone, a rear guard must be provided. The rear guard is kept to a minimum size consistent with the threat. It is organized and operated like an advance guard in inverse order. All units within a formation, including supporting units, must be prepared to protect themselves from enemy attack.

Section IV. CONDUCT OF THE ATTACK

111. Control

The commander employs every means available to keep informed of the situation confronting his subordinate units. Radio is the principal means of control, but messengers, wire, visual signals, and personal contact are also used. The commander goes where he can best influence his forces toward a successful conclusion of the attack. He is constantly alert to changing conditions which may require him to modify his organization for combat, scheme of maneuver, fire support plan, and reserve employment.

112. Assembly Area to Line of Departure

Prior to the attack, units occupy dispersed locations well to the rear of the line of departure. Using the best available cover and concealment (often darkness), companies move to the LD, massing to the

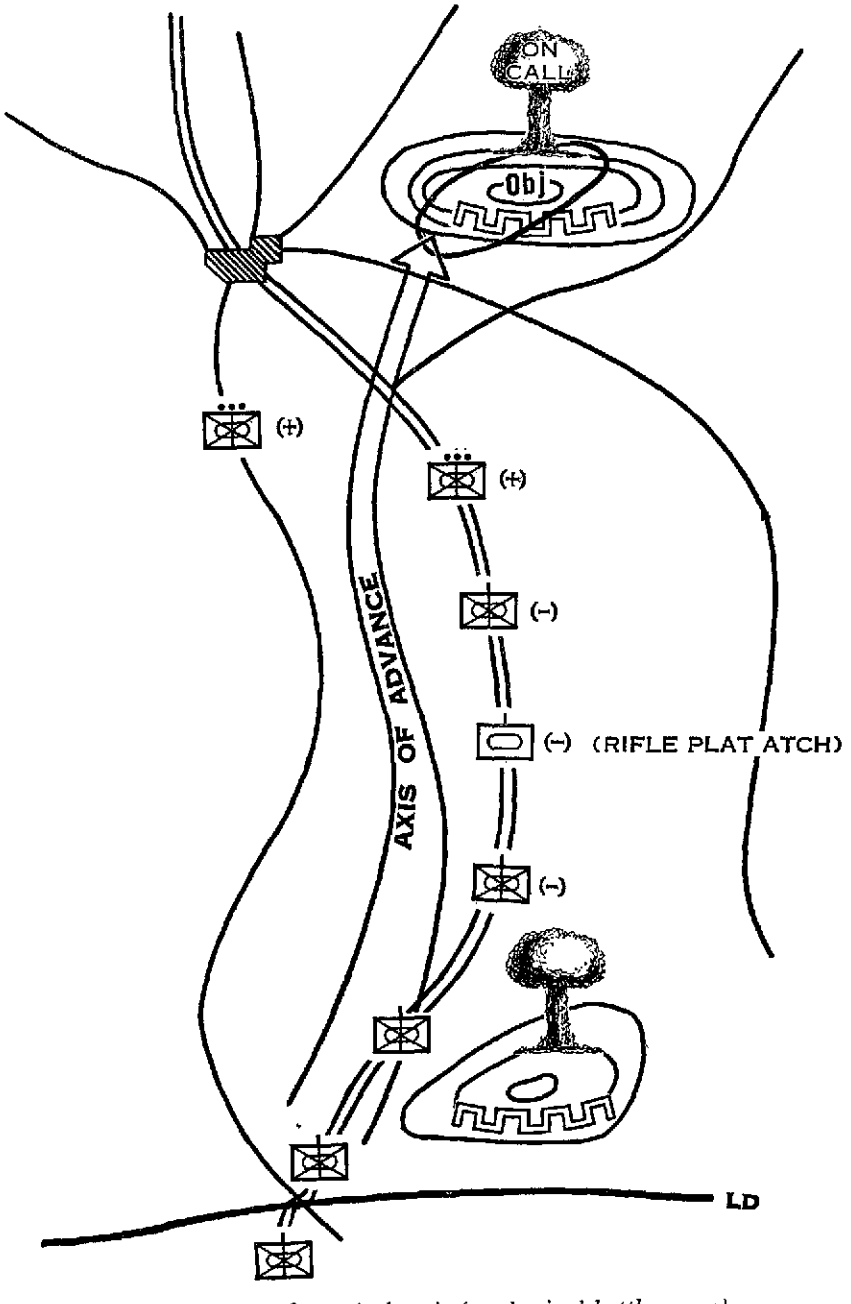


Figure 7. Attack on single axis (mechanized battle group).

minimum extent required. Supporting fires, sometimes including smoke, are placed on initial targets. At times, it is desirable to gain surprise by withholding fires until after units have crossed the LD. Movement is planned so that units move continuously and cross the LD at the designated time and without halting.

113. Fire and Maneuver

Attacking companies move rapidly along their selected approaches under the protection of organic and supporting fires, and using the available cover and concealment. Targets of opportunity are engaged rapidly by weapons already in position and those that can go quickly into action off-carrier. Supporting weapons may displace by echelon to provide continuous support or, particularly in mobile operations, move on-carrier until needed. Radiation detection teams with attacking companies report dangerous areas. These areas may have to be bypassed or crossed rapidly in vehicles to reduce radiation exposure. As the attack progresses, combat power is shifted to the locality offering the greatest possibility of success. The attack is characterized by a series of rapid advances and assaults, closely supported by fire. Lengthy halting on intermediate objectives is avoided as it greatly increases vulnerability and slows the attack.

114. Reserves

a. One of the primary means available to the battle group commander to influence the outcome of an attack is the commitment of his reserve at the proper time and place. The reserve should be employed against the flank or rear of the enemy or against any other point of known or suspected weakness. Passing the reserve through units that have been stopped by enemy action is avoided whenever possible; rather, the reserve should be committed from a new direction to achieve surprise and avoid massing. The reserve is used to exploit success, not to redeem failure (figs. 8 and 9).

b. The reserve should be located in a position from which it can move rapidly to points of probable employment. As the attack progresses, it is kept within reinforcing distance of the attacking echelon; that is, close enough to continue the momentum of the attack or to intervene before the attacking echelon can be overwhelmed by a counterattack. The battle group commander, assisted by his staff and reserve commander(s), constantly revises his plans for the employment of the reserves to meet changes in the situation.

c. The battle group commander commits only that portion of the reserve required to accomplish a specific task; however, when in his judgment the situation warrants employment of the entire reserve, he commits it without hesitation. He notifies the division commander when he commits the reserve.

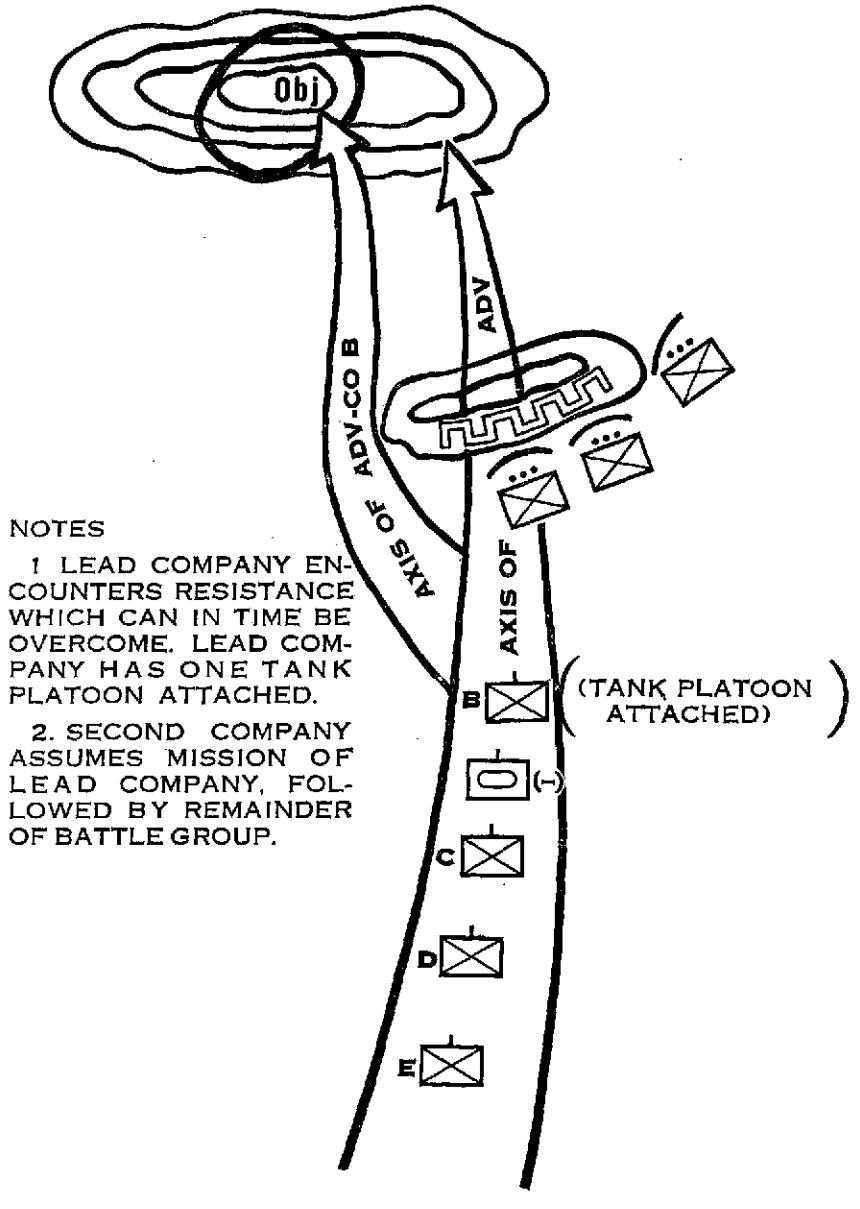


Figure 8. Committing the reserve to maintain momentum.

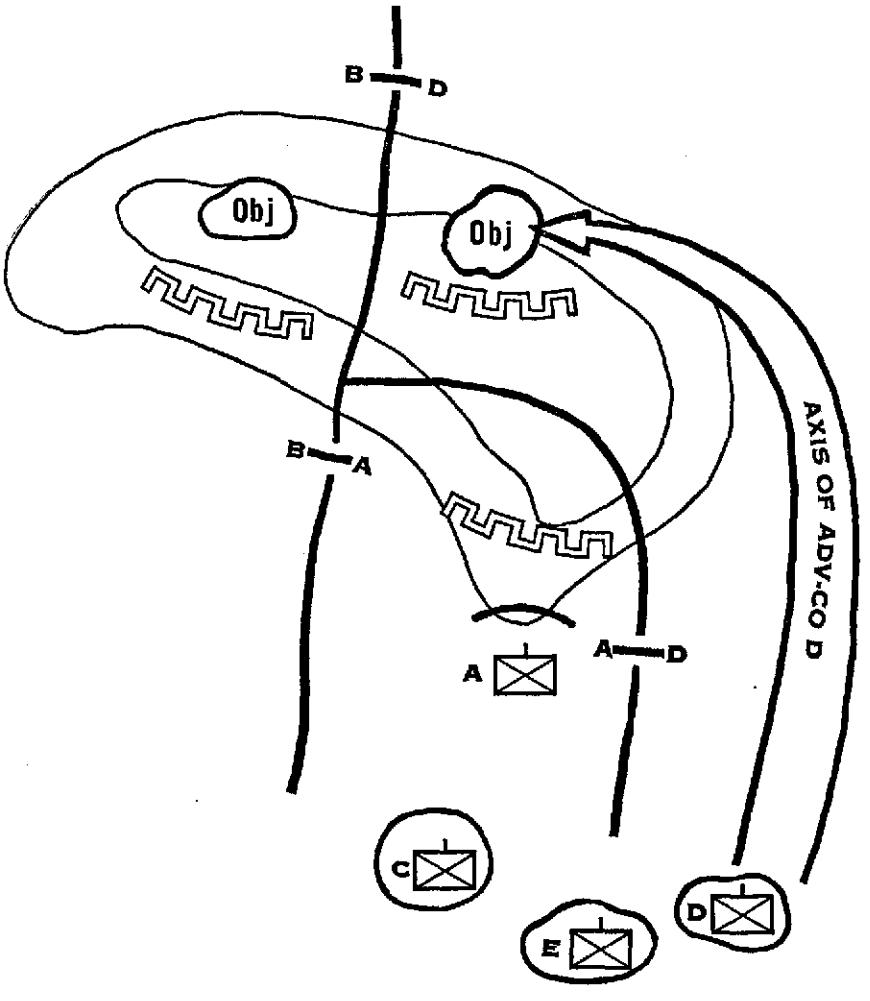


Figure 9. Committing a reserve company to assist an attacking company.

d. In committing the reserve, a scheme of maneuver is used which permits rapid closing with the enemy. If massing with another attacking company must occur, it is planned to occur at the last possible moment.

e. Occasions may arise when all companies will be committed in the assault. A reserve should be reconstituted as soon as possible. Personnel from headquarters company, combat support company, and attached units may be used. If this temporary reserve is inadequate, the battle group commander may place restrictions on committing the reserves of one or more of the rifle companies. He also makes plans for moving elements of the least heavily engaged companies to assist those more

heavily engaged. One or more companies revert to reserve as soon as the situation permits.

115. Assault

a. A dismounted assault usually is required to complete the destruction of the enemy. The commander prepares for the assault by concentrating supporting fires to neutralize and weaken the enemy prior to launching the assault. The assault units advance close to their objective under cover of the supporting fire.

b. Assault units, moving continuously, follow closely their supporting fires, deploy, and launch the assault as supporting fires shift, usually on order of company commanders. The firepower of the assaulting units must continue to neutralize the enemy. Any hesitation by assaulting troops may be disastrous.

c. The assault is characterized by decentralized control and aggressive employment of fire and maneuver to close with and kill or capture the enemy. Massing of forces to seize the objective is restricted to the minimum.

116. Reorganization

Reorganization is continuous. Specific halts to reorganize are avoided because of the danger inherent in stopping or slowing the operation. By keeping abreast of the situation, the battle group commander can insure that reorganization is taking place. Companies that must be reorganized because of excessive casualties should be halted in areas providing cover until reorganization is completed, if the situation permits. Reorganization includes replacement of casualties, evacuation, resupply, and restoration of control and communication.

117. Consolidation and Dispersion

During the preparation for an attack, plans are made for consolidation in the area of the final objective. Consolidation includes establishing security, taking reconnaissance measures, displacing weapons and installations, requesting fire support, and positioning units. Once an objective has been seized, units disperse as soon as possible consistent with the capability of defending the objective area. Consolidation plans must be flexible. The formation used to seize an objective generally determines the initial disposition of units employed in its defense. Even when ordered to defend an objective, the battle group commander must maintain his command in a state of readiness to continue the attack. To aid in accomplishing this, he sends elements of his command beyond the objective to maintain contact with the enemy and to seize critical terrain features which will facilitate resumption of the attack. See chapter 6 for a detailed discussion of defensive concepts employed in the consolidation.

118. Pursuit

If organized enemy resistance collapses, the higher commander may order a pursuit. Pursuit is characterized by rapid movement, decentralized control, and violent action to prevent the enemy from reorganizing. Complete destruction of the enemy becomes the primary objective. The battle group commander may use all available vehicles, including attached tanks, to provide transportation for an enveloping force in the pursuit. The remainder of the battle group may continue on foot to act as a direct pressure force, mop up bypassed enemy, or be available as reinforcements. When supported by nuclear weapons, highly mobile forces conducting a pursuit may make their principal effort against the enemy frontally, relying on nuclear weapons to eliminate any attempt to conduct delaying operations. When possible, pursuing forces are lifted by fixed- or rotary-wing aircraft and block enemy withdrawal routes. The battle group may act as all or part of a direct pressure force for division. The pursuit continues until enemy units are destroyed or contact is lost. The operation then becomes a movement to contact.

119. Action Against Counterattacks

If the enemy counterattacks with a force large enough to prevent accomplishment of the mission, the battle group commander destroys or neutralizes it with nuclear and nonnuclear fires so that he may continue the attack toward the objective. If fires are not available or do not eliminate the enemy threat, the commander shifts his attack to destroy the counterattacking force before continuing toward the objective. If the counterattacking force does not constitute a threat to the accomplishment of the mission, the battle group bypasses it and assigns the mission of blocking or destroying it to one or more reserve companies or to a company making a secondary attack. When the counterattacking force appears to be too large for the battle group to eliminate, the battle group commander reports the situation and requests assistance from division.

120. Action When Enemy Uses Nuclear Weapons

a. If the enemy employs nuclear weapons against the attacking force and destroys a company or a major portion of it, the battle group commander maintains the momentum of the attack with all means at his disposal. If the company affected is an attacking company, a reserve company should be committed to take over its mission, while survivors of the affected company continue their mission to the extent possible until relieved. Upon relief, the company may be placed in reserve or, if it is no longer effective as a unit, its survivors may be attached to the company that takes over its mission. If two or more attacking companies are affected, division may have to change the battle group mission, and division reserves may be employed to influence the action.

b. It may be anticipated that the enemy will exploit the effect of his nuclear weapons by counterattacking. To meet such a threat, consideration should be given to shifting forces toward the threatened area to provide maximum protection, while still continuing the attack.

Section V. INFLUENCE OF VARYING MOBILITY ON ATTACK PLANNING AND CONDUCT

121. General

a. When infantry is mounted in either ground or air vehicles, it is desirable to move as close to its objective as possible before dismounting. Rapid movement reduces troop vulnerability to enemy weapons. Sudden closing with the enemy provides some security in that the enemy will hesitate to employ nuclear weapons because of danger to his own troops. The personnel carrier is the most desirable vehicle for ground movement because of its capability for cross-country movement and because it furnishes considerable protection against many of the effects of nuclear strikes and other fires. Trucks offer little protection against enemy fires and are usually not capable of extensive cross-country movement. Infantry mounted in personnel carriers is called mechanized infantry; mounted in trucks, it is called motorized infantry. A unit is considered mechanized when the majority of its personnel are in personnel carriers. Helicopters may be used for infantry movement under conditions described in chapter 8.

b. The battle group may be dependent on organic transportation for vehicular movement and thus only selected units will be highly mobile. Under certain conditions vehicular movement may be impossible because of unsuitable terrain or enemy defenses.

c. When ground and/or air vehicles are available, the battle group plans to fight a highly fluid type of warfare in which it capitalizes on mobility to facilitate dispersion and rapid concentration in exploiting the effects of nuclear and other weapons. When vehicles are not available, the battle group's ability to disperse subordinate units widely and concentrate them rapidly is curtailed. As the percentage of unit vehicular mobility increases, the battle group's capability for conducting fluid operations increases proportionately. This capability is highly desirable.

d. When the battle group does not have enough personnel carriers to mechanize it completely, the following factors may influence the commander to attach all that are available to a particular company (ies):

(1) Terrain over which the company will operate facilitates the use of carriers.
(2) The company is making the main attack.
(3) The company has a deep objective.

(4) The company is to be in reserve to rapidly exploit a success gained by attacking companies.
(5) The type of enemy resistance in the company's area of action favors the use of personnel carriers.
(6) The company must pass through a contaminated area.
(7) The company has tanks attached.

e. Upon receiving attachments of vehicles, the battle group commander should determine their allocation, including a sufficient number for logistical support, and arrange to have them guided to appropriate positions (frequently company assembly areas). He insures that passive and active security measures are taken to protect their movement and assembly. Provisions for refueling and maintenance should be considered.

122. Approaches

a. Mechanized attacks require roads, trails, or fairly open terrain of good trafficability. Soil conditions should be carefully assessed to insure that attacking vehicles will not bog down. These terrain requirements reduce the probability of mechanized elements being able to use covered and concealed approaches. The use of smoke should be considered to offset this disadvantage.

b. Dismounted attacks can be made over almost any type of terrain. Banks, gullies, trees, or other features which may stop vehicles provide advantageous cover and concealment for foot troops.

123. Formations

a. The conditions under which the battle group conducts mechanized attacks usually favor the use of a column or adequately separated columns. Fluid operations against deep objectives demand the speed, control, flexibility, and flank security afforded by columns. Also, terrain suitable for rapid movement of mechanized units deployed in width is frequently not available. The speed of mechanized reserves allows them to rapidly move forward to assist the leading company or maintain the momentum of the attack. Mechanized attacks are often conducted against intermittent or disorganized enemy resistance where emphasis is placed on rapid maneuver and aggressive exploitation, facilitated by columnar formations. As the enemy situation develops, the attacking companies may be deployed as required until they are all on line.

b. The dismounted battle group frequently attacks with 3 companies generally abreast. This attack formation is desirable in the circumstances mentioned in (1) and (2) below and for the reasons named in (3), (4), and (5) below.

(1) The attack is against well-organized positions that must be assaulted in width.

(2) The distance to objectives is relatively short.
(3) The rapid application of a preponderance of firepower is facilitated.
(4) Terrain usually permits dismounted forces to deploy in width.
(5) It is desirable to close rapidly with the enemy to avoid nuclear and other fires.

c. An attack formation of four or five companies abreast may be used to sweep a large area containing scattered, ineffective enemy resistance.

d. Dismounted attacks may be made in column under the conditions mentioned in paragraph 108*e*(4).

124. Control Measures

While any desirable combination of control measures may be used by either the dismounted or mechanized battle group, conditions under which which the mechanized battle group is employed generally favor the assignment of deep objectives and axes of advance to the attacking companies. Intermediate objectives are used sparingly. Check points and phase lines will assist in maintaining control, rapid reporting of position, and in calling for indirect fires. The dismounted battle group commander ofter assigns zones of action to attacking companies to facilitate close coordination of fire and maneuver. Intermediate objectives may be designated. The final objective is apportioned as necessary to control the attack and concentrate combat power.

125. Fire Support

The protection afforded by personnel carriers allows mechanized forces to move closer to nuclear and nonnuclear fires than dismounted troops. Consequently, fire support can be exploited much more rapidly and effectively. At times, nonnuclear air bursts may be placed over buttoned-up personnel carriers as they move onto the objective. In fast moving mechanized attacks, fire support elements may move on-carrier until their fires are required, rather than displacing by echelon as is usually the case in dismounted operations. However, some fire element must be available to provide on-call fire support to lead elements.

126. Movement of Reserves

The rapidity of movement of mechanized attacking forces often requires the reserve to move continuously to remain within reinforcing distance. In a slow-moving dismounted or mechanized attack, the reserve may move by bounds on the battle group commander's order. The bounds should be made to areas which provide concealment and dispersion and facilitate future employment of the reserve.

127. Personnel Carriers in Attack

See FM 7–10.

Section VI. MOVEMENT TO CONTACT

128. General

a. Movement to contact is a tactical movement conducted to gain initial contact with the enemy or to reestablish lost contact. The commander determines the probability of contact and directs the conditions of combat readiness accordingly.

b. Division or higher echelons usually conduct a movement to contact on multiple approaches. A battle group may use multiple routes or may remain tactically grouped on a single approach.

c. It is desirable that a covering force precede the main force. A highly mobile unit such as the cavalry squadron or a mechanized battle group is well suited to form the nucleus of a covering force. The covering force operates under division control or under control of a higher headquarters if the division is part of a larger force.

d. A commander must organize his force for a movement to contact to provide for—

(1) Rapid and uninterrupted movement.
(2) Maximum all-round security and early development of the situation.
(3) Retention of the bulk of the combat power in an uncommitted status during movement to permit its rapid employment upon contact.

129. Organization of a Battle Group for Movement to Contact

a. General. Organization of a battle group for a movement to contact is essentially the same whether the battle group is the leading element of a larger force or is operating independently. When a battle group is the leading element of a larger force, it may be designated as the advance guard with the mission of insuring the uninterrupted advance of the main body. When it marches alone, the battle group commander usually designates a reinforced rifle company as the advance guard. The formation adopted by the lead company in either case is essentially the same.

b. Mechanized Battle Group. A mechanized battle group's organization for an advance guard mission is similar to the organization for an advance in column against unknown enemy dispositions (par. 108*d*(5) and (6) and fig. 3).

c. Dismounted Battle Group.

(1) A dismounted lead battle group is organized like a mechanized battle group, but less dispersion is possible. The lead company operates as advance guard, sending forward an advance party, which in turn sends forward a point. Flank security is provided by motorized or mechanized elements or, where vehicular

movement is impractical, by foot patrols observing likely enemy approaches until the main body passes, then joining the tail of the column. Army aircraft supplement other security measures.

(2) Figure 10 shows a type formation for a dismounted battle group moving alone in a movement to contact. For a detailed

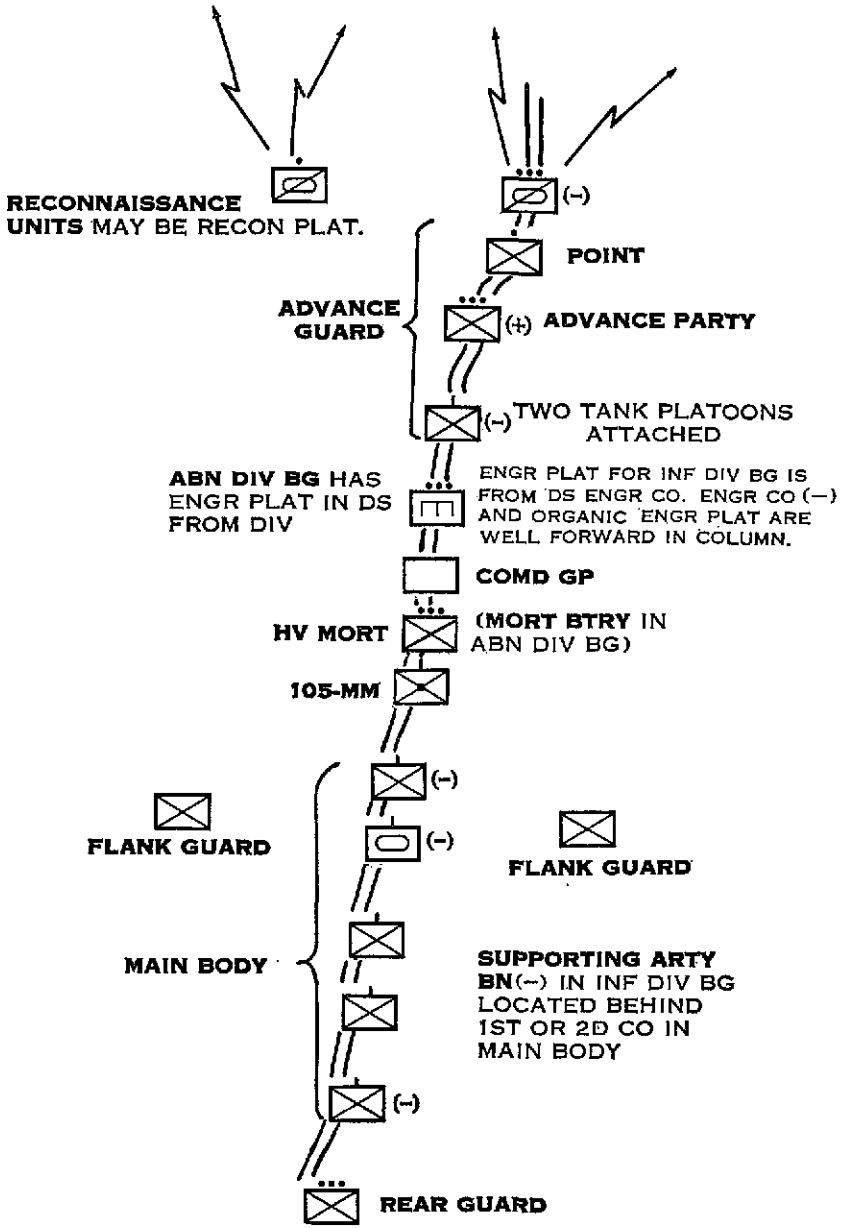


Figure 10. A type formation for dismounted battle group in movement to contact.

description of the organization and employment of advance guards, flank guards, and rear guards, see FM 7-10.

(3) Figure 11 shows a type formation for a dismounted battle group as the advance guard of a larger force in a movement to contact.

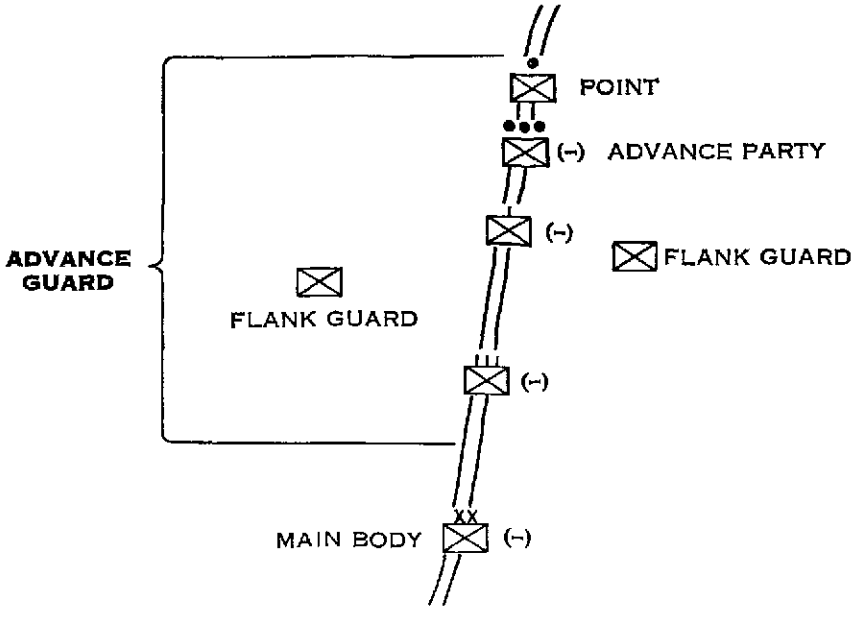


Figure 11. A type formation for a dismounted battle group in a movement to contact when marching as the advance guard of a larger force.

130. Conduct of Movement To Contact

The advance guard quickly destroys small enemy delaying forces with nonnuclear fires and assault. On-call nuclear weapons may be employed to destroy enemy forces to the front or those that threaten the flanks. If nuclear fires are not employed, additional nonnuclear fires may have to be used. If neither nuclear nor additional nonnuclear fire is available, then the advance guard may have to contain the enemy force, while the remainder of the battle group bypasses and continues the advance. Movement to contact ends when enemy action forces deployment from a march column(s).

Section VII. NIGHT ATTACK

131. General

a. (1) Night attacks are a normal part of operations. They are used frequently and are especially desirable against an enemy

possessing a strong nuclear capability. In training or preparing for night attacks, commanders must stress to their commands the likelihood of achieving success with minimum casualties in such an operation. They must minimize the tendency to overstress control and limitations. While control and coordination are essential at night, well-trained units nevertheless can successfully conduct envelopments, seize deep objectives, and disperse. The success of a command may well depend on its ability to fight at night. Figure 12, while representing a maneuver scheme necessary in some situations, should not be considered as the only scheme which can be used. Variations are limited only by the unit's state of training and the imagination and experience of leaders.

(2) This section deals with the planning and conduct of a night attack without artificial illumination, except in emergencies or on an on-call basis. When illuminating means are available to provide light approximating that of daylight, and their employment is contemplated throughout the attack, the techniques involved are generally the same as for a daylight attack.

b. The concealment afforded by darkness decreases the enemy's ability to place effective fires. Silent movement permits attacking forces to achieve surprise. The attacker gains a psychological advantage in that the doubts, apprehensions, and fear of the waiting defender are greatly magnified at night. While dispersion remains important, a greater concentration of troops can be accepted than in daylight, since the possibility of enemy use of nuclear weapons is decreased if secrecy is maintained.

c. Night combat generally is characterized by a decrease in the ability of the attacker and defender to place aimed fire on each other; by a corresponding increase in the importance of close combat; and by the employment of fires from weapons laid on definite target areas by daylight. Troop leading assumes an all-important role, and plans provide for close control. The deep objectives and dispersion desired in nuclear war can be achieved at night, as well as reorganization and consolidation, but they must be thoroughly planned in advance.

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

e. The decision to employ nuclear fires in a night attack depends on the ability of the unit to achieve surprise, the effect that blowdown and radiation may have on attacking forces, the relative strength of

opposing forces, and the actions to be taken after the objective has been seized. The danger of producing flash blindness is also considered. When nuclear fires are employed, operations may be similar to those in a daylight attack, although additional control measures will have to be used. The use of night vision devices may facilitate operations.

f. The following are desirable factors for a night attack:

(1) Considerable time for preparation.

(2) Detailed information of terrain, enemy, and expected weather conditions.

(3) Secrecy and surprise.

(4) Detailed orders and simple plans.

(5) Easily identifiable objectives.

g. Figure 12 is a schematic diagram of a night attack.

(1) The company release point should be easily recognizable in the dark and may be marked by artificial means. It is to the rear of the line of departure unless the battle group commander elects to cross the line of departure in a column of companies to facilitate control while advancing to a very deep objective.

(2) The attack position is discussed in paragraph 100*i*(3).

(3) The point of departure is that point on the ground where the company or platoons cross the line of departure.

(4) The probable line of deployment is preferably within 150 meters of known enemy positions and easily recognizable in the dark. It may be marked by artificial means.

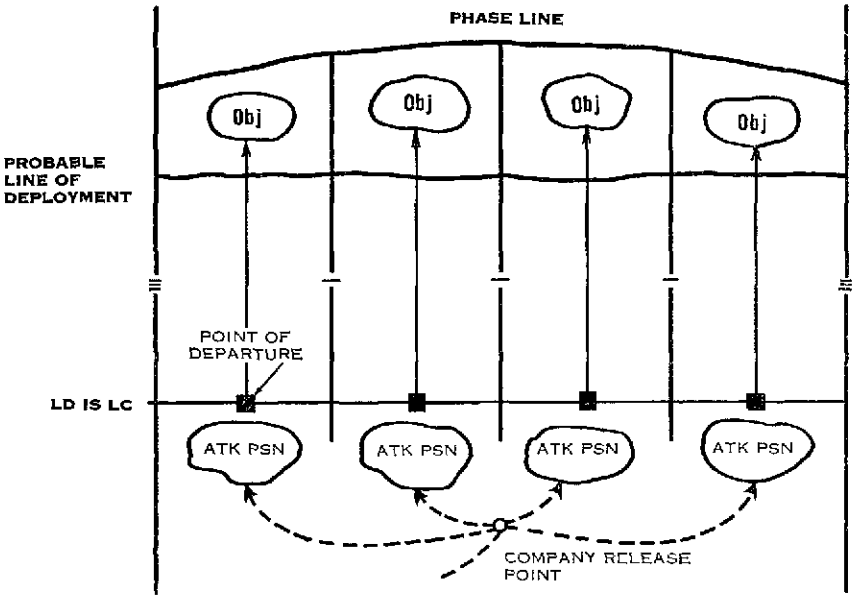


Figure 12. Night attack with four companies attacking.

(5) A phase line is designated to provide for troop safety. It should be easily recognizable in the dark (a stream, road, edge of woods, etc.) and far enough beyond the objective to allow security forces space in which to operate. Fire support agencies are free to engage enemy forces beyond this line.

132. Illumination

a. Plans are made for employing available illumination even if the attack plan calls for the objective to be seized by stealth. The type of illumination planned depends on the degree of secrecy the battle group will try to attain and the amount of light needed to conduct the attack. Illumination may be direct or indirect. The use of infrared illumination has a psychological effect on the enemy in that he may not be able to detect the light source while receiving casualties from aimed fire. A portion of the battle group zone may be illuminated while other portions are not. This allows for deception, gives visibility to units that are outside the illuminated zone without exposing them to the enemy, and enhances surprise. An enveloping force may move under cover of darkness while the secondary attack assaults under illumination.

b. Indirect illumination may be placed on the objective following the assault to assist in the reorganization and consolidation. When secrecy is lost, all forms of illumination are employed if they will assist the attacker.

133. Scheme of Maneuver

a. Control Measures. Some additional control measures which may be used are—

(1) Special means for identifying friendly troops, such as white arm bands, white adhesive strips on helmets, and standardized outer uniforms.

(2) Special means for helping to maintain direction, such as infrared devices, guides, engineer tape, and the firing of white phosphorus mortar or artillery rounds.

b. Attack Echelon.

(1) The battle group commander employs enough combat power forward to enable assaulting units to clear assigned objectives in the initial assault. Complicated maneuvers are avoided. Company objectives are clearly delineated.

(2) A zone of action is designated for each attacking company. A direction of attack may be established along a recognizable terrain feature or on an azimuth, or both.

c. Reserve. One or more rifle companies may be retained as the battle group reserve. The reserve is prepared to assume the mission of an attacking company at any time before it crosses the LD, protect the

flanks and rear of the battle group, and occupy a defensive position during consolidation. The reserve is not committed in an area where it will become involved with other attacking companies unless illumination is used.

d. Use of Tanks and Assault Guns. When secrecy is desired, tanks and assault guns seldom accompany the attack echelon. The mass movement of tanks from rear areas forward prior to a night attack may compromise secrecy, but they may be infiltrated to the forward areas with a good chance of preserving secrecy. If the terrain and light conditions permit, and the need for tank support during the assault and consolidation outweighs the desire for secrecy, tanks may be attached to the attack echelon. Usually, tanks fire at designated targets on call and join the attacking elements in the objective area as soon as practicable. The use of night vision devices may enhance the effectiveness of tank fire and movement.

e. Assault Weapon Platoon. Assault weapon squads remain in the vicinity of the line of departure, in preselected areas, prepared to fire or displace forward on order. Plans are prepared in advance for the attachment of squads to companies in whose objective areas enemy armor threats are likely to develop.

134. Fire Support

a. Fire Support Plan. Fire support plans are similar to those for daylight attacks.

b. Control of Supporting Weapons and Supporting Fires.

(1) The methods of controlling supporting weapons and their fires when direct illumination is used are identical to those used in a daylight attack. When only partial or no illumination is provided, additional restrictions are placed on the movement of weapons and shifting of fires. All available weapons are placed in position to fire and, where necessary, are registered on known targets on the objective. Fires are planned to protect the flanks of maneuver units and to isolate the objective. The pattern of fires existing prior to the attack is maintained, but enemy nuclear delivery means that are located during any phase of the attack are immediately taken under fire. When a night attack is made to achieve surprise, the battle group commander announces conditions under which supporting weapons will be fired.

(2) After the attack has been discovered and the assault has been launched, supporting fires are placed beyond and on the flanks of the objective to protect attacking units during the assault, reorganization, and consolidation phases. Nuclear and nonnuclear fires may be used as soon as surprise is lost. Nuclear fires are placed principally on deep targets, including enemy

nuclear delivery means and hostile units which may either reinforce the enemy in the objective area or counterattack.

135. Communication

Normal radio communication is maintained but, as in daylight attacks, no mention of the attack is made until it has been disclosed otherwise. After crossing the line of departure and until the attack is disclosed, wire is the best means of communication. After the attack is disclosed, radio becomes the primary means. If a reserve or new unit(s) is to make a night attack through another unit(s), it maintains listening silence until its movement is discovered.

136. Conduct of the Attack

a. Security Units. Reconnaissance patrols which gather information before the attack may be used during the attack as members of frontal and flank security detachments to mark routes forward of the line of departure; to mark the probable line of deployment; and to furnish guides for attacking units during their movement from the line of departure to the probable line of deployment.

b. Advance to Probable Line of Deployment. Companies cross the line of departure without halting. Except when the zone is well lighted, they advance in columns forward of the line of departure until they are close to the enemy or until enemy action forces them to deploy. A silent, stealthy advance is essential. The previous pattern of night fires is maintained to assist in concealing the noise of movement. At platoon and squad release points, subordinate commanders take over the control of their units. If an enemy outguard or patrol is encountered, leading elements of the column assist security patrols in disposing of it as quickly and quietly as possible. When the rifle squads reach the place of deployment, they deploy and prepare to advance at the prearranged time or on a given signal. Once a skirmish line has been formed and the order has been given to advance, the attack echelon continues to move forward silently until discovered by the enemy, then it opens fire. If the attack is discovered prematurely, attacking companies launch the assault on their own initiative.

c. Assault. When the assault begins, all assaulting troops advance as quickly as possible. Flares and searchlights may be used to allow assaulting troops to fire aimed shots and to move at a more rapid rate. Every effort is made to prevent the skirmish line from breaking up into isolated groups.

d. Action After Capture of Objective. Tanks and direct fire weapons move rapidly to the objective. Artillery and infantry mortar forward observers check defensive fires as soon as possible. Security elements are posted. Units disperse to defense areas. They disperse to the maximum extent possible to reduce vulnerability to nuclear countermeasures.

Planned nuclear fires may be placed forward of the captured position if the necessity arises. The units complete their reorganization and consolidation rapidly and the battle group prepares to continue operations.

Section VIII. RIVER CROSSINGS

137. General

a. The purpose of this operation is to move the attacking force across a river obstacle as rapidly and as economically as possible so that it may continue its attack to destroy the enemy or to seize an assigned objective which will protect the crossing of the remainder of the force. It is an offensive operation differing from other offensive actions only in the application of techniques. For detailed considerations of river crossing operations, see FM 31–60.

b. A river crossing requires specialized equipment and trained personnel and the need for dispersion assumes great importance. Crossing areas are usually limited, and this results in the canalization of attacking forces. Therefore, plans include provisions for rapid dispersion on the far shore both in width and depth to avoid presenting a lucrative nuclear target. The employment of STOL and VTOL aircraft overcomes many of the problems associated with crossing areas and crossing sites.

138. Types

a. A crossing is termed "hasty" when it is conducted as a continuation of an attack by forces which advance to the river line with a minimum loss of momentum. Since a hasty crossing is characterized by speed, surprise, and a minimum concentration of personnel and equipment, it is less vulnerable to enemy counteraction.

b. A crossing is termed "deliberate" when it is conducted under any of the following circumstances:

(1) As a resumption of the offensive after friendly forces have previously secured the near bank.
(2) When a hasty crossing is not feasible because of a lack of necessary equipment and personnel or because of the strength of enemy defenses.
(3) As a result of an unsuccessful hasty crossing.

c. A deliberate crossing is characterized by some delay, detailed preparation and planning at all levels, and the employment of extensive and specialized river crossing means. Enemy opposition in the zone of advance on the near shore should be neutralized before a deliberate crossing is attempted.

139. Reconnaissance

a. Detailed information of the enemy situation and the nature of the

river is essential. Since even small enemy forces can seriously interfere with a crossing, the commander executing the operation should have detailed knowledge of the location of any enemy force that can place observed fire on the river. The location of enemy reserves assumes great importance because of the initial vulnerability of the crossing force to counterattack, especially by armor. Reconnaissance is directed toward locating these enemy units so that their effectiveness may be reduced by nuclear and/or nonnuclear fires at the time of attack. Employing Army aircraft for both visual and photographic reconnaissance is a fast and effective means of obtaining information. Such reconnaissance may reveal excellent blocking positions for helicopterborne forces. All possible landing areas should be noted in case a diversionary attack by helicopterborne forces is desired in conjunction with the crossing attack. Aerial reconnaissance should be kept to the minimum necessary to accomplish the mission and should not reveal the crossing site by remaining in the immediate vicinity.

b. Much information of the river is usually available from engineer sources. However, with the use of increased frontages and diversified means of crossing, infantry units must obtain considerable additional information by ground and air reconnaissance to determine all practicable crossing sites in the various areas.

140. Plan of Operations

a. General Considerations. As in all forms of attack in nuclear warfare, speed of operation, maximum dispersion, and the seizure of deep objectives are desirable. If transportation equipment, such as personnel carriers, is available in quantity, it may be possible to achieve all of these aims. For this reason, personnel carriers are used whenever possible. If crossing means are limited to boats and footbridges, resulting initially in a lack of mobility on the far bank, closer objectives may have to be seized, and the entire initial concept may have to be based on seizing and protecting a limited bridgehead until bridges and ferries suitable for carrying heavy equipment can be built. Smoke may be used to deny the enemy observation and the ability to visually adjust fires on crossing areas. Extensive screens, including dummies, may be used to confuse the enemy as to the exact crossing sites.

b. Crossing Sites. The following are desirable requirements for a river crossing, whether by vehicle or boat:

(1) A far shore that is undefended or lightly held. However, a strongly held position may be neutralized or destroyed with nuclear weapons to obtain a desirable crossing site.
(2) Terrain on the far bank which facilitates rapid movement forward and early seizure of critical terrain.
(3) A moderate river current.
(4) An unobstructed water area.

(5) Suitable banks.
(6) Sites suitable for ferries and bridges to carry tanks and other heavy equipment.
(7) A bend in the river line toward the attacker in areas where nuclear weapons are not available to neutralize enemy river defenses.
(8) Dominating terrain on the near bank.
(9) Covered approaches, assembly areas, and attack positions.

c. Time of Attack. A time of attack is selected, if possible, that allows units to move forward in darkness, but reach the far bank at daybreak. Care should be taken that a repeated use of dawn attacks does not eliminate surprise.

d. Deception and Security.

(1) Surprise is essential in a river crossing operation. Assault units should be able to reach the near bank and launch their attacks without major enemy interference. Feints and demonstrations are used to draw the enemy away from attack points and permit the assault units to get a firm foothold on the far bank.
(2) The battle group takes local security measures against floating mines, river craft, and underwater demolition parties. A plan is prepared to eliminate bypassed enemy who can interfere with the construction of bridges and rafts. Measures are planned against enemy counterattacks, especially those supported by armor.

141. Fire Support Plan

The fire support plan is designed to permit an uninterrupted movement across the river and far enough forward to allow units to obtain dispersion as protection from nuclear weapons. If available, enough nuclear weapons are placed on the far bank to neutralize or destroy enemy forces that can interfere with the crossing. The area in which the main attack is made receives priority of nuclear support. Enemy reserves that can interfere with the crossing are also taken under scheduled fires. Smoke is planned against enemy observation posts. On-call fires are planned against likely or suspected enemy positions and positions which are so deep as to make their early attack unlikely. Nonnuclear and nuclear fires are integrated. Artillery crosses the river early enough to insure continuous artillery support to the assault units.

142. Conduct of Operations

a. Troops move from positions well in rear of the river to the near edge, which is the line of departure. Every effort is made to maintain a continuous flow of personnel with no appreciable stopping on the near bank. This may not be possible when boats are used. In

that case, attack positions (where boats are picked up) are selected by the battle group commander, and positions on the near bank from which boat teams can deploy and launch their boats are required. Units do not attempt extensive reorganization on reaching the far bank, but move away from the river to rapidly eliminate remaining enemy and to gain enough dispersion to reduce the damage from an attack by nuclear weapons. As the attack progresses, reorganization is continuous until, eventually, the units are reconstituted in the formation necessary to continue the attack. The attack then proceeds as described in paragraphs 121 through 127.

b. The reserves remain on the near bank until enough ground has been gained on the far bank to permit them to cross without undue massing. They are prepared to move to the far bank quickly if the enemy's countermeasures cause extensive casualties among the assault units.

c. All available crossing means are used to achieve maximum speed in the crossing and the subsequent exploitation of the bridgehead, and to reduce the criticality of any one crossing means. Army aircraft, particularly helicopters, may be very useful in moving fire support units, reserves, and supplies to speed the buildup on the far bank.

Section IX. RAIDS

143. General

A raid is an attack within an enemy position to accomplish a specific mission, with no firm intention of holding the invaded territory. A raid may be executed within or beyond supporting range of the parent unit, in daylight or in darkness. When the area to be raided lies beyond supporting range, the raiding force may be organized and operated as a task force.

144. Purpose of Raids

a. Raids are designed primarily to capture prisoners, gain specific information of the enemy, or to capture or destroy specific enemy material or installations. They may be conducted to seize or destroy an objective, but not to hold it. They are also used frequently to exploit nuclear strikes forward of the friendly battle area; the raiding force sweeps into the area and eliminates remaining enemy personnel. Attack planning considerations for raids are similar to those described in section III of this chapter.

b. Raids may be conducted by any size force. It is often desirable for the force to be highly mobile and be composed of all arms. A task force as described in appendix III is particularly suitable for a raid. A battle group may constitute the raiding force for a division.

As such, it may receive varied attachments as described in appendix III, and intelligence teams from higher headquarters, as well.

c. Since permanent retention of terrain in the enemy area is not contemplated, a raiding force plan of withdrawal must be made in advance. Easily identifiable rallying points should be designated for use in case unforeseen situations do not permit the original plan of withdrawal to be executed.

Section X. BATTLE GROUP IN THE OFFENSE IN NONNUCLEAR WARFARE

145. General

a. The basic goal in planning and conducting an attack is to achieve superior combat power at decisive points with minimum risk. Since this is as true in nonnuclear as in nuclear war, the principles and techniques discussed in sections I through IX are generally applicable to non-nuclear conditions. The absence of nuclear consideration in the commander's estimate of the situation will substantially affect his concept.

b. In nonnuclear warfare, the battle group often attacks strongly held, continuous enemy positions in close coordination with adjacent units. This tends to require the frequent use of zones of action and intermediate objectives as control measures.

c. Offensive operations in nonnuclear warfare tend to be slower and more deliberate than in nuclear warfare because concentrating nonnuclear weapons alone to gain superior combat power is normally more time-consuming than gaining comparable superiority with nuclear support.

146. Planning and Conducting the Attack

a. In nonnuclear attack, dominant terrain is habitually seized and controlled by strong maneuver elements using high ground approaches. (With nuclear support, such terrain may at times be neutralized by nuclear fires in conjunction with relatively small security elements.)

b. Close control and coordination may be practiced in a nonnuclear attack because the absence of nuclear weapons makes the attendant concentration and slowness of movement less dangerous.

c. Nonnuclear preparatory fires can normally reduce enemy combat effectiveness to a lesser degree than nuclear fires. Strong assault forces are therefore usually necessary to overcome remaining enemy resistance.

147. Degree of Concentration

a. The absence of nuclear fires permits greater concentration of enemy defensive forces and consequently requires greater concentra-

tion by the attacker. Also, a defender can remain stationary and prepare strong positions with less risk, a factor which forces the attacker to commit larger forces and greater quantities of nonnuclear munitions.

b. Since there is always a possibility that an enemy may employ nuclear weapons, the battle group concentrates only to the degree necessary to accomplish the mission. Neither units nor installations are concentrated merely for convenience.

CHAPTER 6

THE DEFENSE

Section I. GENERAL

148. Mission

A battle group, as part of a larger force, employs the defense to deny a vital area to the enemy, to protect a flank, to contain an enemy force, to gain time, to economize forces, or to bring about maximum destruction and disorganization of the enemy. The mission is the paramount factor in organizing for the defense. In addition, the composition of opposing forces, the terrain and weather, dispersion, and security are important considerations.

149. Types and Echelons of Defense

a. There are two basic types of defense, the position defense and the mobile defense.

b. The position defense is a relatively compact defense in which the battle area is organized into a series of mutually supporting defensive positions. Forward portions of the battle area are strongly held. Terrain may be controlled temporarily with nuclear fires. Units may be in dispersed assembly areas adjacent to critical terrain, prepared to occupy it or to call for nuclear fires on it if its seizure is threatened. The depth of the defense is relatively shallow, and is organized with the aim of stopping the enemy forward of the battle area. If the enemy penetrates the area, he is destroyed or ejected.

c. The mobile defense is a fluid defense. Forward areas are lightly held by forces which block, impede, and canalize the enemy. The larger portion of the force is in reserve to be used in offensive action. The mobile defense envisages that decisive combat will occur within, or forward of, the battle area. Principal reliance is placed on bold and vigorous action to destroy the enemy. Battle group frontages and depths are usually greater than those for the position defense. The smaller number of troops in forward areas may result in the forward battle groups not being mutually supporting.

d. The two types of defense lie at opposite ends of a scale with a wide range of variation between. The primary differences between

them are the manner in which the forces are disposed, and the size and intended use of the reserve.

e. Defense, regardless of type, consists of three echelons—the security echelon, forward forces, and the reserves or striking force. The security echelon provides early warning of the advance of the enemy, delays and disorganizes his advance, and deceives him as to the true location of the battle area. The forward forces engage the enemy in decisive combat, or stop, slow, canalize, or disorganize him to facilitate his destruction by other forces and means. The reserves are designed to limit penetrations and to destroy or eject the enemy by counterattack. The area in which the forward forces and the reserves are located is known as the battle area.

150. Defensive Operations

a. Defensive operations on the nuclear battlefield are characterized by flexibility, dispersion, and the employment of a series of defensive localities disposed in great depth. Defensive tactics are designed to absorb a severe initial shock when an enemy attacks. With nuclear weapons in his arsenal, the defender can take advantage of every opportunity (and can create opportunities) to regain the initiative. Defensive operations are conducted aggressively to destroy the enemy and to maintain high morale; offensive action in conjunction with the use of nuclear weapons is stressed.

b. An enemy's nuclear capability forces the broad dispersion of a defending unit. The dispersion presents problems in surveillance, in massing nonnuclear fires, and in controlling the large area assigned. The defender's nuclear weapons assist materially in providing a solution to the problems of controlling large areas because they can destroy enemy forces of significant size that may attempt to move through lightly held areas. Chemical weapons, biological weapons, and radiological means may also be employed in such areas.

c. Passive defensive measures are highly important. Emphasis is placed on camouflage and concealment. Barriers and dummy or lightly held positions are used to delay and deceive the enemy and entice him into expending his nuclear weapons unprofitably. All positions are dug in as time permits, and underground shelters are provided whenever possible. All emplacements must be provided with overhead cover for protection against blast and thermal and nuclear radiation effects resulting from a nuclear explosion.

d. Emphasis is placed on forcing the enemy to concentrate into a nuclear target, either forward of or within the defense area. Troop safety is a vital factor which must be considered in planning for the use of nuclear weapons.

e. Against a defender possessing nuclear weapons, the enemy may

attack most often at night or with concealment provided by heavy smoke screens. This emphasizes the need for effective security measures, including defensive fires and warning systems, and for training in night combat and the use of illuminating devices.

f. Nuclear warfare places a premium on mobile reserves. Reserves must be prepared to move quickly by any means to critical areas which the enemy may attack following a nuclear strike.

g. The enemy's use of nuclear weapons, airborne and airlanded troops, infiltrators, and guerrillas creates requirements for defending in more than one direction, for establishing defensive areas in great depth, and for adopting specific measures to provide security for artillery and administrative installations within the defensive area.

h. Defense in depth is designed to prevent the enemy from gaining free access to rear areas after breaching forward positions.

i. Because movement and dispersed formations are used as a protection against nuclear weapons, forward defensive forces are often assigned the mission of slowing, delaying, and disorganizing the enemy to make him more vulnerable to counterattack, rather than of stopping his advance forward of a line or area.

j. Great emphasis is placed on rapid reorganization. After an enemy nuclear strike, the success of the defense may well depend on the speed with which the defending forces are reorganized and disposed to destroy the enemy or contain his attack.

k. Flexibility of battle group employment is assured by the several types of organic and attached transportation means. Personnel carriers, especially when employed with attached tanks, afford speed, protection, and shock action for the reserve in aggressive defense operations.

l. The battle group is the basic tactical unit of the infantry and airborne divisions. Battle groups must be able to operate with substantial gaps between them on a battlefield of great width and depth.

m. In all defensive operations, the effects of the enemy's air, CBR, and nuclear capabilities, and friendly battlefield surveillance means are major considerations.

151. Troop Leading

The thoroughness with which each step in troop leading is accomplished depends principally upon the proper use of available time. The efficient use of good troop leading procedures assures concurrent planning and reconnaissance, competent staff action, timely decisions, and rapid and orderly occupation and organization of the position. See also appendix II.

Section II. ORGANIZATION OF DEFENSE

152. Basic Considerations

Basic considerations for planning and conducting defensive operations are discussed below. It is recognized that these considerations will not all have equal influence in a given situation nor will any of them apply to the same extent in different situations. The commander decides the degree to which each will affect his planning.

a. Proper Use of Terrain. Terrain analysis in the area of operations covers these military aspects:

(1) *Critical terrain.* Critical terrain is important in nuclear warfare, but the defender is not rigidly bound always to occupy it or to hold high ground. He may occupy ground adjacent to or forward of critical terrain, taking advantage of cover and concealment. With his nuclear capability, he may be able to defend critical terrain with comparatively small forces, or he may be able to relinquish it temporarily without seriously jeopardizing the successful accomplishment of the mission.

(2) *Cover and concealment.* Woods, vegetation, natural conformations of the terrain, and manmade cover reduce the primary effects of nuclear weapons. However, the defender must consider the secondary blast effects which occur in woods and built-up areas. Concealment is important in nuclear warfare because it makes target acquisition more difficult for the enemy.

(3) *Obstacles.* Natural and manmade obstacles are used in organizing the defense so the defender may remain as dispersed as possible and still adequately cover avenues of approach. Obstacles assist in canalizing enemy troop movements. When they are covered by effective fire, the enemy is forced to bypass them or mass the necessary force to overcome them. In massing, the enemy may become a worthwhile target.

(4) *Observation and fields of fire.* Good observation is essential so that targets may be brought under fire at the earliest opportunity. Conversely, it is necessary to deny observation to the enemy in order to reduce the nuclear vulnerability of the defending forces. The selection of fields of fire should emphasize destruction of the enemy in the gaps between positions. The possession of high ground is valuable for observation and for obtaining fields of fire. Army aircraft are used for observation and for posting and shifting ground observation posts.

(5) *Avenues of approach.* In view of the dispersion between units, a defender must give attention to avenues of approach from all directions. Nuclear weapons available to the defender will facilitate his control of the avenues of approach to and into his position. Analysis of avenues of approach to the defender's

position provides a basis for the location of potential targets for nuclear weapons. As targets develop in or near predetermined locations, they may be brought under nuclear fire by security forces. The defender also considers the avenues of approach to be used by elements of his force engaged in offensive maneuver.

b. Security. (See also section III.)

(1) The enemy's nuclear capability and the necessity for dispersion place emphasis on all-around security. Counterreconnaissance is of vital importance to reduce to a minimum the enemy's capability of locating nuclear targets. Aviation and reconnaissance units are habitually used to perform security missions.

(2) Depending on the plan of defense, security forces may or may not attempt to force the enemy into early deployment. It may be desirable to allow him to come close to the defensive area or into areas where defensive nuclear fires are more effective.

(3) The defender's capability of employing nuclear weapons makes it possible for his security forces to destroy an attacker.

c. Mutual Support. Mutual support is achieved by positioning units so that they can reinforce one another by fire or movement. The mobility of units and the range and lethality of supporting weapons determine the degree of mutual support.

d. All-Around Defense. This is a prime consideration in nuclear warfare. The large gaps between units require that all units prepare for attack from any direction. Frequently, it may be necessary to move forces to previously prepared positions to obtain all-around defense and thereby prevent defeat.

e. Defense in Depth. Maximum depth of defense is required since the enemy may be expected to rapidly exploit his nuclear attacks. Defense in depth precludes the enemy's free maneuver in rear areas. It also reduces overall nuclear vulnerability and assists the maneuver of the reserve or striking force.

f. Proper Use of Barriers. An effectively coordinated barrier system is of particular importance when defending on wide frontages. The necessity for freedom of maneuver of the maneuvering force in a counterattack must be taken into account when establishing the barrier system. Demands on manpower, material, equipment, and time impose a limitation on the extent of barrier construction. Natural obstacles are utilized to the maximum extent in conjunction with manmade obstacles to construct the barrier system. Prepositioned or surface burst nuclear weapons can be used to create additional obstacles and to deny areas to the enemy. Persistent effect chemical agents may be integrated into the barrier system to strengthen obstacles and to assist

in denying areas. Barriers may cause enemy forces exploiting a nuclear attack to mass temporarily. See FM 31–10.

g. Coordinated Fire Plan. When nuclear fires are used, they dominate the defensive fire plan. They are planned against all probable enemy action. Nonnuclear fires are planned to assist in the defense of unit positions, to assist in causing the enemy to mass, to augment the effects of nuclear fires, and to cover areas where nuclear fires are not used. Troop safety is a major consideration in planning nuclear fires, particularly those to be delivered within the position. Plans are made to bring the enemy under fire at long range and subject him to increasingly heavy fire as he approaches the battle area. Fires are also planned to strike enemy formations which have been successful in penetrating the battle area, and to support counterattacks. The defender makes plans to take swift action against the enemy when he masses into a profitable nuclear target. Fires must be closely coordinated with the use of barriers and the location of defensive positions.

h. Flexibility. The possession of nuclear weapons affords the defender great flexibility. Additional flexibility is obtained by maintaining a reserve and by centralizing the control of fire support at the battle group level. Flexibility is also gained through the use of helicopters and personnel carriers to shift reserves rapidly.

i. Maximum Use of Offensive Action. The defending unit maintains an aggressive desire for offensive action, and troops are psychologically conditioned to go rapidly from the defense to the offense. In fluid situations with wide frontages and great depths, there are many opportunities to regain the initiative by offensive action. The counterattack is the element in the defense by means of which the defender gains the initiative.

j. Dispersion. The commander is constantly faced with the problem of weighing his vulnerability as the results of either too great concentration or dispersion. The former entails risk of defeat by nuclear fires and the latter, risk of piecemeal defeat by locally superior enemy infantry or armor. Two criteria should be applied to arrive at the desirable degree of dispersion. These are the unit's mission and the unit's capabilities. Maximum theoretical capabilities may be established as functions of fire support, mobility, communications, and surveillance. In turn, these theoretical capabilities must be subjected to the influence of relative combat power including enemy nuclear capability, weather, and terrain. Only after consideration of these factors can a realistic determination of optimum dispersion or concentration be made.

153. Planning the Defense

a. Organization of the Ground.

(1) Organization of the defensive area normally develops as follows:
   (*a*) Consideration of areas to be occupied.
   (*b*) Estimation of troops required for the defense of each area.
   (*c*) Tentative selection of boundaries or areas of responsibility.
   (*d*) Organization of the ground by units within assigned sectors.
   (*e*) Adjustment of defensive sectors, if necessary.

(2) Concurrently, commanders at all echelons consider the employment of nuclear weapons in all phases of their planned defense. They also consider the effects of enemy employment of nuclear weapons against the defense.

b. Fire Support Planning.

(1) All available supporting fires must be planned and integrated into the defense. Nuclear and nonnuclear fires are planned concurrently.

(2) Fires must be planned to support security forces, forces in the forward defensive areas, and counterattacking forces.

(3) Fires must be organized so that they are compatible with the type of defense selected.

(4) For further details, see chapter 9.

c. Planning Employment of Chemical and Biological Weapons and Radiological Contamination.

(1) Biological attacks in support of defensive operations are planned by corps or higher headquarters.

(2) Toxic chemical agents may be employed in defense to produce both persistent and nonpersistent effects. The use of persistent effect chemical agents increases the effectiveness of fire against known enemy weapon positions and reserves. Persistent effect agents may be used to contaminate obstacles and defiles as an aid in impeding enemy movement or canalizing enemy forces. Nonpersistent effect agents may be employed against weapon positions, targets of opportunity, and concentrations of enemy troops moving in the attack. The use of flame weapons may be very effective and should be considered.

d. Barrier Planning.

(1) Barrier plans are developed concurrently with other plans. See paragraph 152*f* for factors considered in barrier planning.

(2) Obstacles are planned forward of and within the battle area. Those within the battle area are planned especially in connection with the battle group blocking or switch positions, or with defensive installations prescribed by the division commander. They are constructed with due regard to their effect on the mobility of friendly forces, especially in the

counterattack. Persistent effect chemical agents and flame mines can be incorporated in the barrier plan.

e. Air Defense. Air defense is usually furnished by corps units under division or corps control. Units may be dispersed throughout the division zone. Pertinent parts of the air defense mission must be tied in carefully with the battle group plan of operations. When the battle group is operating independently, air defense units may be attached. When under battle group control, the plans for their use are prepared by the commander of the attached air defense units and integrated with the battle group plan of operations.

f. Counterattack Planning. Counterattack plans (par. 182) are prepared concurrently with plans for the defense. They are prepared for all likely enemy penetrations within the defensive areas.

154. Battle Group Capabilities

a. Mobile defense is based on using minimum forces forward, and on destroying the enemy by a powerful counterattack. The battle group is not capable of performing all aspects of this defense. It participates in the mobile defense as part of the defense being conducted by division or higher unit, either as part of the forward defensive forces, in the security echelon, or as part of the striking force.

b. To the extent that the mission and mobility of the battle group permit, the defense of the battle group area is based on flexibility, movement to alternate or supplementary positions, limited delaying actions, and rapid follow up of an enemy attempting to disengage. The amount of vehicular mobility available to the battle group may not always permit all of these types of movement to be conducted. The terrain or the lack of depth to the battle area assigned by division may impose further restrictions. Nevertheless, within the capabilities of the battle group, these restrictions are overcome. The enemy is not presented with a fixed, easily located target. Critical terrain is not always held in strength. Relative mobility must be considered. The fact that the battle group does not possess vehicular mobility does not prevent movement. Troops on foot may make the necessary movements when the enemy also is on foot or when enemy movement is restricted by fires or barriers. When battle group mobility is restricted during daylight, by enemy observation and mobility, movements are made by infiltration or at night.

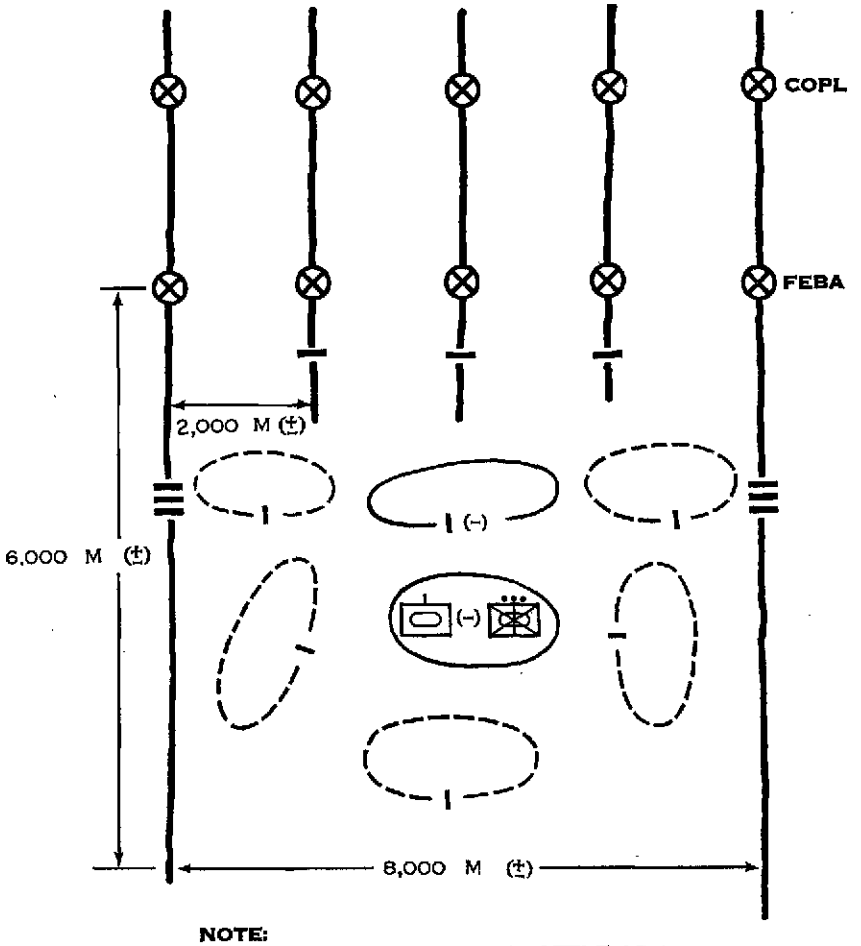
155. Battle Area

The division commander assigns each forward battle group a battle area to defend. The area is prescribed by limiting points, boundaries and, frequently, a rear boundary. The division commander provides enough guidance in his orders to insure that the battle group commander will have a clear understanding of the initial concept for the

organization of the terrain and the contemplated plan for the conduct of the defense.

156. Frontage and Depth
(fig. 13)

The battle group is capable of conducting a defense, regardless of type, on frontages of 8,000 meters (plus or minus) with depths of 6,000 meters (plus or minus). These are only guide figures. The disposition of battle group elements in any situation can only be determined after a complete estimate of the situation is made based on all factors involved. These factors may be summarized, as was done in the offense, as METT—mission, enemy, terrain, and troops available.



NOTE:
FEBA—FORWARD EDGE OF BATTLE AREA.

Figure 13. Battle group in defense (schematic).

Section III. SECURITY FORCES

157. General

Security forces are employed to provide security, deception, and flexibility to the overall defense and, where possible, to destroy the enemy with nuclear weapons forward of the battle area. Properly employed, they provide early warning, disorganize the attacker, and disrupt his plans. Security forces include those used to counter enemy activity within the battle area, such as guerillas, infiltrators, and airborne or airlanded troops.

158. General Outpost

a. A general outpost is normally used in position defense when there are friendly forces on either flank, and it may be used in mobile defense. It is provided by division. The division commander normally prescribes its location, general composition, and the units responsible for its organization. When the division is operating as part of a corps, the initial location of the general outpost may be designated by the corps commander. As a guide only, the general outpost may be located 5,500 to 11,000 meters forward of the FEBA (FM 7–100).

b. There is no prescribed organization for a general outpost. It is normally a balanced combined arms force with the necessary logistical and air support. It may be supported by artillery, including nuclear fires, from within the battle area or may have attached artillery fire support means. A general outpost is as mobile as conditions permit, using tanks, personnel carriers, trucks and Army aviation. It may consist of the entire reconnaissance squadron reinforced by tanks and artillery, or a mechanized battle group with attached reconnaissance elements, tanks, and engineers. When a battle group is the major component of a general outpost, it is desirable for the battle group headquarters to control the force unless the brigade headquarters is used for this purpose.

c. The general outpost warns of an enemy approach and provides time for units to prepare the battle area. It covers the withdrawal of the covering force and denies the enemy ground observation of the battle area. The mission emphasizes locating nuclear targets, deceiving the enemy into presenting a nuclear target, or allowing some of its elements to be bypassed so they can remain behind to secure intelligence information and control fires.

d. The general outpost accomplishes its mission by observation and fires, including nuclear fires; use of obstacles and demolitions; aggressive patrolling and reconnaissance; delaying action; deception measures; and, exceptionally, by close combat. Its disposition and frontages conform in general to those in a delaying action. Plans are based on the mission and provide for both a night and daylight withdrawal, security

measures, disposition and frontages of troops on the initial position and on delaying positions in the rear, coordination of fires, and means for deceiving and disorganizing the enemy throughout the action. (For a detailed discussion of a delaying action, see chapter 7.)

159. Combat Outpost

a. The primary mission of the combat outpost is to provide early warning of the advance of the enemy and to deny him close ground observation of the battle area. Within its capabilities, it delays and disorganizes the enemy and attempts to deceive him as to the true location of the battle area, principally by means of available fires. It is made as mobile as terrain and equipment permit. If the combat outpost is provided with personnel carriers and has tanks attached, it may place additional emphasis on delaying and disorganizing the enemy. It avoids close combat.

b. The combat outpost is normally located 1,000 to 2,400 meters forward of the FEBA on the first terrain feature from which it can accomplish its mission. FM 7–10 discusses its organization. Usually, security elements of higher echelons are forward of the battle group. The reconnaissance platoon or the combat outpost maintains contact with them. If no friendly forces are forward, the outpost sends patrols forward to gain and maintain contact with the enemy. It may locate and recommend targets for nuclear weapons. The outpost withdraws over previously reconnoitered routes.

c. The division commander prescribes the location and control of the combat outpost based on recommendations of the battle group commander.

d. Terrain selected for the combat outpost should—

(1) Afford long-range observation and fields of fire.
(2) Provide obstacles to the front and flanks.
(3) Provide cover and concealment on positions.
(4) Provide cover and concealed routes of withdrawal.
(5) Deny the enemy close ground observation of the battle area.
(6) Be within supporting distance of the battle area.

e. The combat outpost in front of each forward company usually consists of a reinforced rifle platoon. Artillery and heavy mortar support is usually provided the combat outpost from within the battle area. The reconnaissance platoon may be attached to one of the companies for use on the combat outpost when security echelons of higher headquarters withdraw or when the enemy approaches the combat outpost.

f. The force to occupy the COPL is usually provided by the forward companies or by troops attached to the forward companies for this purpose. Tanks, when appropriate, are attached to the forces

manning the combat outpost. These tanks may be taken from the tank element located with the reserve elements. Upon withdrawal of the COPL, these tanks revert to their primary mission.

g. When the time to prepare positions on the FEBA is limited, when the combat outpost line is beyond supporting range of the forward companies, and when subsequent positions are occupied in a night withdrawal, a reserve company may establish and control the combat outpost.

h. The battle group commander normally delegates to the company commander the control of and authority to withdraw the combat outpost. The company commander keeps the battle group commander and adjacent unit commanders advised of plans for and the contemplated time of withdrawal. If the combat outpost loses all communication with its company, the outpost commander may withdraw it when it has accomplished its mission or to prevent its capture or destruction. He makes every effort to notify his company and commanders of adjacent portions of the outpost of the contemplated withdrawal.

160. Reconnaissance and Security Forces (R&S Forces)

a. Under nuclear conditions, the division may use R&S forces more often than in nonnuclear warfare, since the area of security responsibility is usually increased. The R&S forces consist of personnel manning a series of lateral outposts, roadblocks, observation posts, and reconnaissance detachments. They are furnished by forward battle groups and/or other divisional elements. If the forward battle groups provide the forces for the reconnaissance and security position (RSP), they do not establish a COPL. If other units provide these forces, forward battle groups may establish a COPL. R&S forces perform missions prescribed for the general outpost and combat outpost (if a COPL is not established).

b. The division commander normally prescribes the location of the RSP's, although corps may prescribe it when the division operates as part of a corps. Generally, they are farther from the forward edge of the battle area than a COPL, but closer than a general outpost. They may be as far as 4,000 meters forward of the battle area. When the division commander assigns responsibility for manning the RSP to the forward battle group commanders, he extends the battle group boundaries through the RSP (FM 7–100).

161. Rear Area Security

The battle group commander designates a rear area security commander. He may assign the combat support company commander this responsibility. Rear area security is provided by establishing observation posts, patrols, listening posts, and road guards, and by positioning the rear area troops carefully. Areas of responsibility for rear

area security generally coincide with unit boundaries. Security elements are particularly alert for airborne or airlanded attack, guerillas, infiltrators, and interference by local civilians and refugees. The reconnaissance platoon may be used for rear area security. Army aircraft may be employed during daylight to economize on other surveillance means.

162. Other Security Measures

a. Units establish local security to prevent surprise and infiltration of their defensive positions. At the forward edge of the battle area, this security consists of observation posts, listening posts, outguards, and patrols. The forward companies patrol the area between the combat outpost and the FEBA to maintain contact with COPL forces and to add to the security of the battle area (FM 7–10).

b. In addition to the security measures discussed in *a* above, the battle group commander establishes flank security, when required. Subordinate units institute security measures to provide for the security of the flanks of their installations. Defensive measures against airborne attacks, guerilla action, infiltrations, and CBR attack are established (par. 185). Patrols seek out the enemy and gain information of his activities. They are employed forward of and within the defensive position. Other means that can be used to contribute to security, such as electronic surveillance devices, infrared equipment, illuminants, barbed wire, antipersonnel mines, and other devices, are employed forward of and within the defensive position.

Section IV. POSITION DEFENSE

163. General

The position defense is characterized by a strongly held battle area. Forces placed in organized localities are relied on to maintain positions and control of the terrain between them. The battle area is composed of the forward companies, known as forward forces, and a battle group reserve. Security forces are employed forward of this battle area, while reserves of higher headquarters are employed to its rear. When the enemy possesses both a nuclear capability and mobile forces, the division frequently employs the mobile defense. When this occurs, the missions of the battle group are usually modified to require it to block, delay, canalize, or divert the enemy, with emphasis on a more fluid operation (sec. V).

164. Mission

The mission of the forward battle group in the position defense is to stop the enemy by fire forward of the battle area, repel his assault by close combat if he reaches it, and destroy or eject him by counterattack if he succeeds in penetrating it.

165. Security Echelon

a. Division and higher echelons furnish the general outpost and security echelons operating forward of the general outpost. (See FM 7–100.)

b. The forward battle groups furnish the combat outpost. Subordinate elements of the battle groups establish local security. See also paragraph 162.

166. Variations of Position Defense

There are several variations of the position defense which may be adopted by the division. These include the compact, extended, linear, and perimeter variations. At battle group level, the extended variation of the position defense is normally adopted. This variation emphasizes depth in position, maximum firepower forward, and a strong reserve. The compact variation is more suitable for nonnuclear warfare wherein forward forces occupy less frontage and have a greater degree of mutual support. When isolated, the battle group may be required to adopt the perimeter variation of the position defense. These variations may be modified as dictated by the mission, situation, terrain, and troops available.

167. Organization of the Battle Area

a. In figure 14, the battle group is organized to retain some blocking capability and, in addition, to have a counterattack capability utilizing the company in the extreme rear of the battle group area and elements of the attached tank company as the maneuvering force. Note that the tank company has one platoon of mechanized infantry attached. Figure 15 emphasizes a blocking rather than a counterattack role. To reduce the vulnerability of this organization to nuclear attack, the reserve companies may be located in greater depth.

b. The battle group may adopt the perimeter variation of position defense (perimeter defense). The commander prescribes as large a perimeter as possible considering the terrain, mobility of friendly forces, and the availability of fire support, especially nuclear fire support. Companies on the circumference are mutually supporting. The equivalent of one company or less constitutes the battle group reserve. This reserve is reinforced with tanks. The minimum reserve should be a rifle platoon, plus tanks. The battle group commander plans to contain enemy penetrations or to counterattack, using his reserve, plus troops which may be available in areas that are not heavily engaged or are less heavily engaged than troops in the threatened area. Against an enemy possessing a nuclear fire capability, the battle group does not adopt a perimeter defense voluntarily, as in this formation it has maximum vulnerability to nuclear weapons. It must, therefore, be regarded as principally a formation for nonnuclear warfare.

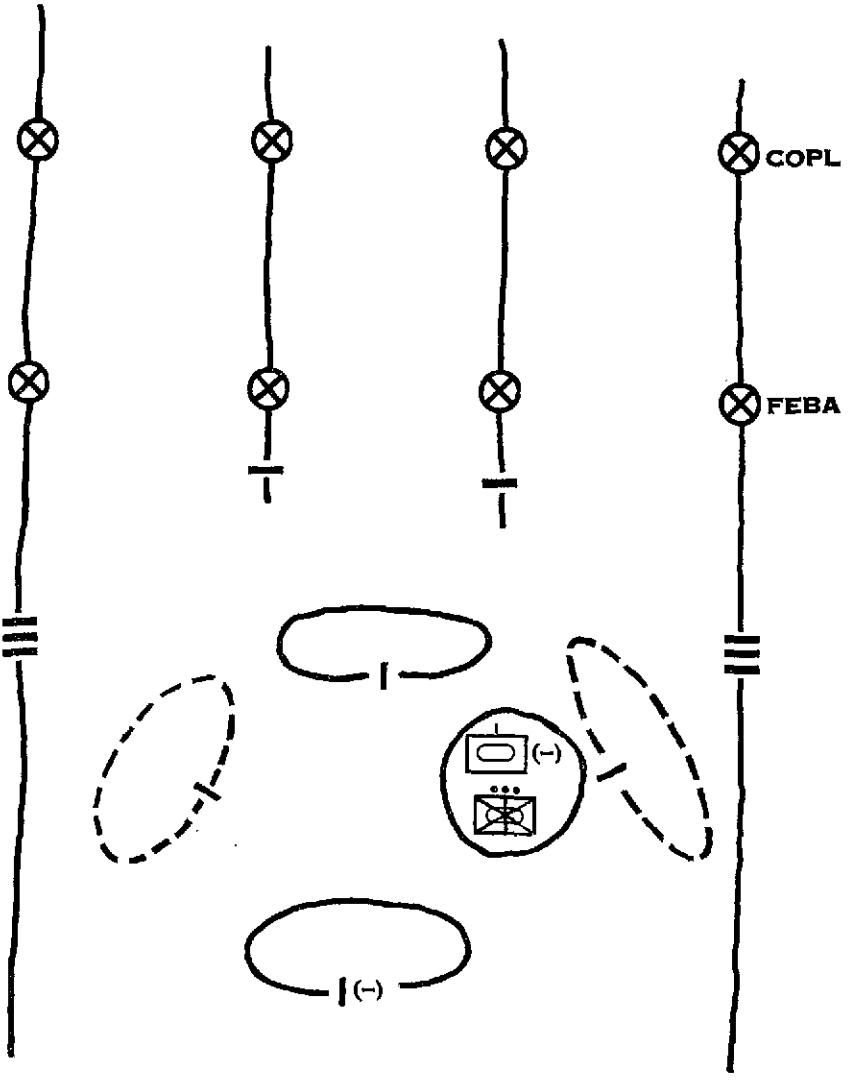


Figure 14. Position defense variation (schematic).

(1) Figure 16 shows a battle group perimeter with all companies forward. With this organization, the only reserve directly under battle group control is the tank company, minus. However, the companies are not authorized to commit their reserve platoons without the battle group commander's authority. When the commander commits his tank reserve, he adds to it as many of the reserve rifle platoons as he feels are needed to accomplish the mission. He designates a commander for this composite reserve. A perimeter with five companies for-

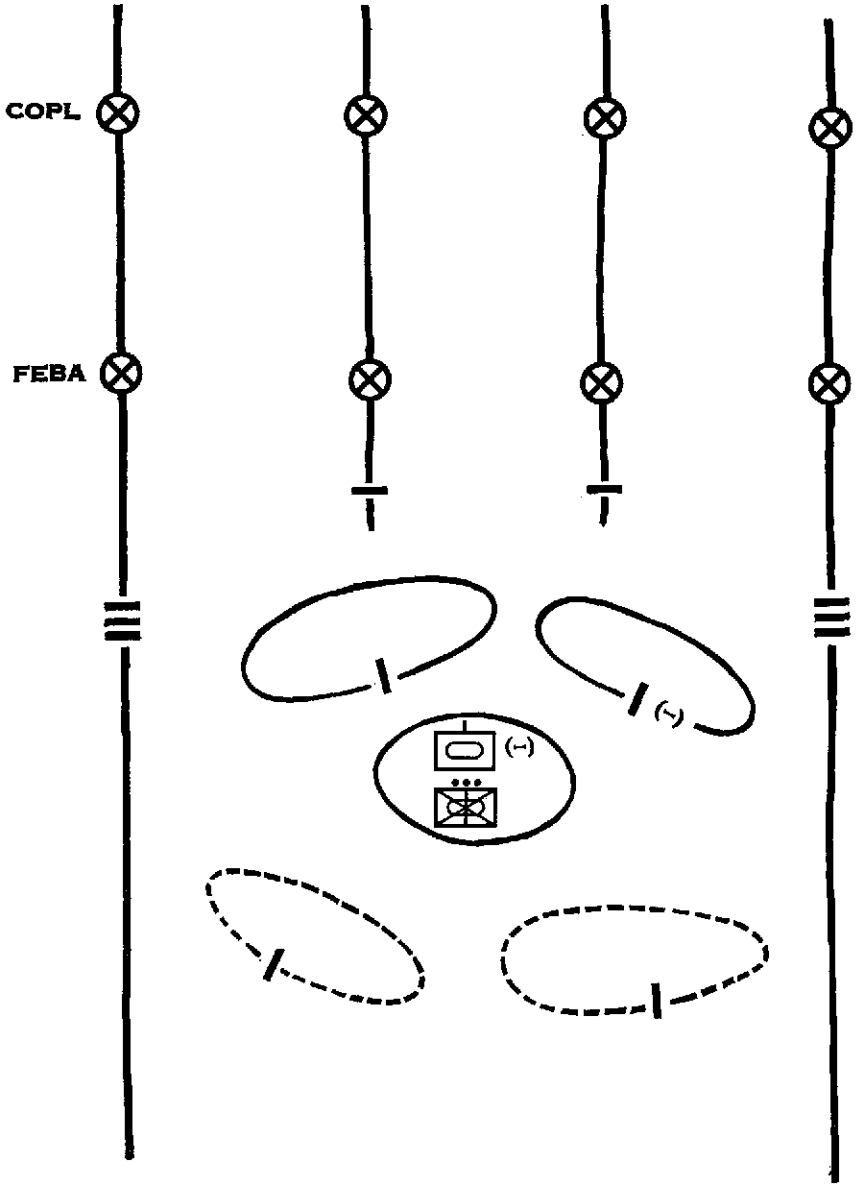


Figure 16. Position defense variation (schematic).

ward provides for maximum firepower forward because all company crew-served weapons can be employed there. Its principal disadvantage is the composite reserve.

(2) Figure 17 shows a perimeter with four companies on the circumference.

168. Forward Companies

a. The battle group commander frequently assigns defense missions to rifle companies which require the company commanders to commit the major portion of their units forward. Similarly, the mission assigned the battle group commander will often require deployment of all combat power available with the exception of a relatively small reserve. This frequently results in a formation which is linear. This may be advantageous in the presence of an enemy nuclear capability, since a unit in such a formation is less vulnerable to nuclear attack than one more compact. In any event, maximum dispersion of personnel and equipment consistent with the accomplishment of the mission is a principal guiding factor for commanders at every echelon.

b. Limiting points (par. 171) (marked FEBA) are used to indicate the general trace of the forward edge of the battle area to the forward companies. (The exact trace is ultimately determined by the location of the forward companies and their subordinate elements.) The general trace of the FEBA should possess the following characteristics:

(1) Observation to the front and flanks.
(2) Good fields of fire.
(3) Natural obstacles.
(4) No significant salients and reentrants.
(5) Cover and concealment.

c. Because of the formation planned for the forward companies, their depth is comparatively shallow, considering the overall depth of the battle group battle area. However, they are given adequate space to position their weapons and to establish alternate and supplementary positions.

169. Frontage and Depth

The battle group commander assigns frontages to his forward companies according to the natural defensive strength and relative importance of their defense area. Every effort is made to assign each company sufficient frontage and depth to enable it to disperse as the mission will permit. It is desirable for units and weapons to be located and employed so that they can assist one another. Desirably, companies are located so that as a minimum, mutual support is obtained by mortars and 106-mm rifles.

170. Boundaries

a. Boundaries define areas in which commanders coordinate and control their units' movements and fires.

b. The boundaries between forward companies divide the battle group frontage in proportion to the defensive strength and weakness of the terrain in the area. Boundaries are located to avoid the division

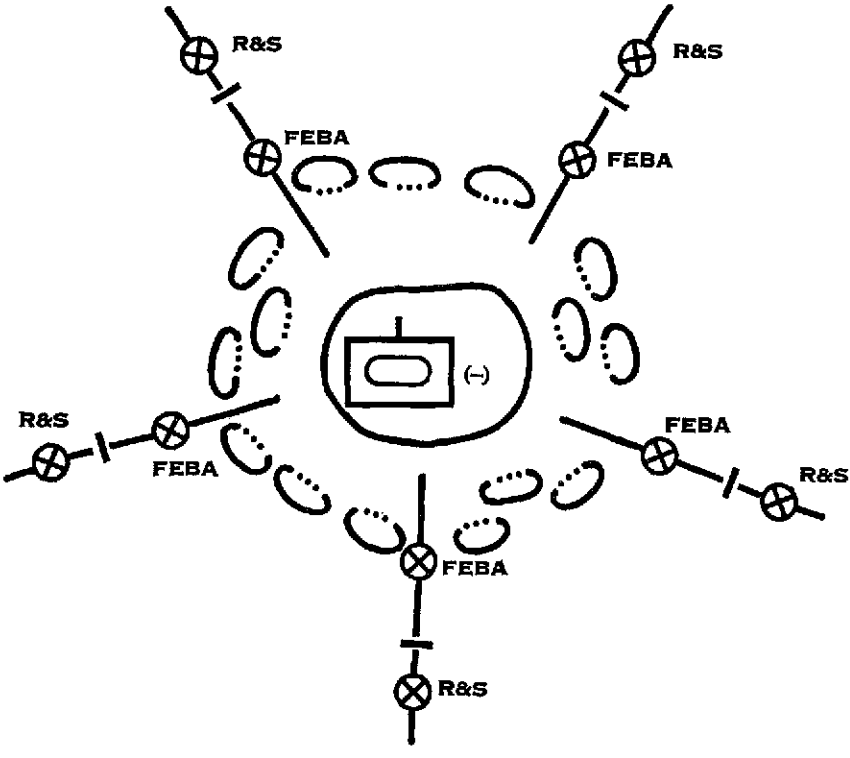


Figure 16. Perimeter variation, position defense, five companies forward (schematic).

of responsibility for the defense of terrain features or avenues of approach. Every effort is made to give forward companies equal defensive tasks.

c. When the combat outpost is controlled by the battle group reserve commander, the boundary is extended forward to a point short of the combat outpost. If the combat outpost is controlled through the forward company commander, the boundary is extended through the combat outpost line to the limit of effective ground observation forward of the COPL. In either event, boundaries extend far enough forward to allow forward companies to position local security. The boundary extensions at their farther limits are located to coincide with easily recognizable terrain features. Boundaries between forward companies are extended to the rear to provide adequate areas for companies to organize their defense.

171. Limiting Points

a. Limiting points on unit boundaries are used to fix the exact location at which a higher commander desires adjacent subordinate com-

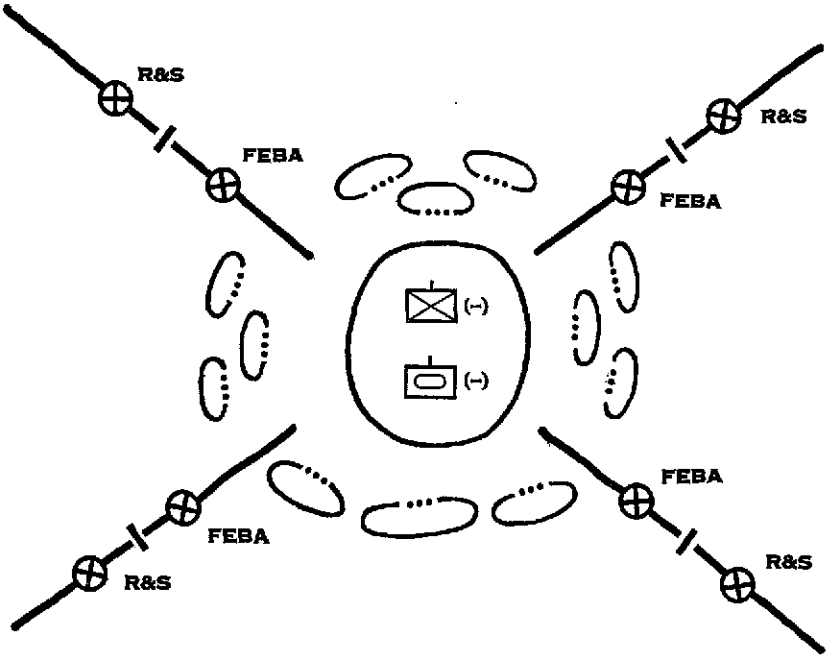


Figure 17. Perimeter variation, position defense, four companies forward (schematic).

manders to coordinate their defenses. The division commander designates limiting points on the battle group boundaries at the FEBA and may designate limiting points for the combat outpost, usually on recommendation of commanders of battle groups located along the FEBA. Battle group commanders designate limiting points on their company boundaries at the FEBA and, when the forward companies control the combat outpost, designate limiting points on company boundaries of the combat outpost line.

b. A limiting point should be located at or near a terrain feature easily recognizable both on the ground and on a map.

c. Commanders (or their representatives) coordinate at limiting points and decide whether they should be covered by fire (direct or indirect) or fire and barriers, or whether they should be garrisoned. When adjacent unit commanders agree that a limiting point should be relocated, they may recommend a change to the commander who designated it. Battle groups may, without permission from higher headquarters, refuse their flanks away from designated limiting points on the FEBA to obtain adequate security. Effective surveillance must be maintained in the gaps between battle groups (par. 179). The surveillance forces must be capable of coordinating at the designated limiting

point. Flanks must not be refused to the extent that dispositions and fires cannot be coordinated well enough to achieve a continuous defense.

172. Battle Group Reserve

a. The battle group commander designates primary, alternate, and supplementary positions in rear of the battle group forward area to be prepared by reserve units, and specifies their priority of construction. Positions are on or near critical terrain where penetrations from the front or flanks can be blocked. In positioning reserves, the battle group commander provides for maximum dispersion within each company in reserve and separation from forward company positions that are consistent with the performance of the mission.

b. When the battle group reserve is not working on positions, manning the combat outpost, or performing surveillance missions in the battle group rear area, it usually occupies the platoon positions having the highest priority for defense. These positions may be completely occupied or occupied with skeleton forces, keeping the remainder of the reserve dispersed in the vicinity.

c. When a forward battle group commander has to commit his entire original reserve, he immediately reconstitutes a temporary reserve of at least platoon size. Usually, he makes up this temporary reserve from personnel assigned to the headquarters and headquarters company and designates a commander for it. He may assign the combat support company commander as its commander. Assignments to the temporary reserve are kept current.

173. Deception

a. Deception is highly important in the defense. Maximum use is made of camouflage and alternate and dummy positions. The combat outpost attempts to deceive the enemy as to the true location of the battle area. Prepared company positions are occupied with skeleton forces as long as there is no danger of immediate enemy attack. The controlling factor is the ability of the whole force to be in position, ready to defend prior to the time the enemy can attack. Units which are in reserve, as well as supporting units and trains, are dispersed by small units either working on positions, on reconnaissance missions, or in covered and concealed assembly areas. Movement during daylight is kept to a minimum.

b. The employment of dummy radio stations and other electronic warfare countermeasures as available from supporting units and teams should be incorporated in all deception plans.

174. Fire Support Plans

a. Fire support plans are closely integrated with other portions of the defense plan. Fire support is an essential element of the plan of

defense. It is only when properly supported by fires that the plan of defense or counterattack can be a success. When nuclear weapons are used, the importance of fire support is intensified and may become the decisive element in the defense. The utilization of both nonnuclear and nuclear weapons is planned and their fires are designed to complement and supplement each other. The fire support plan is designed to take the enemy under an increasingly heavy volume of fire from the time he comes within range until he reaches the battle area; to stop his assault by an intense barrier of fire (final protective fires) immediately in front of the battle area; and to block him or support counterattacks within the battle area. It includes fires of organic, attached, and supporting weapons on targets of opportunity and prearranged fires that can be delivered under any condition of visibility.

b. To the extent possible, areas most critical to the success of the enemy attack are planned as nuclear targets. These areas include locations where the enemy may be expected to mass such as obstacle crossing sites, assembly areas, and potential nuclear weapon delivery sites. Priorities for each type target are assigned, based on the availability of nuclear weapons. The plan for the use of nuclear weapons should include complete data on all potential target areas—the size of each area, the DGZ, and the number and size of weapons needed to create the desired effect. With this preplanned information, the commander is prepared to strike quickly whichever of these targets becomes the most important to the developing situation. Troop safety in an important consideration when nuclear weapons are used in final protective fires and in fires to support counterattacks. Small yield weapons may have to be employed for these missions, with increased reliance on nonnuclear fires against the enemy in close contact with the defending elements. For further details on nuclear considerations in fire support, see paragraphs 312 through 317.

c. When integrating nuclear and nonnuclear fires in the defense, each type of fire is assigned the task it can perform most effectively. Primary targets of nonnuclear weapons are enemy forces that are so dispersed as to make the use of nuclear weapons uneconomical, and forces that are so close to friendly troops as to make the use of nuclear weapons unsafe. Nonnuclear weapons are also prepared to take over fire missions planned for nuclear weapons in areas where induced radiation may adversely affect the performance of the defensive mission. Nonnuclear fires supplement nuclear fires by firing outside the nuclear effects radius, firing into the major damage area to maintain neutralization, firing on routes that can be used to move reinforcements into the affected area, and by fixing the enemy for followup nuclear fires. Chemical fires are particularly useful in these roles.

d. As far as practicable, final protective fires are planned across the front of the battle area to break up the enemy assault. They usually

consist of nonnuclear fires, but nuclear fires may be incorporated as stated in *b* above. Final protective fires include barrages of organic and supporting artillery and mortars. The battle group commander employs barrages to cover dangerous infantry avenues of approach into the battle area. He designates the general location of each barrage. The forward rifle company commander in whose area the barrage is located specifies its exact location on the ground to his artillery observer. The exact location is then reported to the battle group. The rifle company commander assigns the location of a barrage(s) for the company mortars to cover approaches not covered by the heavier barrages or to extend the coverage of heavier barrages.

e. (1) Antitank defenses are planned to engage enemy armor as soon as it comes within effective range. The defenses are disposed both laterally and in depth. They are planned to separate enemy armor from its accompanying infantry and to destroy it forward of the battle area. If it reaches or enters the battle area, it is canalized into terrain where its destruction will be facilitated by offensive action of armored reserves and by antitank weapons positioned in depth. When nuclear weapons are employed, the antitank defense is designed to force enemy armor to mass so as to present a remunerative nuclear target. Antitank fires are integrated with other types of fires and with the barrier system.

(2) The assault weapon platoon leader (assault gun platoon leader in the airborne division battle group) and/or an attached tank company commander advises the battle group commander on antitank defense measures.

(3) Rifle company antitank weapons are under the direct control of the company commander who coordinates their employment with battle group antitank weapons.

(4) As enemy tanks approach the battle area, they may be taken under fire by artillery until within range of heavy antitank weapons. Those which are able to continue the advance are subjected to an increasing volume of fire from medium and light antitank weapons (fig. 18). Artillery contributes to the destruction of armor attacks by separating enemy tanks and infantry, by causing tanks to button up, by blinding them with smoke, and by making direct hits. Enemy armor has a high priority as a target for aircraft supporting infantry. In addition, small yield nuclear weapons may engage small groups of tanks. Antitank mines can be used to supplement antitank weapons. Minefields should be utilized to the maximum extent commensurate with time available but without unduly restricting the maneuver of friendly forces.

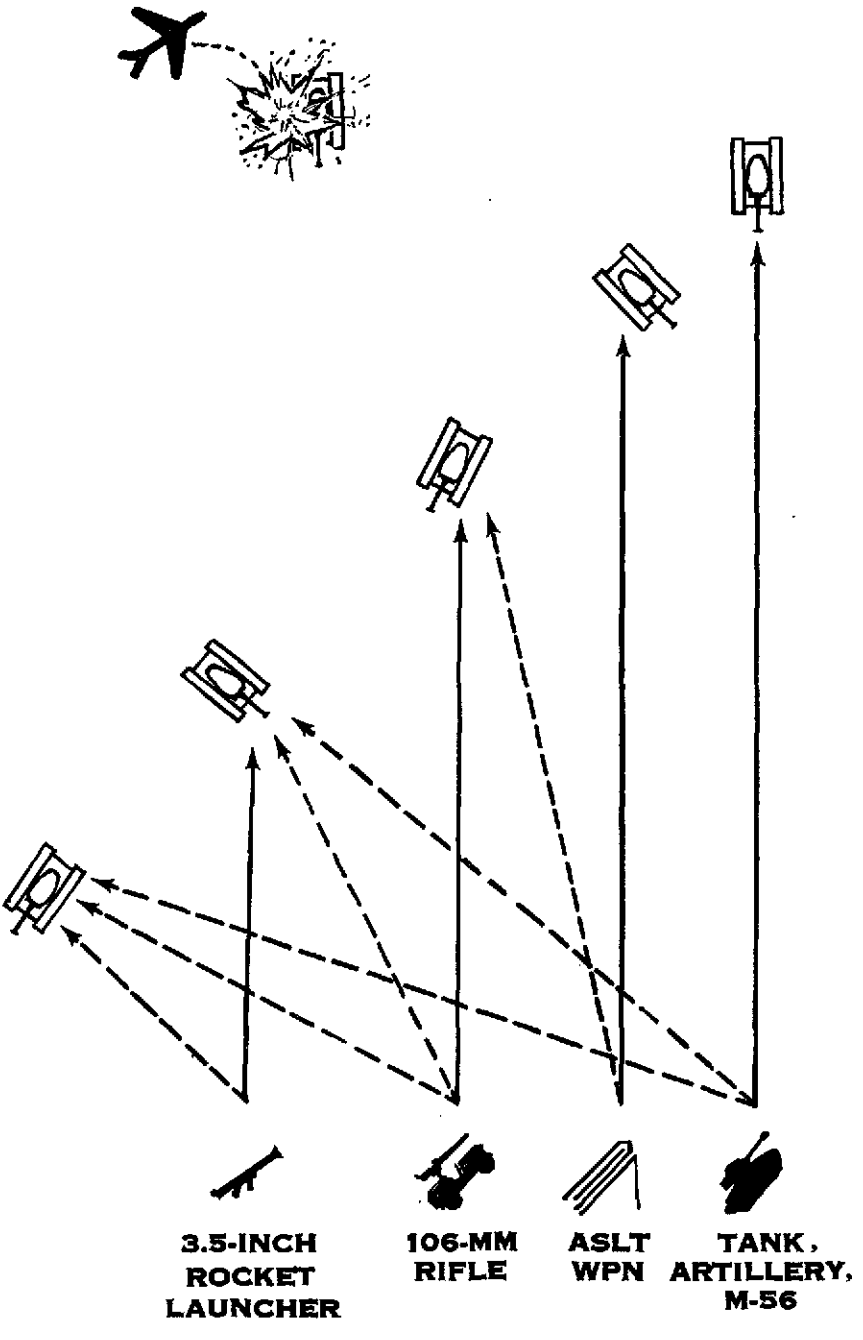


Figure 18. Tank engagement.

175. 4.2-Inch Mortars

a. Heavy Mortar Platoon (Inf Div BG).

(1) The heavy mortar platoon is normally employed in general support and is located so its fires can cover the most dangerous avenue(s) of approach. Its fires are coordinated with, and its fire direction center tied into, the artillery battalion supporting the battle group. The FSC plans the fires of the heavy mortar platoon and integrates them with those of the artillery battalion.

(2) Fire requests are transmitted by forward observers direct to their respective fire direction centers.

(3) The battle group commander prescribes missions, general position areas, and method of utilization.

(4) For details of employment, see FM 7–( ) "Combat Support Company, Infantry Division Battle Group" (when published).

b. Mortar Battery (Abn Div BG). The mortar battery is normally employed in general support to allow better fire control and supply. The mortars are usually emplaced within or near an occupied position of the battle group reserve. The battery may be employed by platoon when the mortars cannot cover the entire front from a battery position, when mask clearance is limited, or when elements of the battle group, such as the combat outpost, are beyond supporting distance of the battery position. Each platoon fires a platoon barrage. The battle group commander assigns general position areas for the mortar battery. Within these general areas the mortar battery commander selects precise position areas from which he can best support the battle group. He keeps the battle group commander informed of the locations of his unit. See also FM 6–18.

176. Utilization of Tanks

a. Normally, at least one tank company is attached to a forward battle group. The tanks have a dual mission of providing antitank defense for the battle area and participating as a part of the maneuvering force in the counterattack.

b. A portion of the attached tanks is employed laterally and in depth throughout the forward portion of the battle area. Tanks are located in or near rifle platoon positions. It is desirable for tanks to be separated, yet mutually supporting. The employment of tanks, assault guns, assault weapons, and other antitank weapons is intergrated into a coordinated antitank plan.

c. The remainder of the tank company is usually held as a part of the reserve. It is desirable, where practicable, to form a sixth control headquarters by attaching one or more infantry platoons to the tank company minus. The primary mission of the tank unit(s) in reserve

is to support or make the counterattack. A secondary mission is adding depth to the antitank defense. Time permitting, positions are reconnoitered and prepared. Flame tanks, when available, may be employed on the FEBA to supplement final protective fires or in reserve to accompany the maneuver element in the counterattack.

d. Tanks may be employed on the combat outpost. Desirably, these tanks should come from the battle group reserve; if so, they revert to the reserve when the combat outpost withdraws.

177. Battle Group Antitank Weapons

a. Assault Weapon Platoon (Inf Div BG). Squads of the assault weapon platoon are located where they can destroy enemy armor forward of the battle area. To accomplish this, they are usually located within the forward company(ies) defense area and are sited to cover tank approaches. When tanks are not available to provide antitank protection in depth, weapons of the assault weapon platoon are employed in depth. When practicable, squads are mutually supporting; however, quite frequently it is necessary to employ squads singly in company defense areas. When assault weapons are employed in the area of a forward rifle company to cover a tank approach of primary concern to that company, they are usually attached. The employment of tanks and assault weapons is closely integrated to provide the best possible antitank defense. When the assault weapon is not engaged in an antitank role, it may be used against other profitable targets. See FM 7-( ) "Combat Support Company, Infantry Division Battle Group" (when published).

b. Assault Gun Platoon (Abn Div BG). The assault gun platoon is employed, generally, like the assault weapon platoon. See FM 57-21.

178. Reconnaissance Platoon

a. In nuclear warfare, rapid changes in the situation, frequent exposure of the flanks, and wide frontages place increased emphasis on complete surveillance of the battle area. The reconnaissance platoon assists in the accomplishment of the mission. The battle group commander may assign specific reconnaissance missions to organic infantry units. Aerial surveillance, where available, greatly assists these missions.

b. Initially, the reconnaissance platoon may operate with the combat outpost or the R&S position, either under battle group control or by attachment to these security forces, or it may be assigned a mission of protecting an exposed flank or covering a less dangerous portion of the battle area.

c. When the general outpost withdraws and the enemy makes contact with the combat outpost, the reconnaissance platoon may operate

in the area between the combat outpost and the forward edge of the battle area. After the combat outpost withdraws, it may make and maintain contact with flank units, establish and man observation posts, or perform reconnaissance and security missions in the rear portion of the battle group sector. See FM 7-( ) "Combat Support Company, Infantry Division Battle Group" (when published), and FM 57-21.

179. Radar Section/Electronic Devices Section

This section is a vital link in the surveillance and reconnaissance capability of the battle group. The short-range teams (AN/PPS-4) are usually employed in forward company areas where they cover to the front and flanks. They may be employed initially on the COPL. The medium-range teams (AN/TPS-21) back up the short-range teams and give additional coverage to the front, flanks, and rear areas. The short-range teams, when in forward company areas, are normally attached to the companies in whose area they are located. The medium-range teams are normally retained in general support. For details on employment, see FM 7-( ) "Combat Support Company, Infantry Division Battle Group" (when published), and FM 57-21.

180. Engineers

a. Engineers are used primarily to assist in impeding the progress of an enemy attack by preparing obstacles, executing demolitions, constructing minefields, and carrying out other engineering tasks. Infantry units may perform much of the labor for these tasks, with the engineers acting in an advisory role. The engineers furnish technical assistance and engineer tools and supplies to units engaged in construction that requires special engineer training and equipment. (See FM 5-132, FM 7-21, and FM 57-21.)

b. The senior engineer unit commander supporting the battle group acts as the battle group engineer. When a company (or more) of division engineers supports the battle group, the organic engineer platoon (inf div BG) may be directed to accept missions from the supporting engineer unit commander so that engineer activities can be closely coordinated. An engineer platoon from the division engineer company normally is placed in direct support of or attached to the Airborne division battle group. When more than one engineer company is placed in direct support of the battle group, an engineer staff officer is normally provided to coordinate engineer activities.

181. Close Air Support

The mobility and long-range striking power of the tactical air force make it an important means of nullifying the enemy's advantage of initiative in offense. It furnishes early support against a sudden and strong attack. Advance planning and reconnaissance are necessary to

obtain maximum and timely effects from the use of air power. Air control teams operate within the battle group to control air strikes on targets close to friendly ground forces.

182. Counterattack Plan

a. A counterattack is a limited objective attack designed to destroy the enemy within a penetration and to regain lost portions of the battle area. The battle group reserve is normally the maneuvering force, but the counterattack plan provides for including all unengaged organic and attached elements. The maneuvering force is supported by the weapons of the battle group, including, where practiable, weapons of the forward companies. A single coordinated blow is delivered by as large and strong a force as the situation and terrain permit, avoiding friendly areas to the extent practicable. All friendly elements within the penetration are attached to the commander of the maneuvering force.

b. The battle group commander prepares counterattack plans for each part of the battle area which he estimates may be penetrated. He prepares them in advance and gives highest priority to those which assume the loss of or a threat to the most critical terrain. Plans are rehearsed as time permits.

c. A counterattack plan has the usual features of any attack plan. Special consideration is given to the following:

(1) *Objective.* The objective assigned to the maneuver force is usually a terrain feature within the penetration the seizure of which is essential to the elimination of the penetration and the restoration of the battle area.

(2) *Direction of attack.* If the terrain permits, the attack is designed to strike the flank of the penetration and avoid friendly defense areas. However, the use of nuclear support may make an attack against the nose of the penetration feasible.

(3) *Composition of the maneuver force.* The counterattack plan designates the maneuver force. Desirably, it is the entire battle group reserve. In executing the counterattack, the commander commits only that portion of the reserve that is needed to accomplish the mission.

(4) *Blocking forces.* The unit responsible for blocking the enemy penetration is designated. Whether such a mission can be assigned to the company in whose area the penetration has occurred depends on the capability and availability of the reserve of that company. If such a reserve is not available, elements of the battle group reserve may be designated as the blocking force.

(5) *Fire support.* Fire support is obtained from organic, attached,

and supporting weapons of the battle group, the maneuver force, and from the other companies of the battle group if the situation permits. Plans for the use of nuclear weapons must insure that the obstacles (including induced radiation) which they may create within the battle area will not adversely affect either the area through which the maneuvering force will move or the defensive mission when the battle area is restored. All fires, whether nuclear or nonnuclear, must be completely integrated, both with one another and the scheme of maneuver.

(6) *Line of departure.* A line of departure is designated to insure coordination of the attack.

(7) *Defense missions.* The battle group commander designates the units that will be prepared to defend the area once the penetration has been eliminated.

(8) *Reserve.* The temporary reserve is assigned a mission as part of the counterattack plan.

d. Adjacent battle group or other commanders coordinate plans to eject the enemy from a penetration that threatens both their areas. Division is informed of such plans.

183. Conduct of the Position Defense

a. As the attacker comes under observation, he is subjected to long-range fires, including nuclear fires, if appropriate. As he advances, he is brought under increasingly heavy fires. If he succeeds in launching an assault, final protective fires and all other available fires are placed on him, including nuclear fires. If the enemy penetrates the battle area, the battle group commander uses his reserve to limit the penetration. When there is a reasonable chance for success, he launches a counterattack to restore the battle area and destroy enemy forces in the area of penetration.

b. An aggressive antitank defense is conducted. Antitank weapons attempt to destroy enemy armor forward of the battle area. High explosive and small arms fires are delivered to force tanks to button up, and to separate foot elements from the tanks.

c. The decision to counterattack is made by the battle group commander. In making his decision, he considers these questions:

(1) Has the enemy been slowed or stopped forward of the positions of the battle group reserve?

(2) Have all available fires been employed without destroying the enemy?

(3) Are reserves and supporting fires adequate to support the counterattack?

(4) Has terrain been lost or threatened that jeopardizes the accomplishment of the mission?

(5) Is a counterattack practical, in view of obstacles which have resulted from nuclear strikes in the area?

d. Based on a consideration of the preceding questions, the battle group commander determines the probability of success. Affirmative answers to these questions generally favor a counterattack. However, they need not all be affirmative. An overall estimate is the decisive factor and a consideration of these questions is not a substitute for an estimate. In particular, if the defender is strongly supported by nuclear weapons and has an adequate reserve, a negative answer to *c*(1) above need not be the controlling factor in making a decision. In nuclear warfare, emphasis is on offensive action. A situation can be changed quickly by the use of nuclear weapons. Therefore, the nonnuclear criteria for stopping or slowing the enemy prior to a counterattack loses much of its significance when compared with offensive exploitation of nuclear weapons by the counterattack. If success does not appear probable, though the counterattack will have nuclear support, then the reserve is directed to block. If success is probable, the battle group commander quickly launches a counterattack, using the minimum forces and fires required to accomplish the mission. Division is notified of the decision to counterattack.

(1) After a successful counterattack, the battle group commander makes appropriate modifications to his defensive plan based on a consideration of the amount of induced radiation and other nuclear effects that may be present in the area.

(2) If the counterattack fails to seize the objective, troops usually dig in where they are stopped. Division is informed and the new position is held until further orders are received or reinforcements are made available.

(3) The battle group commander also considers rapidly exploiting the effects of nuclear weapons utilized forward of the battle area. By this action he regains the initiative.

184. The Reserve Battle Group in the Position Defense

a. A reserve battle group of a division in the position defense may be assigned the following missions:

(1) Limiting penetrations. The division commander usually designates switch and blocking positions from which the reserve battle group can limit major penetrations, canalize the enemy, and provide all-around protection for the division battle area. The organization for this mission is normally based on company size positions which are designated by the division commander.

(2) Occupying flank positions. When the division has an open or lightly held flank, positions are designated and organized from which the reserve battle group can protect the flank or extend the battle area to counter enemy flanking actions.

(3) Counterattacking, based on a division plan.
(4) Preparing a rear battle area. Details of the organization are similar to those discussed in paragraph 167.
(5) Organizing the general outpost or furnishing reconnaissance and security forces (pars. 158 and 160).
(6) Relieving a frontline unit or replacing a unit destroyed by enemy action.
(7) Defending against airborne attack, guerrilla action, and infiltration. Operations of this type are conducted as described in paragraph 185c. (See also FM 7–100.)

b. Companies of the reserve battle group are dispersed laterally and in depth throughout their areas of responsibility. The primary positions of all five companies are generally located forward in the area. Supplementary positions are prepared to complete the defense in depth on all major avenues of enemy approach and to furnish all-around defense. An attempt is made to have the companies mutually supporting. With an exposed or lightly held flank, the companies may be echeloned to protect it. In organizing the area, a balance must be maintained between grouping elements of the battle group so compactly that they become nuclear targets and dispersing them to the extent that they cannot accomplish their blocking mission. When enemy contact or attack within the area of the reserve is not probable, companies of the reserve battle group are dispersed throughout the area to prepare positions. Care must be taken to insure that they are not so widely dispersed that they cannot move to their primary positions in time to perform their primary mission of limiting the penetration.

c. The reserve battle group gives first priority to fires in support of its own companies. As a second priority, its fire support plan covers assistance to forward battle groups. Under exceptional circumstances and upon approval of the division commander, the mortars of the reserve battle group may be moved to the vicinity of a forward battle group to support it. They withdraw to their primary positions in time to insure that their fires can support the reserve battle group when needed.

d. If the reserve battle group has tanks attached, they are employed to provide antitank defense in depth, engage in counterattack, and otherwise reinforce the battle group. They may be held in an assembly area or placed in prepared positions. Their employment is coordinated with the employment of the assault weapon (assault gun) platoon.

185. Concurrent Considerations

a. Defense During Reduced Visibility.

(1) In nuclear warfare, the enemy may be expected to attack more frequently during periods of reduced visibility. In order to defend against such attacks, increased security measures are

adopted. These measures include dispatching additional patrols, increasing local security, utilizing organic and attached surveillance devices, and illuminating the area where the enemy may operate.

(2) Using nuclear weapons increases the defender's capability at night. Accurate employment of these weapons may temporarily blind the enemy, cause casualties, and increase his problem of control. Their use is carefully planned well in advance. Care must be taken to insure that friendly forces are not exposed to their effects, including flash blindness. The problem of notifying friendly units of the intended use of nuclear weapons is magnified. Locating nuclear targets may be difficult.

(3) Nonnuclear weapons are prepared to fire final protective fires when the situation demands. Because of wide frontages, the decision to call for final protective fires is usually delegated to leaders of platoons located along the FEBA. The battle group commander supervises and coordinates the employment of all fires organic to and in support of the battle group.

b. Defense Against Air Attack. Air defense units may operate in the battle group area under division or corps control. In this event, the battle group commander coordinates with the commander of these units. Air defense units may also be attached to the battle group, usually in platoon or battery size units. When air defense artillery is attached and employed in defense against fighter aircraft, it is deployed in a checkerboard pattern to provide defense for vital areas or installations as determined by the battle group commander. The air defense unit commander serves as an adviser to the battle group commander. Coordination is effected under the direction of the division artillery commander through fire support coordination channels to minimize undefended gaps between battle groups.

c. Defense Against Airborne Attack, Guerrilla Action, and Infiltration.

(1) Frontages and depths envisioned in defense under nuclear conditions make a unit more vulnerable to attacks by enemy airborne, guerrilla, and infiltrating forces. Positive measures must be taken to combat these forces so that the unit can concentrate on its primary defensive mission.

(2) A warning system is established throughout the battle group area, utilizing security and observation elements already emplaced. Where necessary, special patrols and roadblocks may be established to cover the area. An illumination plan is prepared. A rear area commander is designated. He is responsible for coordinating the actions of all elements to insure complete surveillance of the area. All or a portion of the reserve is normally used for this purpose. It should be reinforced with

tanks, personnel carriers, and/or transport aircraft when available. When information indicates that an enemy force has entered the area, all or a portion of the reserve is given the mission of destroying it. Planned fires support the reserve. Other units within the area remain in positon and support the reserve by fire, as practicable.

(3) When the battle group is in division reserve, it is prepared to perform similar missions for the division.

d. Defense Against CBR Attack. Provisions of protecting individuals and units from CBR attack, including a warning system and shelters, are incorporated in the defense plan. For details, see FM 21–40.

Section V. BATTLE GROUPS CONDUCTING A MOBILE DEFENSE

186. Missions

The battle group alone cannot conduct the mobile defense, because it lacks sufficient forces and fire support. It participates either as a part of security forces, forward defense forces, or the striking force. Commanders must be informed of the part their unit will perform in the defense. Because of the fluid aspects of the mobile defense, the situation may change rapidly. The battle group commander is prepared for all eventualities. In some situations he will be directed to slow, block, canalize, and delay the enemy. Other situations will require him to stop, repel, or eject the enemy. The type mission assigned dictates the mobility and frontage given to the battle group.

187. Occupation of Area

The frontage assigned does not have to be completely occupied. Unoccupied portions may be controlled by nuclear and nonnuclear fires and economy of force units.

188. Security

a. In defense under nuclear conditions, it may be more desirable to use reconnaissance and security positions rather than the general and combat outposts. This is indicated especially when it is desired to economize on security forces in order to increase the strength of the striking force and allow the preparation of additional positions and obstacles.

b. For discussion of security measures, see paragraphs 157 through 162.

189. Flexibility

a. Flexibility of concept and organization must be maintained. The variations discussed in this section should be considered as only repre-

sentative types of the many variations that exist and that the battle group commander may utilize. No defense should become stereotyped. Such standardization may give the enemy the key to destroying the battle group by nuclear fires or permit him to exploit the habitually dispersed formations.

b. The variations discussed are based on two extremes.

(1) At the one extreme is the layer variation. The layer variation does not attempt to retain specific terrain. The emphasis is on the use of the entire area in which to defeat the enemy. The battle group plans to keep its flank tied in with reconnaissance units, adjacent battle groups, division reserve positions, or terrain obstacles. This requires movement to change or adjust positions.

(2) On the other extreme is the strong point variation. The battle group conducting this variation bases its defense on the retention of a critical locality by establishing a strong point on or near it. This type defense accepts semi-isolation from other units as probable.

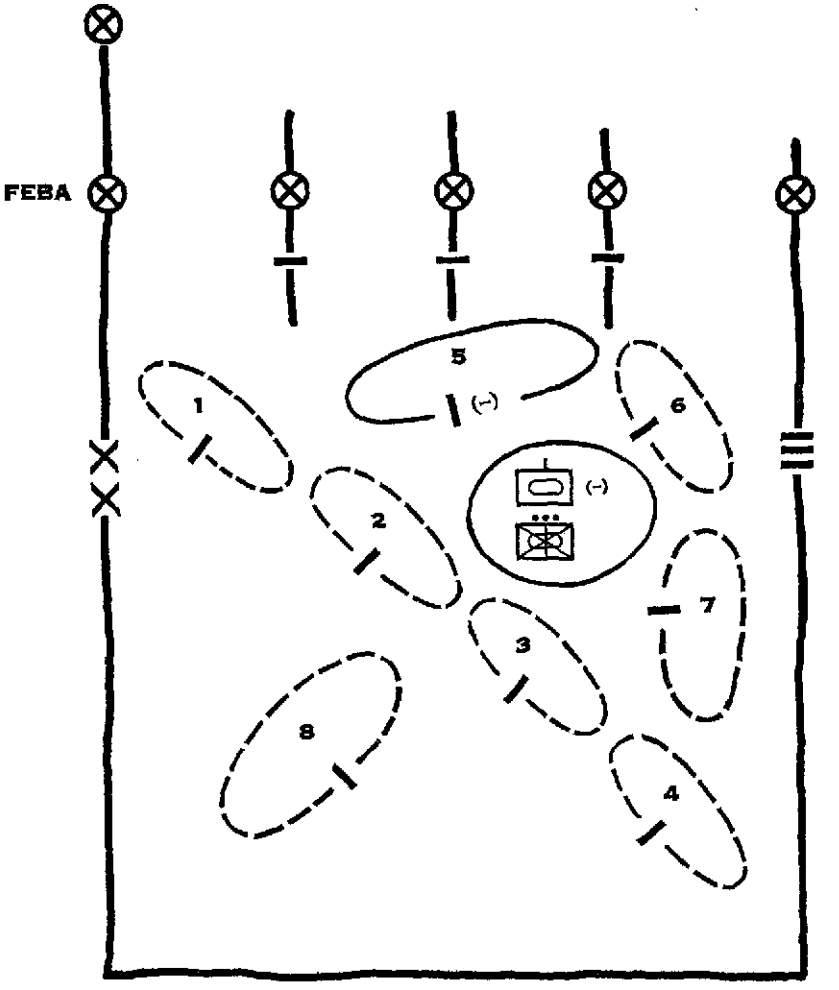
(3) Between these two extremes are many intermediate variations. Changes in the mission assigned by the division commander may require that one variation be abandoned and another be adopted. The battle group commander must be prepared to vary his defense to meet the situation and to adopt a new variation when it promises a more effective defense.

190. Layer Variation

a. In this variation (fig. 19), the forward battle group is deployed with little depth, which results in a reduced capability for prolonged defense of any given position. The type action conducted in this defense is similar to delaying on successive positions and requires a high degree of mobility. The division commander designates which switch positions will be occupied and exercises continuous control.

b. The division commander assigns the forward battle group an area for defense by designating limiting points and flank and rear boundaries. He may also designate switch and blocking positions within the area to fit in with his overall concept of the division operation. His concept must be made known in such detail that subordinate commanders will have a clear understanding of the initial organization of terrain and the contemplated plan for the conduct of the defense. The division commander normally retains the authority to move forward elements of forward battle groups. This does not preclude minor movements or adjustments by a local commander to preserve the integrity of his position. When the mobility of the battle group is equal or superior to that of the enemy, the division commander may assign it an area wider and deeper than that discussed in section IV.

c. The battle group commander indicates positions for his forward companies by prescribing boundaries and limiting points. Because of the wide frontages, forward company defense areas are comparatively shallow (par. 169). In certain situations, the battle group commander may direct companies to place three platoons on the FEBA, thus sacrificing reserves at the lower echelons in order to maintain a larger reserve at battle group level.



NOTES: 1. POSITIONS 1, 2, 3 AND 4 ORGANIZED ALONG SWITCH POSITION AS SPECIFIED BY DIVISION.

2. POSITIONS 5, 6 AND 8 ORGANIZED AS BLOCKING POSITIONS BY THE BATTLE GROUP COMMANDER.

3. POSITION 7 ORGANIZED TO PROVIDE PERIMETER DEFENSE TOGETHER WITH 2, 3, 5 AND 6.

Figure 19. Layer variation of defense (schematic).

d. (1) The battle group usually has about one company in reserve. This reserve assists in preparing company sized positions to defend the switch and blocking positions specified by the division commander. The battle group commander specifies additional blocking and switch positions to facilitate the performance of the group's mission. Because of the limited time, it may not always be possible to construct all these positions, but they are staked out so that they can be occupied if the necessity arises.

(2) The battle group commander makes plans for employing the reserves available to him, including the temporary reserve, to assist the forward companies in their mission and to assist in the overall battle group mission (by having them occupy the switch or blocking positions he designates). Counterattacks against minor penetrations are planned, using available reserves as the maneuvering force. Counterattack plans are similar to those discussed in paragraph 182.

e. The general trace of the FEBA, and the switch and blocking positions are located as for the position defense or as for a delaying action, according to the mission of the battle group.

f. Other aspects of the organization of this defense, including the employment of tanks and supporting units and weapons, fire support plans, the use of barriers, and the establishment of security measures are similar to those discussed in section IV for the position defense. Deception is particularly important and great reliance is placed on the assistance afforded by nuclear fire support in protecting the flanks or disengaging from the enemy in order to withdraw elements of the unit to switch or blocking positions.

g. Elements of the companies that garrison the FEBA may man the combat outpost, if one is established, while other elements may operate in the rear portion of the battle group area to assist in constructing positions. This provides increased dispersion while units are not engaged in close combat.

191. Conduct of the Layer Variation

a. As the enemy approaches the forward security elements, he is engaged by all types of fires, including nuclear fires where appropriate.

b. When the enemy threatens to close with security elements, they withdraw into the battle area. At the same time, personnel whose primary mission is the defense of the FEBA, but who may be performing a surveillance mission in the battle group rear area, move into their primary positions so that the enemy encounters completely occupied company positions when he reaches the battle area.

c. After security elements withdraw, units in the battle area place fires on the enemy. If the enemy attacks, he is taken under all types

of fire (including nuclear fire) whenever he presents a suitable target. If he withdraws, the units designated to garrison the security positions follow to reestablish forward security.

d. If the enemy threatens to engage forward companies of the battle area in close combat, the battle group commander may decide to fight from initial company positions or, subject to the division commander's approval, he may make a limited withdrawal to switch or blocking positions. He insures that companies, if authorized to withdraw, do not unnecessarily expose the flanks of adjacent battle groups and do not mass into nuclear targets as they withdraw.

e. The battle group commander may, without division approval, make minor adjustments in the positions of his units to maintain the integrity of his position. In the case of minor penetrations, the battle group commander may commit his reserve in a counterattack without the approval of the division commander. He notifies the division commander of his action and immediately reconstitutes a reserve. Such a counterattack is usually undertaken to restore a portion of the battle area, but may be made to destroy the enemy within the penetration.

192. Strong Point Variation

a. In the strong point variation, the defender canalizes the enemy primarily by retaining certain areas and allowing him easier access into other areas more favorable to the defender. This variation may be adopted when the defender's mobility is limited, when the retention of specific terrain is essential, when there are no adjacent units or obstacles on his flanks, or where suitable terrain does not exist for the establishment of the layer variation.

b. The battle group strong point may be organized in several ways. On the one extreme is an organization which approximates that discussed in section IV and illustrated in figures 14 and 15. This organization is used when the battle group commander considers his flanks to be adequately protected. Adequate flank protection can be provided by reconnaissance units on the flanks, by terrain obstacles, or by adjacent battle groups. On the other extreme, the strong point may be organized to provide for the early occupation of a perimeter. This organization is undesirable because of its vulnerability to nuclear attack, but it may be used when a unit is isolated, has relatively poor mobility, has so little protection of the flank and rear that there is no other alternative, or has inadequate time to prepare the positions required for other variations of defense. Therefore, with each organization of a strong point, supplementary positions are provided to permit the battle group to withdraw into a perimeter as a last resort. Between these two extremes there are variations. A variation may occur which is characterized by the refusal of one or both flanks. This variation is indicated when units on one or both of the battle group's flanks may be

unable to halt the enemy, but can give the battle group timely warning. Figure 20 shows a strong point with both flanks refused. Figure 21 shows another variation.

c. Other aspects of the organization of the strong point defense are similar to those of the position defense discussed in section IV.

193. Conduct of the Strong Point Defense

a. The conduct of the security forces is similar to that described for the layer variation (par. 191). After the security forces withdraw, units in the battle area assume the responsibility for placing fires on the enemy. Maximum fires of all types are utilized.

b. If the enemy attacks the position frontally, the conduct is similar to that for the position defense discussed in section IV.

c. If the enemy attempts to pass to the flanks of the battle group, he is taken under fire while in the gap between units. Fires of adjacent units must be closely coordinated with the unit which may be operating in the interval between battle groups. Maximum use is made of nuclear fires.

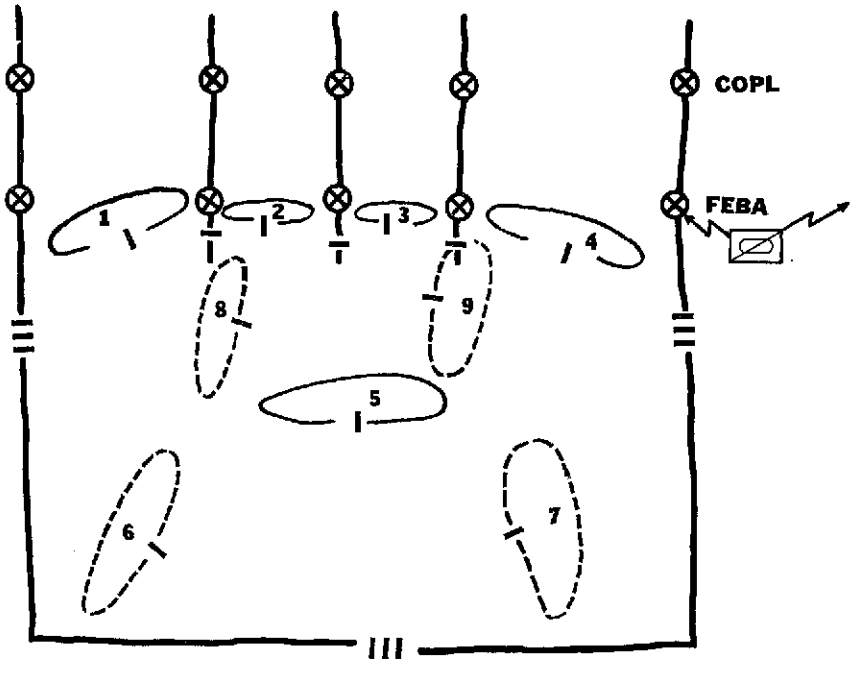
d. If fires fail to halt the enemy, the battle group commander shifts his reserve to the supplementary position that extends the threatened flank. If the enemy is successful in bypassing the flank and attacks toward the rear of the battle group, the battle group commander may make further adjustments to occupy the supplementary positions forming the perimeter. He does this after determining that he cannot in any other manner contain or resist the enemy. In making this decision, he also considers that in a perimeter he will be completely isolated and that he may increase his vulnerability to nuclear weapons. If he orders occupation of the perimeter, he will reestablish the original positions as soon as it becomes possible.

e. In making withdrawals and adjustments, the battle group commander attempts to keep his troops close to the enemy so that the enemy cannot use nuclear weapons without endangering his own troops. If the enemy withdraws after an attack, the battle group commander must be alert to conduct previously planned attacks to follow the withdrawal and reestablish the original defensive position, including the combat outpost, if feasible.

194. Reserve Battle Group

a. The missions assigned a reserve battle group in a mobile or extended variation of the position defense are similar to those in the position defense (par. 184). The reserve battle group may apply any one or more of the concepts discussed in this section to organize defense areas within the division rear area.

b. When the division is conducting a mobile defense, the reserve battle



NOTES:

1. POSITIONS 1 AND 4 OCCUPIED INITIALLY, BUT COMPANIES OCCUPYING THESE POSITIONS ARE PREPARED TO WITHDRAW TO POSITIONS 8 AND 9 AS ENEMY PRESSURE MOUNTS AND PERIMETER IS TO BE OCCUPIED.
2. COMPANIES OCCUPYING POSITIONS 2 AND 3 REMAIN IN PLACE.
3. POSITIONS 6 AND 7 PREPARED TO EXTEND FLANKS; MAY BE OCCUPIED BY RESERVE COMPANY.
4. POSITION 5 CONSTRUCTED SO IT CAN FACE TO THE REAR IF THE PERIMETER IS OCCUPIED.

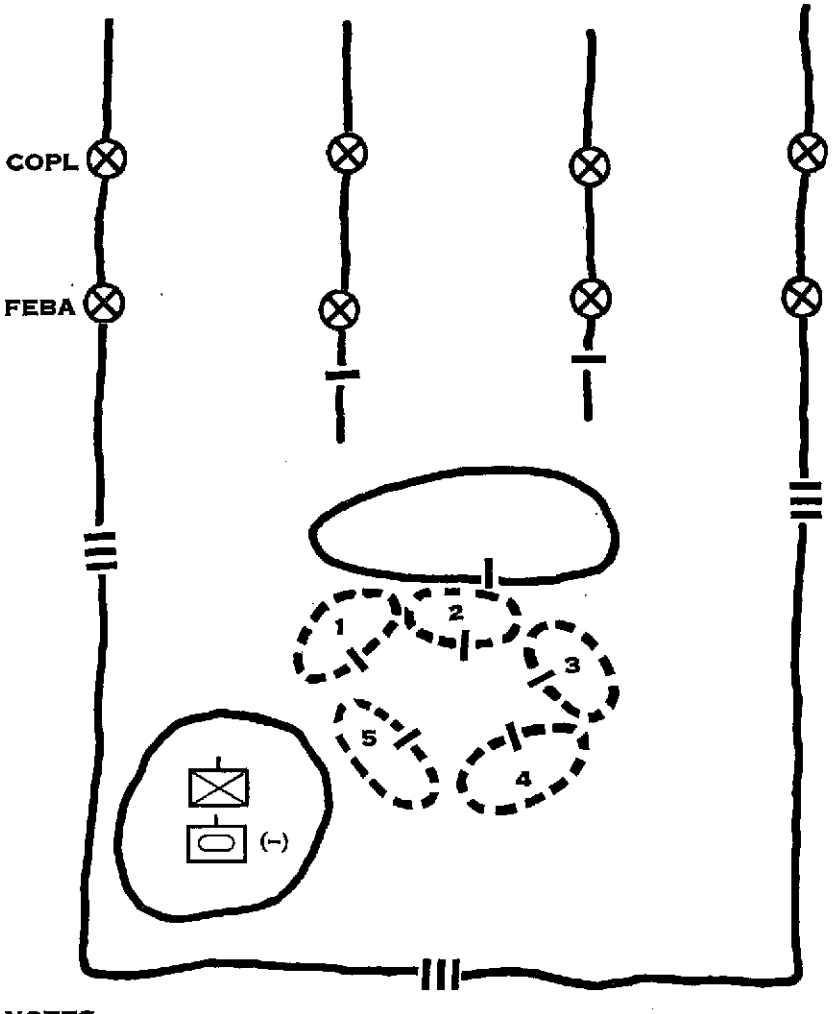
Figure 20. Battle group in strong point (schematic).

group commander places special emphasis on being able to perform the offensive mission as part of the division striking force. As part of the striking force, the reserve battle group conducts its offensive mission as described in chapter 5.

Section VI. SPECIAL DEFENSE OPERATIONS

195. Reverse Slope Defense

A reverse slope defense is organized on that part of a slope which is



NOTES:

1. FORWARD COMPANIES FIGHT A DELAYING ACTION, OCCUPYING THE PERIMETER ONLY WHEN FORCED BY ENEMY ACTION.
2. ONE RESERVE COMPANY IS IN POSITION TO COVER THE WITHDRAWAL OF THE FORWARD COMPANIES
3. THE OTHER RESERVE COMPANY, WITH THE TANK COMPANY MINUS IS HELD MOBILE TO COUNTERATTACK OR OCCUPY POSITIONS.
4. POSITIONS 1, 2, 3, 4 AND 5 ARE PREPARED BUT OCCUPIED ONLY AS A LAST RESORT.

Figure 21. Variation of strong point (schematic).

masked from enemy direct fire and observation by the topographical crest. A successful reverse slope defense is based on denying the topographical crest to the enemy. Once the enemy gains control of it, the defender no longer possesses the advantage offered by a reverse slope. The battle group or its elements may conduct a reverse slope defense (FM 7–10).

196. Use of Rivers in Defense

The defense of a river line requires the application of the basic considerations of defense as modified by the particular condition of terrain.

Section VII. REORGANIZATION AFTER NUCLEAR ATTACK

197. General

The plan for reorganizing after a nuclear attack must receive great emphasis. The defense must be so organized that the loss of any single unit or a portion of the battle area will not result in its becoming ineffective.

198. Defensive Position

When a company or major portion of a company on the forward edge of the battle area is destroyed by a nuclear weapon, the battle group commander immediately takes action to restore the position with reserves when the extent of the area of radiation contamination permits. If the commander is unable to restore the entire position because of radiation, he reoccupies the portion that is within allowable safety limits and covers the remainder by observation and fire. If the position cannot be restored adequately, in whole or in part, by reoccupying primary positions, reserves may occupy previously prepared alternate and/or supplementary positions. When this is not feasible, they occupy blocking positions. Adjacent units take action to occupy positions which refuse their respective flanks. The blocking positions occupied by the reserve should be as far forward as the terrain permits to reduce the size of the salient. Withdrawal of the entire battle group to blocking positions is undertaken only when required to prevent its destruction, or when ordered to do so.

199. Mobile Defense, Layer Variation

In the layer variation, reorganization may be facilitated by the depth of the battle area. When a forward company or major portion of it is destroyed by a nuclear weapon, the battle group commander takes immediate action to reorganize survivors and survey the extent of damage to the prepared positions. If the prepared positions are usable and contamination does not prohibit, the reserve or a portion of it may be ordered to occupy them. When the positions cannot be reoccupied be-

cause of radiation contamination, the reserve is ordered to occupy blocking or switch positions. At the same time, units adjacent to the affected unit are ordered to occupy positions to refuse their flanks or they are ordered to withdraw to switch or blocking positions. In any event, action is taken to insure that forces are best disposed to counter an attacking force that may attempt to exploit the use of the nuclear weapon.

200. Reserves

If the affected force is a reserve unit, immediate action must be taken to reconstitute a reserve by using the temporary reserve and/or restricting subordinate units in the employment of their reserves.

Section VIII. RELIEFS

201. General

Secrecy is essential in preparing for the conduct of a relief. Darkness or reduced visibility facilitates the preservation of secrecy. The tactical situation usually dictates whether the relief is made during daylight or darkness. Because of the enemy's nuclear capability, reliefs at battle group level in daylight are avoided except in emergencies. The relief is conducted as rapidly as possible, consistent with secrecy and control.

202. Planning the Relief

Planning the relief includes—

a. Reconnaissance. Incoming unit commanders become familiar with the battle area, enemy situation, assembly area, and routes prior to the relief. Outgoing unit commanders make plans for the accomplishment of the new mission. Since the outgoing commander usually remains with his unit, he designates representatives to make the reconnaissance.

b. Liaison Personnel. Liaison personnel of the incoming battle group are sent in advance to the positions to be occupied so they can acquaint themselves with the situation. Liaison personnel from the outgoing unit remain in the battle area long enough to orient the newly committed unit commanders.

c. Exchange of Crew-Served Weapons, Supplies, and Equipment. Commanders of the incoming and outgoing units arrange for the mutual exchange of crew-served weapons that cannot be easily moved or that are needed to insure the continuous effective delivery of fires. Outgoing units normally leave on position bulky supplies, wire lines and telephones where necessary, firing data, minefield records, and such other equipment as may be mutually beneficial. Radios are not normally exchanged.

d. Attachments. To simplify control and reduce the number of

guides, commanders of incoming and outgoing battle groups usually attach elements of their assault weapon (gun) platoons and attached tank units to rifle companies in whose area they are located. After completion of the relief these units may revert to battle group control.

e. Guides. Routes and assembly areas should be reconnoitered and marked in advance by guides. For simplicity, the same routes and assembly areas within the forward battle group battle area are ordinarily used by both incoming and outgoing units. Care must be taken to insure that intermingling of units does not occur.

f. Security and Surveillance. During the relief, normal activities are simulated. The outgoing battle group furnishes security and surveillance during the conduct of the relief. No mention of the relief is made in the clear over electrical means of communication. Reconnaissance is held to the essential minimum and makes full use of available cover and concealment.

203. Conduct of Relief

a. Defending forces are vulnerable to enemy attack during the conduct of a relief. Delays within assembly areas are held to a minimum. Maximum fire support from outgoing and incoming units should be available to insure the success of the operation.

b. To avoid presenting a large nuclear target, adjacent companies of the battle group are not normally relieved at the same time. Smoke may be used extensively to cover daylight reliefs.

c. Assembly areas are not designated for units larger than a company. Company assembly areas are separated as much as possible to minimize vulnerability to nuclear weapons.

d. Elements of the outgoing battle group leave the area as soon as they are relieved. Companies are dispatched to their new areas as soon as their company relief has been completed. After being relieved of responsibility for the defensive position, each company commander joins his unit in the assembly area and moves to the rear.

204. Command During Relief

a. During the relief, commanders at each echelon should be together at the command post or observation post of the outgoing unit.

b. The incoming unit commander assumes responsibility for the defense when the majority of his unit is in position and communication and control are established, or at a time ordered by the next higher commander. In the absence of orders from the next higher commander, the exact time of exchange of responsibility is agreed upon by the commanders concerned. If an attack occurs before the incoming commander assumes the responsibility for the defense, he assists the outgoing commander with means available to him. In this event, elements

of the incoming unit in the battle area are attached to the outgoing unit. Changes in organization of the defense desired by the incoming unit commander are initiated after the exchange of responsibility.

Section IX. DEFENSE IN NONNUCLEAR WARFARE

205. General

In nonnuclear warfare, the battle group organizes and conducts the defense as discussed in sections IV and V. Only significant modifications are discussed in this section. The fact that the enemy has not used nuclear weapons does not eliminate the possibility that he may do so at any time. Any necessary concentration of troops or material which offers a lucrative nuclear target is accepted as a calculated risk.

206. Basic Considerations of Defense

The basic considerations of the defense are unchanged, but a different emphasis is placed on the application of the following fundamentals.

a. Proper Use of Terrain. In order to accomplish his defensive mission, the defender must retain the critical terrain. He may be required to defend on or forward of critical terrain in order to control it.

b. Mutual Support. The absence of nuclear support requires a greater degree of mutual support to limit the probability of infiltration or penetration by enemy forces and to minimize the risk of defeat.

207. Battle Groups Conducting Mobile Defense and an Extended Variation of the Position Defense

As a part of a division in mobile defense, a forward battle group frequently employs the strong point variation of position defense. If it has greater mobility than the enemy, it may be organized into the layer variation of mobile defense (fig. 19).

208. Perimeter Defense

The radius of the perimeter may have to be reduced to improve the mutual support between units and afford a strong defense.

CHAPTER 7

RETROGRADE OPERATIONS AND BREAKOUT FROM ENCIRCLEMENT

Section I. GENERAL

209. Definitions, Types, and Purposes

a. Definition. A retrograde movement is any movement of a command to the rear or away from the enemy. It may be conducted by ground or airborne movement, or by a combination of both methods.

b. Types of Retrograde Operations. Retrograde operations are classified by three basic types:

(1) *Withdrawal from action* is an operation by which all or part of a deployed force disengages from the enemy to initiate some other action.

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

(3) *Retirement* is an operation in which a force moves away from the enemy without direct pressure to avoid an engagement under existing conditions.

c. Purposes. Retrograde movements are made for one or more of the following purposes:

(1) To disengage from combat.

(2) To avoid combat under undesirable conditions.

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

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

(5) To place the forces involved in a more favorable position in relation to other friendly forces.

(6) To permit the use of elements of the force elsewhere.

(7) To harass, exhaust, and inflict punishment on the enemy.

(8) To maneuver the enemy into areas where he can be destroyed by nuclear fires.

210. Fundamentals of Retrograde Operations

a. Proper Utilization of Terrain. Terrain has a decided influence on all retrograde movements. Good observation and fields of fire are desirable so that 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 CBR and atomic demolition munitions, are exploited to strengthen the delay, to protect exposed flanks, and to impede the enemy advance. Cover and concealment are sought for assembly areas and routes of movement. Road nets are exploited, especially by armor and motorized forces, to expedite their movement and to facilitate control of the operation. Road nets are denied to the enemy.

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

c. Detailed Centralized Plans—Decentralized Execution. Communication and control become increasingly difficult in retrograde operations. Plans and orders must be prepared in much greater detail than those for offensive and defensive operations. However, once the operation has started, subordinate commanders must have the authority to make on-the-spot decisions. When communications with the parent unit are lost, subordinate unit commanders must act independently until centralized control is regained.

211. General Considerations

a. The possession of nuclear weapons by retrograding forces effects a measure of delay in itself, for it forces caution on the enemy and limits his application of force. Retrograding forces may delay with greater relative safety by defending temporarily at major defiles or obstacles. If the enemy masses sufficient strength to force a passage, he may become vulnerable to a nuclear counterblow. Such a counterblow may permit limited offensive action to inflict greater damage on the enemy force.

b. The very nature of retrograde operations (extended frontages, infiltration tactics, movement under conditions of reduced visibility, linear formations, rapidly changing situations) offers excellent conditions for passive protection from nuclear weapons during the movement.

c. The probability of enemy employment of nuclear weapons on road nets along the routes of withdrawal demands the planning of alternate routes.

d. A retrograde action can rarely 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 contribute to its failure. Route priorities are required for tactical units, and civilian movement must not be allowed to interfere with tactical operations.

e. An aggressive enemy may 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 movement, and air and antitank defense become priority requirements.

f. Army aircraft may be utilized effectively to move units to the rear. Commanders in helicopters can land at specified control points to achieve better control and to obtain clearer information of the progress of the operation. Helicopterborne forces with strong firepower can be used to block defiles and other critical points. When friendly forces are heavily engaged, armed aircraft may be utilized to assist them in breaking contact and to cover their withdrawal. Aircraft observers report conditions of roads and bridges to the rear as well as bypasses and alternate routes in case bridges are destroyed. Aircraft may be used to move supplies and equipment and to evacuate wounded.

g. The priority of allocation of personnel carriers within the battle group should be made to detachments left in contact and covering forces. Mobility is of particular importance to these forces. Every effort should be made to provide them with a greater degree of mobility than the enemy has.

h. Nuclear fires may be employed to assist disengagement of heavily engaged forces.

i. Nuclear targets are anticipated and integrated into retrograde plans. The conduct of the retrograde operation is planned to capitalize on the anticipated targets by canalizing the enemy into the selected target areas.

j. Since retrograde movements may involve confusion and periodic loss of control, the use of nuclear weapons must be carefully coordinated. Easily recognizable nuclear safety lines must be designated.

k. The commander who directs the retrograde operation authorizes destruction of nonmedical supplies and equipment which cannot be evacuated and delegates responsibilities for such destruction.

l. The fact that a retrograde movement is a planned military operation with a positive purpose must be conveyed to the troops. Rumors are suppressed to prevent disorganization and maintain morale. Forceful leadership, strict discipline, control, and prior planning are necessary to prevent a retrograde from becoming a rout.

m. In retrograde operations, flame weapons are effectively used against mass attacks which threaten to overrun positions, and in counterattacks.

212. Retrograde Movement Involving Passage Through a Rearward Position

a. Close coordination and cooperation between commanders of the withdrawing force and the force in the rearward position are of great importance.

b. A detailed plan for mutual recognition is prepared and carefully coordinated.

c. The commander of the withdrawing unit is responsible for identifying the last element of his command as it passes through the unit in position.

d. The withdrawing unit has priority on roads and facilities, provided it does not jeopardize the defense.

e. Coordination and control are facilitated if boundaries for both the unit in position and the withdrawing unit coincide and points of passage through the defensive position are reduced to a minimum. In selecting points for passing through the defensive position, the fire support plan and delaying mission are considered.

f. The withdrawing force's responsibility for the zone normally terminates when it has passed through the defensive position.

213. Stay-Behind Forces

a. During a retrograde movement, elements of the battle group may be ordered to let enemy elements bypass them in order to act as stay-behind forces. Detailed planning, carefully delineated missions, and effective control are necessary to insure the success of such an operation. Requirements for long-range communication equipment and for evacuation and supply facilities necessitate support from divisional elements.

b. The actions of a unit intentionally acting as a stay-behind force are determined by its assigned mission. Appropriate missions for a stay-behind force include calling for and adjusting fires; locating nuclear targets; reporting enemy information; and destroying key installations such as enemy communication facilities, supply installations, command installations of large units, and nuclear delivery means.

Section II. WITHDRAWAL FROM ACTION

214. General

a. Withdrawals from action may be forced or voluntary. They may be executed day or night.

b. Night withdrawals are favored over daylight withdrawals because they normally preserve freedom of action, facilitate deception, and reduce the effectiveness of enemy observation.

c. A daylight withdrawal under direct enemy pressure is avoided, if possible, because observed enemy fires may result in heavy casualties and loss of freedom of action. Nevertheless, a commander may decide on a daylight withdrawal if the expected losses are less than those he may receive if the withdrawal is postponed until night. Simultaneous planning for both a day and night withdrawal is required.

d. A night withdrawal is based on deception made possible by darkness. A daylight withdrawal is based on fighting to the rear. Therefore, if a withdrawal is made at night when the battle group is under enemy attack or when secrecy of movement cannot be maintained, it may be conducted like a daylight withdrawal. Conversely, if smoke or other conditions reduce enemy observation, a daylight withdrawal may be based on deception like a night withdrawal. Unless otherwise noted, the term "night withdrawal" as used in this text means a retrograde action executed without enemy pressure, usually during periods of reduced visibility. The term "daylight withdrawal" means an operation conducted under enemy pressure, normally during periods of good visibility. Illuminants should be considered for supporting a night withdrawal that must be made without secrecy.

e. The commander ordering a withdrawal designates the location to which the troops will move and the action to be taken after the withdrawal. Withdrawals are normally followed by a defense on another position, a delaying action, or a retirement.

f. The battle group is normally assigned a zone of withdrawal. The boundaries of the zone extend back to include the new position. The division commander usually assigns routes to the battle group. The battle group commander then assigns routes to his subordinate units.

g. A night withdrawal normally is made without the use of scheduled nuclear weapon support since its success depends primarily upon maintaining secrecy. However, if a night withdrawal is conducted under heavy enemy pressure, it is normally supported by nuclear and/or nonnuclear fires. On-call fires are planned for both daylight and night withdrawals.

h. The withdrawal order must be prepared in detail to include—

(1) Location and disposition of units.
(2) Zones and routes of withdrawal.
(3) Strength and mission of security forces and other security measures.
(4) Time and priority of withdrawal by units.
(5) Evacuation of casualties.
(6) Provisions for evacuation or destruction of supplies and materiel.
(7) Traffic control measures.
(8) Times, routes of withdrawal, and locations for administrative units.
(9) Fire support.

i. Planning for the withdrawal should allow time for subordinate commanders to conduct daylight reconnaissance of both the new position and the terrain between the old and new areas. Since lack of time may preclude adequate daylight reconnaissance, units should develop

standing operating procedures for making daylight and night withdrawals on short notice.

215. Night Withdrawal

(fig. 22)

a. General.

(1) A forward battle group conducting a night withdrawal is protected initially by its detachments left in contact and, subsequently, by a covering force through which it withdraws.

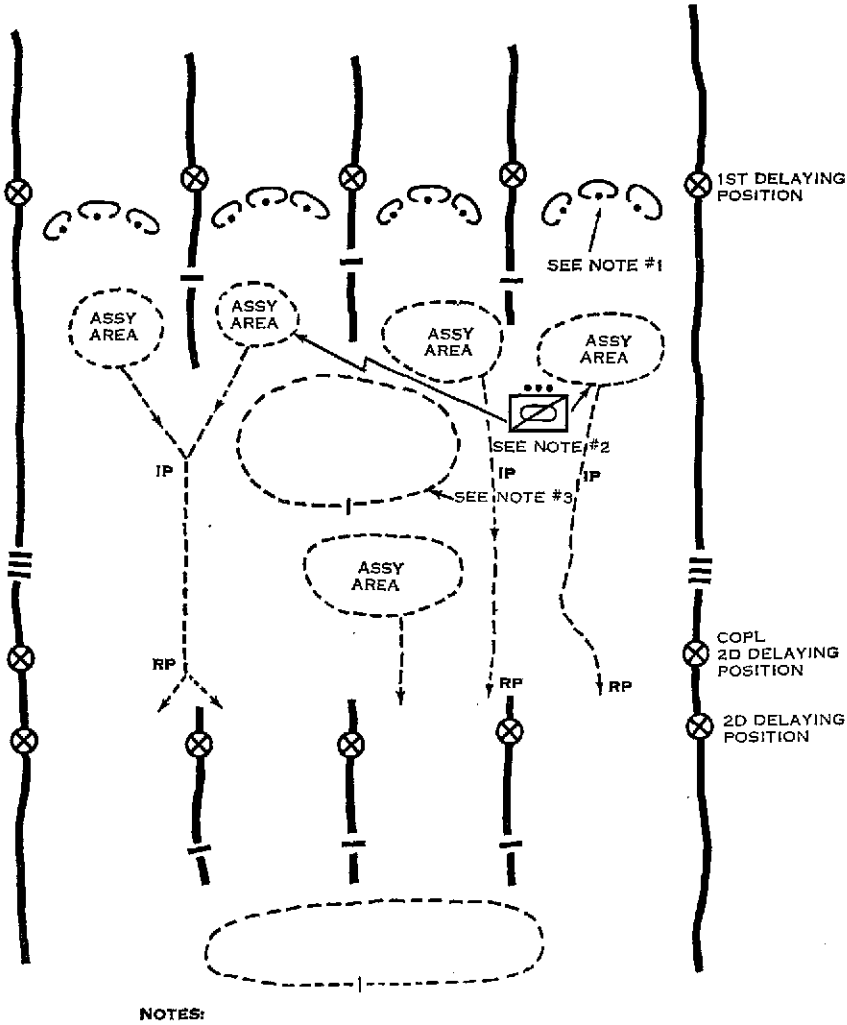
(2) The main body of the battle group moves to the rear under the protection of the detachments left in contact, which are normally commanded by the deputy battle group commander.

(3) The division commander provides the necessary artillery support, coordinates the actions of the detachments left in contact, specifies the time of withdrawal (by directing them to withdraw on order or at a prescribed hour), and prescribes the action to be taken in case of hostile attack.

b. Control Measures. The battle group commander maintains control of the withdrawal by designating initial points and release points, guides, company assembly areas, routes of withdrawal (including alternate routes), and road priorities when required. He recommends to division locations for traffic control posts along routes of withdrawal in the battle group zone. The recommended locations that are not included in the division traffic plan may be established and manned by battle group personnel as guide locations. Assembly areas are located well forward to facilitate early organization of the unit for the withdrawal. They should be on good routes of withdrawal. If transportation is to be used, adequate turn-around space should be provided within or adjacent to them. Assembly areas should be planned for the night withdrawal; defilade is desirable but not mandatory. The assembly areas should not be used when the commander feels that the movement can be controlled without them. If they *are* used, they should be no larger than company size and they should be used for the briefest possible period, since this is a time when withdrawing units are most vulnerable. Each commander is responsible for covering routes and approaches into his unit's assembly area. Alternate routes are provided to insure the orderly movement of the force to the rear in case primary routes are blocked by enemy guerilla or airborne forces, nuclear attack, or other action.

c. Detachments Left in Contact.

(1) The detachments left in contact have the mission of protecting the withdrawal of the main body. They have a limited capability for resistance, and must depend primarily upon deception to accomplish their mission. General strength limitations for the detachments are prescribed by the division



NOTES:

1. DETACHMENTS LEFT IN CONTACT ON FIRST DELAYING POSITION.
2. RECONNAISSANCE PLATOON NORMALLY WILL BE LEFT AS THE RESERVE ELEMENT OF THE DETACHMENTS LEFT IN CONTACT, WHEN IT IS NOT EMPLOYED ON OTHER MISSIONS.
3. RESERVE COMPANY USUALLY WITHDRAWS AS A UNIT IMMEDIATELY PRIOR TO THE WITHDRAWAL OF FORWARD COMPANIES.

Figure 22. Night withdrawal (schematic).

commander. Within these limitations, the battle group commander prescribes their size and composition.

(2) The detachments left in contact normally do not exceed one-third of the rifle strength of the forward companies, augmented by supporting weapons such as mortars, machineguns, tanks, and antitank weapons. Elements of other supporting troops such as artillery, armor, engineers, reconnaissance

units, and medical personnel may also be left as part of the detachments. The detachments left in contact simulate the normal activity of a fully occupied position and are so located as to give the impression that the position is occupied.

(3) Deception and secrecy may be obtained by suppressing noise made by withdrawing units, by simulating normal supporting fires, by patrolling, by using dummy positions, and by simulating normal radio traffic.

(4) The commander of the detachments left in contact assumes control at the time the withdrawal begins.

(5) The reconnaissance platoon normally is left as the reserve element of the detachments left in contact when it is not employed on other missions. It patrols and protects the command post of the detachments left in contact and/or blocks the most likely avenue of enemy approach into the battle group area. The priority of these missions is determined by the commander of the detachments left in contact. The reconnaissance platoon acts as the security element to cover the withdrawal of the detachments left in contact. Additionally, it may perform the task of maintaining contact with the enemy during the withdrawal if other forces (elements of the general outpost) have not moved forward to perform this task. See FM 7–100.

(6) The battle group commander does not normally employ elements of the reserve company(ies) as a reserve of the detachments left in contact. He may do so when they are needed to augment the reconnaissance platoon, or he may use them instead of the reconnaissance platoon.

(7) The authority to withdraw the detachments left in contact is delegated to the commander of the division detachments left in contact unless the battle group is on an independent mission or unless the division delegates the authority to the battle group commander. The commander of the battle group detachments left in contact may change the disposition of forces in his sector to preserve the integrity of the position. He reports such changes to the commander of the division detachments left in contact.

(8) As much as one-half of the heavy mortar platoon of the infantry division battle group may remain in position to support the detachments left in contact.

(9) A battery of the direct support artillery battalion usually supports the detachments left in contact for the infantry division battle group. A platoon of the mortar battery and at least one platoon of howitzer artillery, both of which are augmented with necessary fire direction personnel, are adequate for the airborne division battle group.

d. Fire Support.

(1) Plans for supporting fires include the maintenance of normal nonnuclear fires in the area. This may require increased rates of fire from the weapons supporting the detachments left in contact.

(2) Generally, nuclear fires are planned only on-call to support a night withdrawal. Scheduled nuclear fires are usually not employed because they alert the enemy, may provoke nuclear countermeasures, and are subject to frequent change. Enemy nuclear fires in the area during a withdrawal not only cause heavy casualties but also greatly multiply the major control problems inherent in all night operations.

(3) If nuclear weapons are used to assist in disengaging, the nuclear safety line must be clearly delineated and recognizable. Troops must be warned so they can guard against flash blindness.

e. Conduct of Night Withdrawal.

(1) Higher commanders usually prescribe that the main forces of the battle group begin their withdrawal shortly after dark, specifying the exact time.

(2) Withdrawal plans ordinarily provide for the simultaneous withdrawal of all elements of the frontline companies not designated as part of the detachments left in contact. Small units withdraw to company assembly areas over previously designated and reconnoitered routes. From the assembly areas they move by motor or on foot through initial points along previously designated routes to the rear position. Supporting units and weapons are normally attached for the withdrawal to the unit in whose area they are employed.

(3) The reserve company(ies) is normally withdrawn as a unit immediately prior to the withdrawal of forward companies. Tasks which the reserve company may be required to perform on the new position are manning the COPL (if established) when forward companies do not have the time or means, occupying a sector of the position, assisting the forward companies in preparing their positions, and preparing and occupying a reserve position.

(4) Supporting artillery and mortars that are not part of the detachments left in contact usually are started to the rear soon after the frontline elements begin to withdraw. This permits maximum fire support means during the initial stage of the withdrawal.

(5) Tanks are not able to operate with maximum effectiveness during periods of reduced visibility. They may be withdrawn by infiltration prior to the withdrawal of the main

body if there is not a definite threat of enemy armor and their withdrawal will not nullify deceptive measures. Tanks that remain with the detachments left in contact withdraw immediately before or at the same time as other elements of the detachments.

(6) Trains and rear installations usually precede the column to the rear, followed in turn by company vehicles not required by the foot elements or the detachments left in contact. They may move by infiltration during daylight if it will not disclose the withdrawal to the enemy. Such movement must be authorized by higher headquarters.

(7) If the battle group withdraws to a new defensive position, its units are initially employed, when possible, in the same formation on the new position that they had on the old position. Since companies along the new delaying position must concentrate initially on preparing positions, the COPL (if established) is manned by elements of the reserve company(ies). Initially, the reserve commander controls the COPL; at daybreak, control may pass to the company commanders along the delaying position. When the positions along the delaying position reach a satisfactory stage of completeness, either before or after daylight, personnel from the forward companies relieve the elements of the reserve company(ies) on the COPL, if established. As these elements are relieved they join the rest of the reserve in the reserve area.

(8) A rear guard secures the movement of the main body.

(9) Elements of the detachments left in contact withdraw simultaneously at a prescribed time or on order, using the same assembly areas and routes of withdrawal designated for the main force, if such routes have not been compromised by the enemy. The time of withdrawal generally is prescribed by the higher commander and should permit the detachments left in contact to come under the protection of the security force prior to daylight. Transportation should be furnished for this purpose. Suitable security is maintained until the detachments left in contact are under the protection of a force to the rear.

(10) When friendly forces have a greater degree of mobility than the enemy and when the forces in contact are not under enemy pressure, it may be feasible to withdraw all forward units simultaneously without leaving detachments in contact. If such a movement is undertaken, the withdrawing unit forms a rear guard to protect the movement against any unexpected enemy action. This type action may be effectively employed to vary the pattern of withdrawal.

f. Secrecy. All daylight activities which might disclose the intention to withdraw, such as abnormal movement of vehicles to the rear, are prohibited. Any necessary daylight motor movements to the rear, including reconnaissance, are made by infiltration. Careful provision is made to insure that noise does not betray the withdrawal. Blackout discipline is enforced, measures for the enforcement of secrecy are taken in assembly areas, and deceptive measures are used to the maximum possible degree.

g. Transportation. Shortly after dark, vehicles necessary for the movement of supplies and equipment are brought as far forward as practicable. If too many are brought forward of company assembly areas, secrecy may be compromised. Enough vehicles are left in assembly areas to transport the heavy weapons and ammunition of the detachments left in contact. It is highly desirable to completely mechanize (motorize) the detachments left in contact to facilitate their rapid and safe movement to the rear.

h. Supply and Evacuation.

(1) Before the withdrawal starts, unit commanders insure that the level of ammunition supply is adequate for the action. The first troops to withdraw can, if necessary, transfer ammunition to the detachments left in contact. Supplies are delivered at the new position in time to fill any anticipated needs.

(2) The problem of evacuation is not materially different from that in a daylight withdrawal execept that air evacuation may be limited. An aid station remains with the detachments left in contact.

i. Communication.

(1) Communication is maintained in the old position and established in the new position. Communications personnel are informed of the time of displacement, route(s) of movement, and locations of the battle group and company command posts in the new position.

(2) A daylight reconnaissance should be made to select and mark command post sites on the new position. Wire lines are installed before dark unless such action will compromise secrecy.

(3) Enough communication personnel are left with the detachments in contact to maintain continuous wire communication, using the lines already established in the old position. Wire communication between the new battle group command post and the detachments left in contact is desirable because of radio restriction. Wire lines are cut and sections removed as soon as circuits are no longer required.

(4) During the withdrawal, listening silence is maintained in the new position and the use of radio by moving units is restricted

except for emergencies. Normal radio traffic in the old position is continued for deception.

(5) Pyrotechnics are used in the old position as prearranged signals to the extent permitted by the simulation of normal activity.

(6) For more detailed communication information, see FM 7–21 and FM 7-24.

216. Daylight Withdrawal

(figs. 23 and 24)

a. General.

(1) A daylight withdrawal is avoided whenever possible. Successful daylight withdrawals depend on careful planning, speed, control, fire support, at least temporary local control of the air, and effective employment of covering forces.

(2) A covering force is provided to furnish security for the withdrawing elements. See *c*(1) below.

(3) No detachments are left in contact. Since the enemy normally has good observation, units in contact usually withdraw in dispersed formations.

(4) The battle group commander's plans are based on orders from the next higher commander. They are as detailed as time permits. They include the placement of the battle group covering force, the establishment of priorities for the withdrawal of subordinate units, control measures, and plans for the action that is to follow the withdrawal.

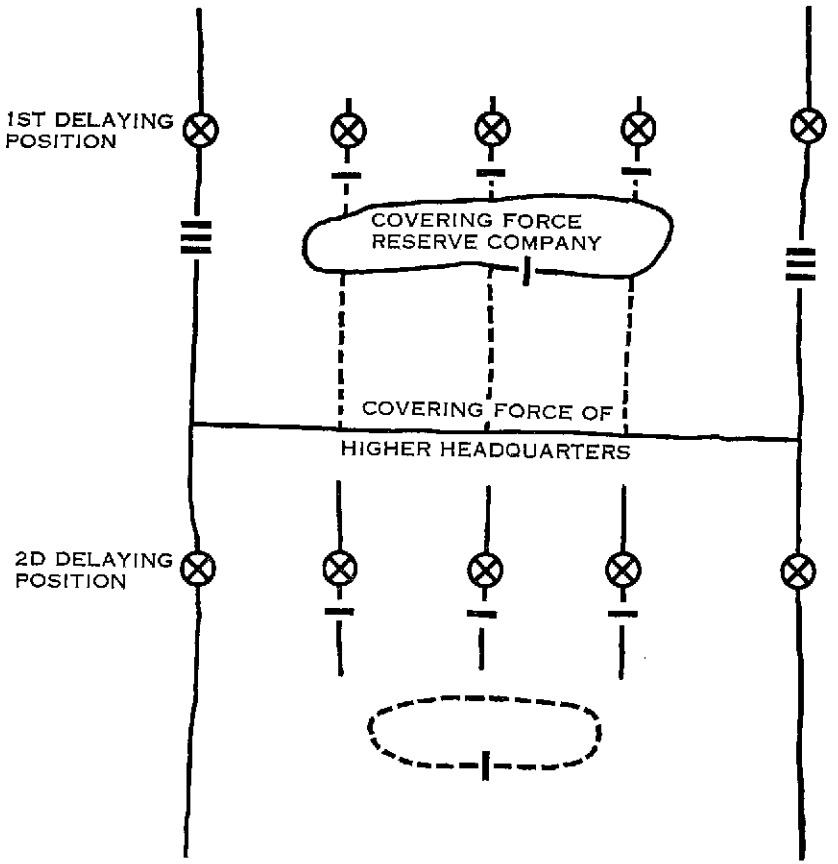
b. Control Measures.

(1) Control measures are similar to those used for a night withdrawal; i.e., assembly areas, routes of withdrawal, initial and release points, guides, and road priorities when required. In addition, zones of withdrawal are used and phase lines and covering positions may be used. Assembly areas are utilized only when deemed necessary to insure adequate control.

(2) Zones of withdrawal are designated by extending boundaries to the rear. They insure coordination between adjacent units if they have to fight while withdrawing. The boundaries are extended through the battle group covering force and as far as the companies may have to move in deployed formations. Normally, they extend through the division or higher command covering force which is to the rear of the battle group covering force. If there is no other covering force to the rear of the battle group's covering force, and if a new delaying or defensive position is to be occupied, the boundaries extend through the new position.

(3) Company assembly areas, if used, should be in defilade in rear of each company's covering force. It may be desirable to designate alternate assembly areas.

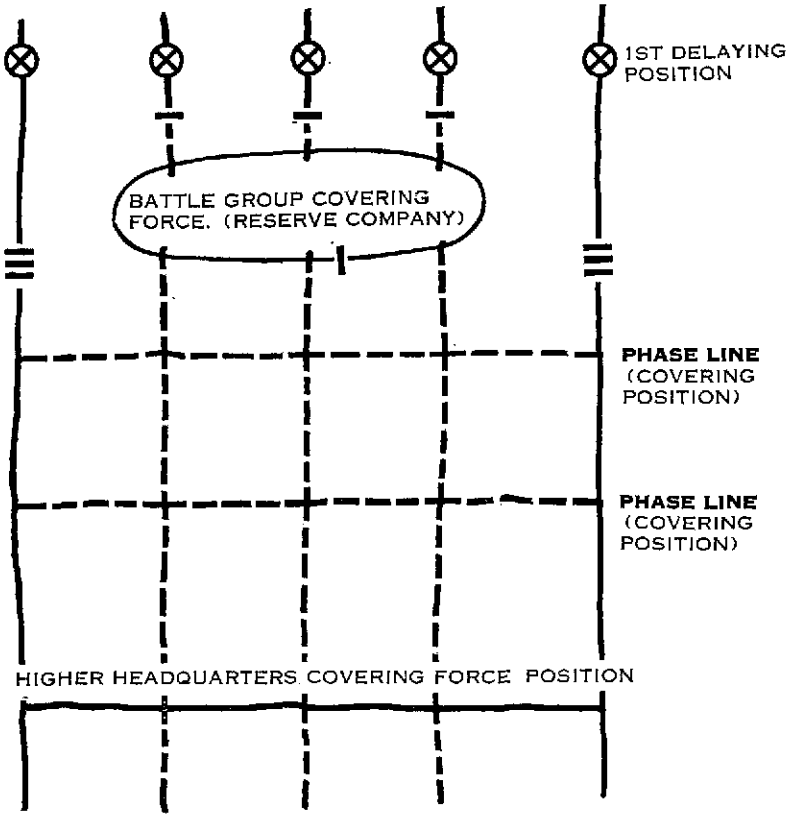
(4) If the enemy pursues aggressively and a division covering force is not close enough to cover the withdrawal, intermediate covering positions are organized and occupied according to the doctrine governing delaying action (fig. 24). These positions are organized on previously selected terrain. Successive covering positions may be utilized alternately by the reserve and the forces initially in contact until the battle group comes under the protection of the division covering force or reaches the new defensive or delaying position.



NOTES:

1. THE RESERVE COMPANY ON FIRST DELAYING POSITION ACTS AS COVERING FORCE FOR FORWARD COMPANIES. AFTER FORWARD COMPANIES HAVE PASSED THROUGH THE RESERVE COMPANY, IT WITHDRAWS THROUGH THE COVERING FORCE FROM HIGHER HEADQUARTERS. ASSEMBLY AREAS TO REAR OF FORWARD COMPANY POSITIONS MAY BE UTILIZED IF NECESSARY.
2. FORWARD COMPANIES WITHDRAW TO 2D DELAYING POSITION WHICH THEY ORGANIZE. RESERVE COMPANY WITHDRAWS TO RESERVE AREA FOR 2D DELAYING POSITION.

Figure 23. Daylight withdrawal through covering force.



NOTES:

1. AS IN FIGURE 23, RESERVE COMPANY COVERS WITHDRAWAL OF FORWARD COMPANIES INITIALLY. IF ENEMY PURSUES AGGRESSIVELY, ONE OR MORE OF THE FORWARD COMPANIES. AFTER WITHDRAWING THROUGH THE RESERVE, ORGANIZE A COVERING POSITION TO ALLOW THE RESERVE TO WITHDRAW. SINCE THE HIGHER HEADQUARTERS FORCE IS TOO DISTANT TO PERFORM THIS MISSION. THIS PROCEDURE IS REPEATED UNTIL FORCES CAN WITHDRAW THROUGH THE HIGHER HEADQUARTERS COVERING FORCE, AND PROCEED TO 2D DELAYING POSITION.
2. ASSEMBLY AREAS MAY BE UTILIZED IF REQUIRED AND ENEMY SITUATION PERMITS.

Figure 24. Battle group covering its own daylight withdrawal through successive positions.

c. Covering Force.

(1) The battle group covering force normally is the battle group reserve reinforced with available supporting units and weapons.

(2) In designating the initial location for the covering force, the battle group commander considers the location and direction of movement of the most threatening enemy action, the ability

of the force to cover the withdrawal of the companies in contact, the probable direction of withdrawal, and the location of the division covering force.

(3) If the withdrawal is from a defensive position, the initial position of the battle group covering force is similar to that in a delaying action.

d. Fire Support.

(1) Heavy fires are planned to support a daylight withdrawal. All available fires are planned on known enemy positions, including assembly areas and reserves. This fire support is planned to disrupt and disorganize the enemy attack at the time the withdrawal begins and to harass his pursuit.

(2) Nuclear fires placed on the enemy by surprise will disorganize and stun him enough to permit friendly forces to break contact and will assist in preventing or delaying pursuit.

e. Conduct of the Daylight Withdrawal.

(1) The battle group commander prescribes the sequence of withdrawal of frontline companies. When the terrain and situation permit, all frontline units are withdrawn simultaneously. If this is not practicable, the units least heavily engaged are usually withdrawn first. The fires of organic and supporting weapons are adjusted to assist in the disengagement. In some situations it is desirable to launch limited counterattacks to relieve enemy pressure on forward elements to permit their withdrawal. Smoke screens are useful in disengaging such units. Tactical air support, if available, should be employed to assist in disengaging.

(2) Ordinarily, the initial withdrawal of engaged units is straight to the rear under cover of the fire of local covering forces. These units may move to company assembly areas or directly to a rearward position.

(3) Enemy tactical nuclear capabilities must be considered when selecting assembly areas. The battle group commander issues timely orders to each unit upon its arrival at its assembly area and/or phase line. When a division covering force is not used, the forward companies may move directly to a covering position located along a phase line from which they can cover the withdrawal of the battle group covering force. The assembly areas of the company(ies) of the battle group reserve are behind the next covering force to the rear or behind the line held by the division covering force.

(4) Security forces consisting of flank, advance, and rear guards cover the rearward movement of the battle group after disengagement. The strength required for the security elements depends largely upon the location of adjacent units, the security

provided by higher headquarters, and the enemy's size, composition, and activity.

(5) Units gain protection against enemy air attacks by using air guards and dispersed formations. Automatic weapons for air defense fires are designated and placed in firing positions by all units when they halt.

(6) Secrecy ordinarily is lost soon after the withdrawal begins, but it should be preserved during the preparatory phase. To maintain secrecy, vehicles moving to the rear proceed singly or in small groups. Deception may be gained by using open formations of vehicles moving toward the front, by using smoke to restrict enemy observation, and by carefully selecting routes of withdrawal.

(7) If the division covering force is not positioned to cover the withdrawal of the battle group covering force, the battle group commander must plan to have forward companies and the covering force leapfrog from one intermediate covering position to another until the battle group reaches an area from which the division covering force can cover the withdrawal. In this type action small mobile forces strong in firepower take maximum advantage of terrain from which long-range fires can be placed on the enemy. These mobile covering forces must be withdrawn before they become engaged in close combat. Since the conduct of this type action depends on small-unit actions, orders for withdrawal should rest with the commander on the ground.

f. Employment of Supporting and Attached Units.

(1) Artillery supports the frontline units while they are disengaging. It also supports the units that perform covering missions.

(2) The heavy mortar platoon (mortar battery) usually supports the withdrawal under centralized control.

(3) Tanks are prepared to support the withdrawal of the forward companies, to engage enemy armor at long ranges, to counterattack enemy elements attempting to penetrate or bypass the battle group covering force, and to cover the withdrawal of elements of the battle group covering force. Platoons of an attached tank company may be attached to the forward companies to support their withdrawal. After the forward companies withdraw, the entire tank company may be employed as a part of the battle group covering force. Tanks and infantry habitually work together; however, when the terrain provides good observation, the infantry elements of a company team generally withdraw before the tanks. If the terrain is heavily wooded, or observation is otherwise restricted, the infantry covers the withdrawal of the tanks.

(4) The reconnaissance platoon may be used under battle group control to protect the battle group's flanks or to maintain contact with the enemy forces and give warning of hostile movement. It may be attached to the battle group covering force to perform similar missions.

(5) Assault weapons are usually attached to withdrawing forward companies to engage enemy armor at long ranges. Elements of the assault weapon platoon may be attached to the battle group covering force as forward companies withdraw through the covering force.

(6) Air control teams direct air strikes against targets of opportunity.

(7) Air defense units, if attached, are disposed to deny the enemy air observation of the battle group covering force and to provide air defense for critical areas along the routes of withdrawal. They may also be employed in a ground support role.

(8) Engineers prepare demolitions to delay the advance of the opposing force. They also assist in destroying supplies which cannot be evacuated, and in preparing minefields and antitank obstacles. When engineers are attached to the battle group for the withdrawal, they may be attached to the battle group covering force.

(9) Chemical units may place smoke to screen selected areas. Chemical personnel may recommend the use of chemicals and provide the technical supervision for employing them to contaminate obstacles, demolished areas, defiles, and likely avenues of advance of the opposing force.

g. Traffic Control.

(1) To avoid traffic congestion, a movement plan is prepared and put into effect before the withdrawal begins.

(2) Guides and traffic control posts are utilized as necessary to insure smooth and rapid movement to the rear once the withdrawal starts. Personnel carriers, when available, are used to the maximum to facilitate the withdrawal. Company vehicles are brought as far forward as practicable to move weapons and ammunition to the rear. The number of vehicles brought forward is held to the minimum consistent with the load requirement. When practicable, some of the supply and administrative cargo vehicles are brought forward to move supplies and equipment to the rear. Vehicles not needed in forward areas are moved to the rear on prescribed routes. Unnecessary movement that might disclose the withdrawal is avoided.

h. Supply and Evacuation.

(1) The principal supply problem in a daylight withdrawal is that

of ammunition. Adequate supplies are provided units which are assigned covering force missions. This may be done by transferring to them surplus stocks in the hands of withdrawing units. Supplies and equipment (except medical supplies and equipment) that cannot be evacuated are destroyed.

(2) Casualties at aid and collecting stations are evacuated by air or surface means before the withdrawal begins. Medical personnel, including those needed to operate aid stations, are attached to the covering force. Casualties within the covering force are evacuated by aircraft, medical vehicles, or other available transportation.

i. Communication.

(1) The battle group signal officer or his representative reconnoiters covering position(s), routes of withdrawal, and the new position so he can plan for adequate communication.

(2) During the initial stages of withdrawal, communication facilities are maintained on the old position. Command posts remain open until the bulk of a unit has cleared its covering force. When command posts close, march command posts are opened. A small detachment remains to operate the communication facilities for the covering forces. When the old command posts are closed, wire lines are cut and sections removed to prevent their use by the enemy.

(3) The withdrawal route of the battle group command post is announced. The withdrawal routes of company command posts are prescribed in battle group orders to facilitate the use of existing wire communication. Companies immediately report any deviations they have to make from these routes. Battle groups and companies select march control posts along the routes of withdrawal and inform higher, lower, and supporting units of their location. Helicopters may be used to displace the command post.

(4) Communication personnel are sent ahead of the main body to install the battle group wire net on a rear position which is to be organized for defense or delaying action.

(5) For more detailed communication information, see FM 7–21, FM 7–24, and FM 57–21.

217. Battle Group as a Covering Force

a. When the battle group is assigned the mission of covering the withdrawal of a larger unit, the initial position and the period of time it is to be held are prescribed by a higher commander. The battle group may be reinforced by divisional elements as required.

b. The battle group organizes and defends the covering position for a specified time in a manner generally similar to that used in a delaying

action. If both battle group flanks are open, a reserve as large as a reinforced company may be retained. The reserve is used to meet a threatened envelopment of either flank, to block a breakthrough, to counterattack, and to cover the withdrawal of the remainder of the battle group.

c. A battle group operating as a covering force accomplishes its mission by—

(1) Delaying enemy troops with demolitions and obstacles, particularly mines.
(2) Employing long-range fires, both nuclear and nonnuclear.
(3) Counterattacking if the situation warrants.
(4) Covering its own withdrawal with its reserve and the fires of organic and supporting weapons.

Section III. WITHDRAWAL BY AIR

218. General

a. A withdrawal by air is an operation in which all or a part of a deployed force disengages from the enemy and is moved by air to another location. The withdrawal may be forced by enemy action or made voluntarily. A voluntary withdrawal may be preplanned or it may be made on short notice as the result of a change in the situation. The battle group may be required to withdraw by air when operating independently or as part of a larger force.

b. Air superiority is a normal requirement for a successful withdrawal by air, 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.

c. A force withdrawn by air normally moves to an assembly area behind friendly lines. Exceptionally it may move to another objective area or battle area.

d. Army transport aviation, Air Force troop carrier aircraft, Naval aircraft, or any combination of these may be employed to move the withdrawing force. Either fixed- or rotary-wing aircraft may be used.

219. Command and Control

a. The commander ordering the withdrawal provides the air transport means, establishes a general time limit for executing the operation, designates the location to which the force will withdraw, and prescribes the action it will take in the new position.

b. To insure continuity of action and concerted effort in planning and conducting the withdrawal, responsibility and authority for all forces and all actions in the airhead must be vested in a single commander. Within the bounds imposed by the requirements of the situation, the

commander ordering the withdrawal provides maximum support and grants full freedom of action to the commander in the airhead.

220. Plans

a. Plans for an air withdrawal are based on orders from higher headquarters. The scope of the plans depends on whether the battle group is operating independently or as part of a larger force. In any case, plans should include the designation of detachments to be left in contact and measures for coordinating and controlling their actions; the time each unit, including detachments in contact, is to start its withdrawal; control measures; the location of assembly and loading areas; fire support; logistics; communications; and, when operating independently, deception. Measures are also taken to provide for identification, secrecy, and security.

b. Plans for the withdrawal are as detailed as time permits. Detailed unit SOP's reduce the time needed for planning and increase efficiency. Some of the items that may be included in SOP's are outline communication plans, instructions for destruction of equipment, procedures and control for aircraft loading, a general sequence for the withdrawal, and security. When an operation involves a high degree of risk and there is a probability that a withdrawal by air will be necessary, plans for the withdrawal are made concurrently with the plan of operation. These plans are revised and kept current as the situation develops.

221. Reconnaissance

a. Reconnaissance of Airhead. The battle group commander (or his representative) and members of his staff conduct the reconnaissance for the withdrawal. They select assembly areas, routes and/or zones, and phase lines as required, for movement to the loading areas. Representatives of subordinate units are given enough time to make a daylight reconnaissance. Reconnaissance parties are limited in size to insure secrecy. They may mark routes and positions, and post guides.

b. Reconnaissance of New Position. When practicable, reconnaissance parties are sent to the battle group's new location. In a withdrawal under pressure and on short notice, it may be impracticable for the withdrawing force commander to reconnoiter or send an advance party to the new location. In this event, the commander ordering the withdrawal has this done.

222. Timing

The commander of the withdrawing force selects the time of withdrawal within general limits imposed by the commander ordering the withdrawal. Nighttime and other periods of reduced visibility are aids to deception and secrecy, and enhance the chances of success for a withdrawal by air. A force withdrawing in daylight, under direct

enemy observation and fire, may sustain heavy casualties, yet the urgency of a situation may require a daylight withdrawal. Choosing the best time for the withdrawal is difficult, and a decision can be made only after careful consideration of the following factors:

a. The mission assigned.

b. The relative effectiveness of enemy and friendly air.

c. Enemy observation.

d. The proximity of enemy forces.

e. The enemy's capability for placing fires on loading areas.

f. The difficulty of control of ground forces and aircraft at night.

g. The capability to deny the enemy observation by the use of smoke.

h. The capability to neutralize the enemy by fire.

223. Organization of the Withdrawal

The organization and disposition of forces for the withdrawal are essentially the same whether the operation is to be carried out during daylight or at night. Detachments left in contact, organized as a distinct tactical force under a single commander, cover the withdrawal of the main body. The main body includes all forces other than those employed as a part of the detachments left in contact (fig. 25).

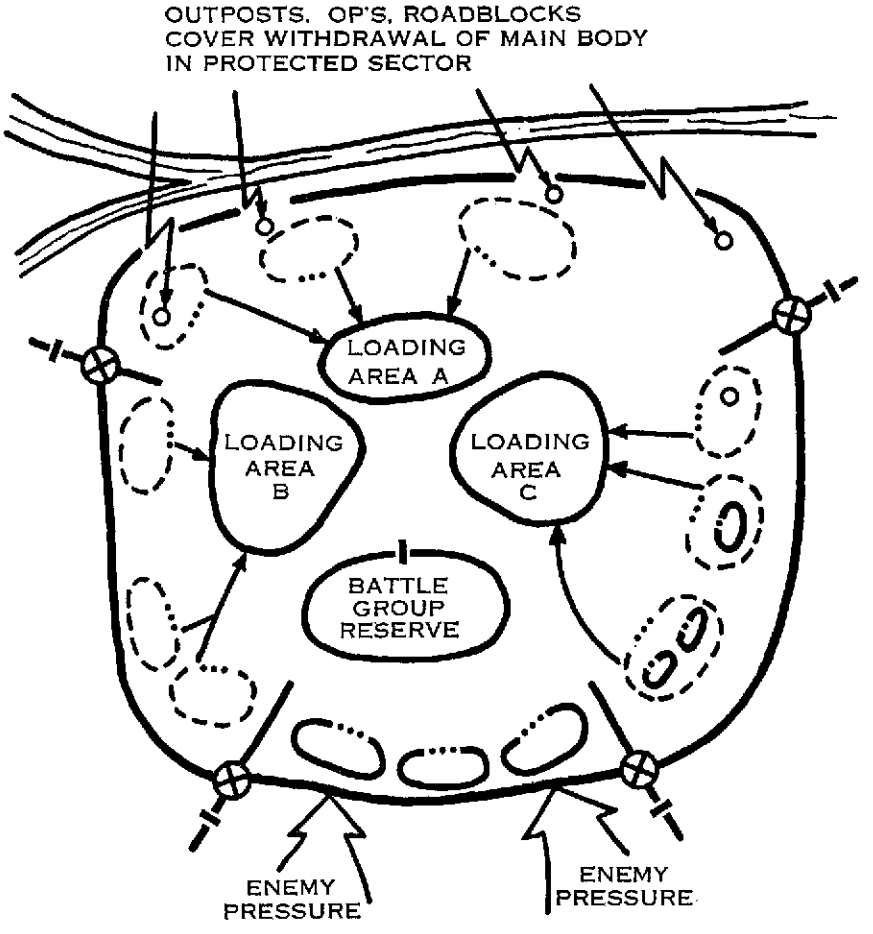
224. Detachments Left in Contact

a. The mission of the detachments left in contact is to prevent enemy interference with the withdrawal of the main body. When operating as part of a larger force, the next higher commander prescribes general limitations as to the strength of battle group detachments left in contact. The battle group commander specifies the composition of detachments left in contact by subordinate units. The detachments should be held to the minimum necessary to cover the withdrawal of the main body. The strength and composition of the force may vary in different portions of the airhead. A unit occupying a sector protected by a formidable obstacle may leave only minimum security posts, while units under attack may be required to remain in full strength.

b. Supporting troops are attached to the detachments left in contact as required. When an armor threat exists, a large proportion of the battle group antitank weapons are left in place to cover favorable avenues of approach. Reconnaissance troops, artillery, engineer, medical personnel, and elements of other supporting troops may be included.

225. Fire Support

a. The requirement for supporting fires increases as the force withdraws and its capability to repel the enemy diminishes. Emphasis is placed upon maximum use of outside fire support agencies, including close air support, artillery (including rockets and missiles) and naval



LEGEND:

MAIN BODY

DETACHMENT LEFT IN CONTACT

NOTE:

ASSEMBLY AREAS ARE SELECTED IMMEDIATELY TO THE REAR OF COMPANY POSITIONS, BUT ARE NOT USED IF COMPANIES CAN WITHDRAW DIRECTLY TO LOADING AREAS.

Figure 25. Battle group withdrawal by air (schematic).

gunfire. When available, nuclear fires may be used to forestall enemy interference. If a portion of the airhead is under attack or is threatened, a large proportion and, in some instances, all of the fire support units may be required to remain with the detachments left in contact. In a night withdrawal, some of each type of supporting weapon are left

in place, distributed to retain the original pattern of fires, to contribute to deception and secrecy.

b. In addition to the air transport, air support requirements include close air support, protection from enemy air, reconnaissance, and interdiction. Readily available close air support is essential to the success of the withdrawal. Forward air controllers with the main body, and later with the detachments left in contact, control air strikes in support of the withdrawal. Allocation of close air support aircraft on air alert may be accomplished through a tactical air coordinator.

c. The commander ordering the withdrawal plans and provides fires in support of the air movement, including air support.

226. Reserves

a. When operating as a part of a larger force, all or part of the battle group may be designated as the reserve, and given missions that will assist in the withdrawal of the main body; i.e., blocking enemy penetrations, supporting by fire from prescribed positions, or counterattacking. Its withdrawal is normally covered by the detachments left in contact.

b. When the battle group executes a daylight withdrawal independently or as part of a larger force, it provides its own reserve to cover the withdrawal of the main body by blocking or counterattacking enemy penetrations. The reserve normally does not exceed one reinforced company. It is attached to the detachments left in contact after the main body withdraws. In night withdrawals, the reserve is usually withdrawn as the last element of the main body.

227. Orders

The battle group commander issues a warning order to subordinates at the earliest practicable time. The order must be specific, as detailed as time permits, and cover not only the withdrawal phase but also subsequent operations. Maximum reference is made to SOP's. Fragmentary orders are common when time is limited.

228. Control for Movement to the Loading Area

Movement to loading areas is controlled through the use of assembly areas, routes of withdrawal, initial points, and check points. The assembly areas are located near the company battle positions. Defilade is desirable but not mandatory. Withdrawals under pressure may require the assignment of zones and phase lines, rather than routes, so that troops may move straight to the rear, maintaining a battle formation until they come under the protection of the reserve in its covering position.

229. Loading Plan

The plan for outloading the withdrawing force must emphasize speed

and provide for maximum coordination between the arrival of units in loading areas and the arrival, loading, and departure of aircraft. To allow aircraft to remain on the ground for an excessive time invites destruction by enemy fires and failure of the operation. Routine loading instructions are included in unit SOP's. The amount of detail included in the plan is determined by the size of the operation, experience of personnel, and the time available. The following may be included:

a. Schedule and priorities for loading.

b. Designation of loading areas.

c. Designation of and instructions for loading control personnel.

d. Schedule for movement of units to loading areas.

230. Landing and Loading Areas

Landing and loading areas are designated by the highest headquarters involved in the withdrawal. They are as close to unit battle positions as the terrain and enemy situation will permit. To achieve maximum speed in the landing, loading, and takeoff, and to provide passive protection against mass destruction weapons, multiple landing areas are desirable. Other factors to be considered in selecting the location and number of landing and loading areas are—

a. Landing area requirements for the types of aircraft to be used.

b. Number of aircraft and rate of landing.

c. Availability of facilities for improvement of landing areas.

d. Availability of aircraft control facilities.

e. Availability of dispersed parking and loading sites.

f. Protection from enemy observation and fires.

231. Loading Control

Loading control personnel are provided for each loading area to summon and guide units from the assembly areas to the loading areas and to expedite loading. The actions of all loading control personnel are coordinated by a loading control officer designated by the commander. Constant liaison is maintained between the loading control officer and the air movement control facility to maintain balance between the arrival of troops and aircraft in loading areas.

232. Air Movement Control

a. The air movement control required to insure precision timing and minimum delay in the withdrawal depends upon the number of aircraft involved, landing facilities, and visibility. When the battle group is operating as part of a larger force, control facilities are established by higher headquarters.

b. In withdrawals employing Air Force aircraft, the Air Force provides a movement control center, and control and support detachments at landing areas.

c. In withdrawals employing Army transport aviation, the battle group commander may appoint a movement control officer to direct the movement of aircraft and to coordinate with loading control personnel.

233. Security

Unit commanders are responsible for the security of their units while occupying assembly areas and during movement to loading areas. The headquarters that establishes the loading and landing areas designates the responsibility for their security.

234. Deception and Secrecy

When the battle group is operating as part of a larger force, deceptive measures are taken as directed by higher headquarters. The battle group operating independently devises its own deception plan. Supporting fires, including air strikes on enemy positions, may be employed to divert attention from transport aircraft. Normal radio traffic is maintained by detachments left in contact. Activities that tend to disclose the intent to withdraw are avoided.

235. Logistics

a. Plans are made for the early disposition of heavy equipment and supplies. The quantities to be evacuated from the airhead depend on the availability of aircraft and the amount of time for outloading. Equipment and supplies that cannot be airlifted out of the airhead, and which may be of use to the enemy, are destroyed.

b. Enough ammunition and supplies are dumped on position to sustain the detachments left in contact and the supporting troops.

c. The evacuation of casualties may present a major logistical problem. Casualties are given a high priority and are evacuated early in the operation. A detachment of medical personnel remains with the detachments left in contact.

236. Communication

a. The detachments left in contact take over existing wire lines and continue normal radio traffic after the main body withdraws. Strict communication security is enforced to preserve secrecy. Clear text radio messages concerning the withdrawal are forbidden.

b. Wire and messenger are the primary means of communication in the loading areas, and between loading control personnel and the command post.

237. Conduct of the Withdrawal

a. Once the withdrawal has begun, all efforts are made to adhere to the prescribed time schedule. Units on the perimeter which are to withdraw as a part of the main body are relieved and assembled with their tactical groups at the latest practicable time before their scheduled arrival in the loading area. They withdraw along routes or in zones as directed. Supporting units and weapons are normally attached for the move to the unit in whose area they were employed. Support troops and units least engaged are withdrawn first leaving the most heavily engaged units to be last. Reserves may execute counterattacks to assist in disengagement.

b. Supporting fires, air support, mines, and obstacles must be fully exploited to prevent the enemy from pursuing the withdrawing force. Smoke may be used to obscure enemy observation.

c. During a night withdrawal, emphasis is placed on secrecy and the simulation of normal activity as long as possible.

d. On arrival in the loading area, units complete preparations for loading and form into plane-load groups. These groups move to the loading area when summoned by the loading control personnel. Tactical loading may be sacrificed for speed and maximum use of the capacity of aircraft.

e. Detachments left in contact assume control of their respective areas when the main body begins its withdrawal. After the main body completes its withdrawal, the detachments left in contact break contact and move to designated loading areas under cover of close air and other fire support.

f. Loading areas for the detachments left in contact must be as close as practicable to their battle positions. It is highly desirable to use helicopters for this phase of the withdrawal because they can land, load and take off in a minimum of time and at the most advantageous loading area.

Section IV. DELAYING ACTION

238. General

a. The delaying action is usually employed as an economy of force measure. Covering forces, security detachments, and battle groups taking part in the mobile defense may employ this maneuver. It is executed most effectively by highly mobile troops (motorized, mechanized, or air transported) supported by armor, tactical aviation, and nuclear and nonnuclear fires. The effective use of obstacles, covered by fire, strongly reinforces the delaying capability. Delaying forces must offer a continuous threat of strong opposition to force the enemy to deploy and maneuver.

b. A battle group may conduct a delaying action independently or as a part of a larger delaying force. It acts independently either on a special delaying mission or as a security element of a larger force such as a general outpost or a rear guard.

c. The echelons of a battle group delaying position are similar to those used in the defense. They may consist of a security echelon, forward forces, and a reserve. When the frontage assigned to the battle group is such that it requires the employment of all elements to man the delaying position with little or no reserves, a combat outpost may not be employed. This does not eliminate the requirement for local security.

d. Delaying actions assume increased importance in nuclear warfare. Dispersed formations, emphasis on flexibility of action, reliance on fires, and movement to inflict maximum punishment on the enemy while avoiding close combat are all characteristics of a delaying action. Thus, a unit in a delaying action may be organized in many respects like a forward battle group in defense when the division is conducting the mobile defense.

e. Delaying actions may be accomplished by—

(1) Delay on a single position.
(2) Delay on successive positions.
(3) Delay by alternating forces on successive positions.
(4) Limited offensive action to throw the enemy off-balance.
(5) A combination of any of the above, using nuclear and/or nonnuclear fires. The detonation of subsurface or surface atomic demolition munitions under the most favorable weather conditions may be employed to produce craters and to contaminate the areas to impede the enemy forces.

f. Continuous liaison between adjacent battle groups is maintained whenever possible. Army aircraft and reconnaissance units facilitate this liaison.

g. To control movements, times of withdrawal are prescribed and phase lines or successive covering positions are designated.

h. A delaying mission usually directs that enemy forces be held beyond a definite line until a stated time. If the limiting line and time are not specified, the battle group commander determines both.

i. The number of successive positions to be occupied depends on the total space available for delay, the terrain characteristics, the enemy situation, and the required delay time as stated in the mission.

j. The decision as to the exact time to withdraw depends on many factors: the strength and composition of the attacking force, status of adjacent units, strength of the position, conditions of the delaying force, and the amount of delay required by the mission. The withdrawal should start while the delaying force still has freedom of movement.

k. The authority to withdraw a battle group in a delaying action remains with the division commander unless he specifically delegates it to the battle group commander. In either case, the next higher commander must be kept fully informed of the situation so that he can order withdrawals before units become too heavily engaged. A subordinate commander who is out of contact with higher headquarters must do everything possible to reestablish communication. If forced to withdraw before contact is regained, he must inform higher and adjacent units of his action as soon as possible.

l. Times of withdrawal from different delaying positions are varied so as not to establish rigid patterns. Movement at night is preferred, particularly when the enemy has air superiority.

m. To facilitate coordination, the battle group is normally assigned a zone of action with the boundaries extended to the rear through rearward positions.

239. Selection and Organization of Delaying Position

a. The vulnerability of friendly forces to nuclear weapons and the presence of enemy massed armor and mechanized forces favor delay on successive positions.

b. A delaying action differs from a position defense principally in the following respects:

(1) Decisive combat is avoided.
(2) Positions are organized to be held for a limited time.
(3) Counterattacks are used primarily to disengage friendly units or to temporarily hold a position until more favorable conditions for withdrawal develop.
(4) Maximum firepower is positioned forward.
(5) Frontages are greater.

c. The major requirements for delaying positions are—

(1) Good observation and long-range fields of fire. Locations near the topographical crest frequently facilitate the development of long-range fires and provide covered and concealed routes of withdrawal. If a long delay on one position is required, terrain that permits mutual fire support by flat-trajectory weapons is also desirable.
(2) Covered routes of withdrawal.
(3) Obstacles to the front and flanks.
(4) Cover and concealment on the position.
(5) A series of parallel ridges across the axis of hostile advance.

d. After selecting the initial delaying position, the battle group commander selects the combat outpost line, if applicable. The desirable terrain characteristics for the combat outpost line are the same as those for a combat outpost line in the defense (par. 159).

e. The battle group reserve should be located where it can limit penetrations and cover the withdrawal of forward units. Whether it is placed in an assembly area(s) or in a blocking position(s) depends on such factors as its mobility, the width of the position, the adequacy of the road net, and the adequacy of flank protection.

f. Successive delaying positions behind the initial position are reconnoitered and selected as the terrain and time permit. They are reconnoitered in detail and organized by the units scheduled to occupy them.

g. Successive delaying positions are located in such a manner as to force the enemy to regroup his forces and displace the bulk of his supporting weapons, including light artillery, before he can launch a coordinated attack against the new position. Distances between successive delaying positions should be short enough to permit completion of a withdrawal to the new position in one night, but far enough apart to reasonably preclude both being affected by one nuclear weapon or group of weapons. Open terrain will usually permit the acceptance of greater distances between positions than close or wooded terrain.

h. The conduct of the delay between successive positions during a voluntary withdrawal depends on the degree of visibility. During darkness or other periods of low visibility, detachments are left in contact to insure secrecy and deception. Reconnaissance forces remain as part of the detachments left in contact and assume the role of rear guard when the detachments are withdrawn. The reconnaissance elements execute demolitions, call down fires, and take action to delay the enemy within their capability. During daylight, mobile forces remain to keep the enemy under surveillance, execute demolitions, call down fires, and delay the enemy within their capabilities.

i. All withdrawals under enemy pressure are conducted alike, regardless of the state of visibility. The delaying force fights its way to the rear, utilizing covering forces and making maximum use of fires, demolitions, and offensive action to inflict damage on the enemy and delay him.

240. Employment of Forces

a. The disposition of the battle group is dictated by the requirement for securing one or both flanks, the need for executing counterattacks, the availability of a covering force for a daylight withdrawal, the length of time it is planned to hold the position, and the nuclear support available.

b. Supporting and attached units are employed in a delaying action as they are in a withdrawal.

241. Conduct of the Delaying Action

a. The approaching enemy is taken under fire at extreme range. As

he advances, the volume of fire is augmented by additional weapons. Every effort is made to inflict casualties on the enemy, to force him from the most likely avenues of approach, to disorganize him, and to force him to stop to reorganize or mass for an assault. Nuclear fires are utilized to the utmost against appropriate enemy targets.

b. The battle group commander avoids decisive combat, when possible. If the enemy threatens to close on the position, he decides whether to execute a daylight withdrawal or to risk close combat in order to postpone the withdrawal until darkness. If only minor contact or penetrations are anticipated, he usually elects to wait and make his withdrawal at night. If large portions of the position become engaged, with the likelihood of being overrun, he may execute a daylight withdrawal.

c. During the course of the withdrawal, special details execute demolitions, activate minefields, and prepare other obstacles as time and materials permit. Persistent effect chemical munitions and nuclear weapons may be effectively used to create barriers, to reinforce natural obstacles, and to deny the enemy critical terrain. Special biological weapons can be used along enemy avenues of approach. All obstacles, both natural and manmade, are covered by fire as long as possible.

d. If the battle group is hit by nuclear weapons, the commander reorganizes and continues the delaying action on the same position or moves his force to an alternate position from which he can continue his mission within the time and space available. If his mission has been adequately accomplished, he may reorganize the affected units and withdraw his entire force to the next delaying position.

Section V. RETIREMENT

242. General

A retirement may be made to put extended distance between the defender and the enemy, to reduce friendly supporting distance, to occupy more favorable terrain, to conform to the dispositions of a larger command, or to permit employment in another sector. A withdrawal from action may precede a retirement. A withdrawal from action becomes a retirement after the main force has broken contact with the enemy and march columns have been formed.

243. Conduct

a. A battle group usually executes a retirement as part of a larger force. When it is on an independent mission, it retires in compliance with specific instructions or after completing its mission. See FM 7–100 and 57–100.

b. The considerations for and the conduct of retirement by air are the same as for an air movement behind friendly lines.

Section VI. BREAKOUT FROM ENCIRCLEMENT

244. General

a. A unit is encircled when it is surrounded by an enemy force which has cut all ground routes of evacuation and reinforcement.

b. In a fluid situation when forces are widely dispersed, the battle group may frequently become encircled. Circumstances will often require the battle group to continue the battle even though encircled. When the mission requires, the battle group breaks out of the encirclement either alone or with the assistance of a linkup force. When circumstances permit, an encircled battle group may be withdrawn by air.

245. Command and Leadership

a. Unity of command for an encircled force is a basic requirement. Enemy attacks are normally directed against tactically weak areas in the defender's position. When encircled forces consist of two or more units, unified command is not assured at first, and their defense is not readily coordinated. To insure continuity in their actions, they should be brought together under a single commander at the earliest practicable time.

b. The highest standard of discipline is essential. The commander of an encircled force must apply stern measures to prevent slackening of control which will, in turn, result in poor discipline and low morale. Any breach of discipline, no matter how small, has a damaging effect on the entire command. The highest standards of discipline must be upheld by the officers and noncommissioned officers: leaders must set the example. Force of character, as in any critical situation, acquires great significance in sustaining the will to fight, and may indeed determine the outcome of the battle. During the encirclement, it is most important that the commander be in the midst of his troops where he can influence their action. He must always appear enthusiastic and confident since the minds of his troops will register his every action and mood.

246. Preparation and Planning for the Breakout

a. A breakout from encirclement is one of the most difficult operations that a force can be called upon to execute. Unless the encircled force has explicit orders to defend in place or is so weak that it must rely on relief from the outside, the decision is made to break out and the operation is executed before the enemy is able to establish a firm ring around the force. The need for making a quick decision, how-

ever, should not lead the commander to start a breakout without adequate planning.

b. Timely intelligence is necessary to provide the basis for a sound breakout plan. The plan should include—

(1) *Direction of attack.* The attack should be launched against enemy weakness, in a direction which will insure linkup with friendly forces in the shortest possible time. The direction is normally indicated by designating objectives and an axis of advance. Objectives are assigned to insure penetration of the encircling force and preservation of the gap created. An axis of advance is assigned for movement after the penetration has been made.

(2) *Time of attack.* Since deception and secrecy are essential to a successful breakout, the commander may decide to attack during darkness or other periods of limited visibility. The effectiveness of enemy and friendly air must be considered in selecting the time for the breakout. When the enemy can gain and maintain local air superiority it may be necessary to break out at night or during weather which reduces the effectiveness of enemy air. On the other hand, if friendly air can gain and maintain local air superiority and if close air support is essential to the success of the operation, it may be desirable to conduct the operation when visibility is good. A daylight breakout may also be feasible if smoke can be used to hinder enemy observation. The time for the breakout should be determined only after weighing all of these considerations.

(3) *Organization of the breakout.* An encircled force is usually organized into four distinct tactical groups for the breakout: the breakthrough force, supporting units, a reserve, and detachments left in contact.

(*a*) The breakthrough force may vary in size from one-third to two-thirds of the total encircled force. It consists of infantry and the majority of available assault weapons (guns). This force is assigned the mission of penetrating the enemy ring, widening the gap, and holding the shoulders of the gap until all other encircled forces can move through. After the penetration phase has been completed and all other encircled forces have passed through the penetrated area, the breakthrough force may be employed as a rear guard.

(*b*) Supporting units such as artillery, supply, and medical units displace on order to provide close and continuous support to the attack echelon.

(*c*) The reserve is composed primarily of infantry units. It may be assigned the mission of assisting the breakthrough

or of executing counterattacks or diversionary attacks. This force is usually employed to maintain the momentum of the attack once the penetration has been made. When freedom of action is gained, this force may become the advance guard for further movement.

(*d*) The detachments left in contact should be the minimum necessary to cover the withdrawal of other forces from the perimeter. The detachments withdraw on order after all other units have cleared the perimeter. After passing through the penetrated area, they may be assigned a reserve mission.

(4) *Deception.* An effective deception plan is usually required for a successful breakout. The primary purpose of the deception is to enable the main breakthrough force to gain surprise. Effective deception may be achieved by employing feints, diversionary attacks, or demonstrations, together with misleading radio transmissions as authorized by higher authority and current directives. These deceptive maneuvers should be planned to deceive the enemy into thinking that he has located the main attack and cause him to mass the bulk of his force near the threatened area. This will weaken the enemy in the area where the main attack is to take place. Assault weapons (guns), because of their mobility, are ideally suited for this type of operation. After the bulk of the enemy force has been diverted, the assault weapons (guns) can move rapidly to support the main attack. Vehicles may be used for a demonstration or as part of a feint.

(5) *Concentration of forces.* Prior to the breakout there must be a gradual change of emphasis from the defense of the perimeter to the formation of a strong breakout force. As the situation permits, every soldier and combat unit that can be spared from the perimeter must be assembled for employment in the breakout.

(6) *Communications.* Since secrecy is essential to the success of this type operation, wire and radio communications must be closely guarded. No mention of the breakout operations should be transmitted in clear text over either of these means of communications. The normal pattern of radio traffic should be maintained until the breakthrough force has started its attack.

(7) *Logistics.*

(*a*) Plans should be made to relieve personnel of all equipment and supplies not essential for the fighting during the breakout. Weapons that cannot be manned or supplied with ammunition are destroyed. Similar considerations are ap-

plicable to vehicles. The number of vehicles that will accompany the breakout depends on the availability of fuel and the requirements for transportation of casualties and indispensable equipment.

(*b*) If the force does not have adequate supplies to support the breakout, plans are made for air resupply of critical items.

(*c*) One of the major logistical problems is that of evacuating casualties. Helicopters and other aircraft are used to the maximum for this purpose. The consideration given to casualties has a profound effect upon the morale of encircled troops. The slightest indication that wounded personnel are to be left behind will immediately reduce the fighting spirit of the troops. Commanders are under the strongest moral obligation to bring casualties out of the encirclement along with the fighting forces if he cannot have them evacuated by air.

247. Conduct of the Breakout

a. Since secrecy and security are primary considerations in conducting a breakout operation, a close time schedule must be prepared and adhered to.

b. Units on the perimeter which are to participate in the breakout as a part of the main breakthrough force or as a part of the reserve are released from their defensive mission and assembled with their respective tactical groups at the latest practicable time before the breakout attack starts.

c. A diversionary attack should be carefully planned and vigorously executed to divert the enemy from the breakout area. The deceptive measures taken and the assault power and supporting fires used in the diversionary attack, and the vigor with which it is executed, must convince the enemy that it is a genuine attempt to break out.

d. The main attack is timed to cross the line of departure as soon as the diversionary attack has diverted the bulk of the enemy force. The breakthrough force, supported by all available fire and close air support, makes a penetration, widens the gap, and holds the shoulders of the penetration. The reserve force then passes through the gap and continues the attack. Supporting units displace on order to provide close, continuous support to the attack echelon. The detachments left in contact withdraw on order and follow the reserve force through the gap. When all encircled forces have passed through the gap, the breakthrough force (which has been holding the shoulders of the penetration) withdraws, prepared to fight a rear guard action. Once outside the encircled area, the attack is continued to link up with other friendly units. During this phase of the operation the breakout force assumes

a formation which insures maximum speed of movement and security to the front, flanks, and rear.

248. Relief Operations

The difficulties encountered by an encircled force may be considerably reduced by the use of relief forces. Whenever troops are surrounded, assistance from outside the encirclement is desirable and should be provided without delay. The urgency of the need for relief depends on the tactical situation and the physical condition of the encircled force. It is greatest when the encircled troops are battleworn and show signs of weakening; it may be less urgent in other situations. It is usually desirable to combine the attack of a relief force with the breakout attack. Plans for a relief operation must be carefully made. Tactical preparations follow the same principles as those for any other type of attack. The strength needed by the relief force is determined on the basis of the enemy situation and the distance to the objective. In most cases armor and artillery support is indispensable. All relief forces should be under one command. Logistical requirements will exceed those for an ordinary attack, because the relief force must try to anticipate and provide for the needs of the encircled troops. The time and place for launching the relief attack are chosen in coordination with the encircled force. Coordination can usually be carried out only by radio, so great care must be taken to maintain secrecy. Aircraft are used for liaison whenever possible. If at all feasible, the relief attack should be launched on a broad front. Its conduct must be marked by a high degree of flexibility. The joint effort of the two converging elements (relief force—encircled force) must be carefully coordinated and geared to the needs of the encircled unit which will be fighting under less favorable circumstances than the relief force. Depending on the relative size of the two forces, it may be desirable to give over-all command of both to the commander of the larger force when linkup is imminent. The linkup is planned and executed like a linkup in an airborne operation (ch. 8).

CHAPTER 8

AIRBORNE OPERATIONS

Section I. GENERAL

249. Scope

a. This chapter discusses the planning and execution of airborne operations. Except where reference is made to parachute-delivery of assault echelon personnel, equipment, and supply, the discussion is applicable to the planning and conduct of an airborne operation by airlanding either the infantry or the airborne division battle group.

b. The tactical principles are applicable for both joint and unilateral airborne operations. Unabridged details of the techniques and procedures discussed in this chapter may be found in FM 57–30 and FM 57–100 for joint operations; FM 57–35 for unilateral operations; and FM 57–210, which is applicable to both joint and unilateral airborne operations.

250. Definition

An airborne operation consists of the movement and delivery by air of combat forces and their logistical support by airlanding or air drop into an objective area.

251. Types of Airborne Operations

Airborne operations in which the battle group may participate as part of a large force or independently are classified as follows:

a. Short-Duration Operation. This is an operation providing for the early withdrawal or relief of the participating units. It does not require an extensive buildup of logistical support.

b. Long-Duration Operation. This is an operation that commits the participating units to sustained combat and requires a substantial buildup of combat power and logistical support.

252. Characteristics

a. The operations of an airborne force differ generally from those of other ground forces in that—

(1) An airborne force usually has limited artillery and heavy equipment and little or no armor within the objective area.

(2) The requirement for protecting landing areas and the lack of vehicles may restrict the flexibility of operations.
(3) Adverse weather (primarily low visibility and high winds) exerts more of an adverse influence.
(4) The force's limited ground mobility and firepower increase its vulnerability to enemy armor.
(5) The limited ground mobility of units increases the importance of dispersed landings to prevent creating remunerative nuclear targets.
(6) The force is relatively vulnerable to enemy aircraft and other direct fires during flight, landing, and assembly.
(7) An airborne assault usually is made in relatively undefended areas, facilitating initial tactical surprise. The lack of defense may be due to the enemy's organization or it may be caused by friendly supporting fires, including nuclear strikes, in the area.
(8) Obstacles and enemy defenses that would ordinarily have to be overcome or reduced may be bypassed.

b. Airborne operations call for overriding air superiority. When it is impossible to insure this, various techniques are used to gain surprise and reduce the enemy's ability to interfere. These techniques include, but are not limited to, flying at low levels, using multiple flight columns, operating during periods of limited visibility, employing electronic countermeasures, and using various deceptive measures such as ruses and feints.

253. Methods of Delivering Airborne Forces

a. General. An airborne force may be delivered by parachute or by airlanding it in fixed- and rotary-wing aircraft. A combination of these methods may be used, but only an airlanding is applicable to an infantry division battle group.

b. Parachute. This method has the following advantages:
(1) Delivery may be made in any area that is relatively free of obstacles.
(2) Troops and equipment are rapidly delivered.
(3) Individual parachutists are difficult targets for ground weapons.

c. Fixed-Wing Aircraft. This method has the following advantages:
(1) No specialized troop training is required.
(2) Units land ready to operate.

d. Rotary-Wing Aircraft. This method has the following advantages:
(1) No specialized troop training is required.
(2) The landing may be made on practically any type of terrain.
(3) Units land ready to operate.

254. Missions

Missions assigned the battle group, or elements of it, in airborne operations include—

a. Seizure of an Airhead. The battle group seizes and consolidates all or part of an airhead line (a line which indicates the outer limits of an area to be denied the enemy).

b. Expansion of an Airhead. The battle group may reinforce other initial assault forces and attack to expand the airhead.

c. Attack To Destroy Enemy Forces or Installations or To Seize Critical Terrain. These missions may be assigned to all or part of a battle group to be accomplished during the assault phase or after an airhead has been established. The action may take the form of a major attack that complements another ground operation. Combined ground and airborne attacks divide enemy effort, rapidly exploit nuclear attacks, disperse friendly forces, and facilitate "hugging" tactics to prevent effective enemy use of nuclear fires.

d. Raid. This includes general harassing and deceiving activities designed to disrupt enemy plans and divide his attention. Such a mission may be assigned for offensive, defensive, or retrograde operations. It is characterized by a sudden strike and rapid withdrawal or shifting of the airborne force. When this type mission can be staged at night and in difficult terrain, the effectiveness of mobile enemy forces is reduced.

e. Area Interdiction. When the division conducts an area interdiction, it may make the battle group responsible for a part of the area. The battle group hinders or prevents the enemy from using that part of the area by any means short of decisive engagement. This is similar to a guerrilla operation.

f. Blocking Enemy Routes of Movement. An operation to block an enemy route of withdrawal or reinforcement is frequently staged in conjunction with nuclear strikes and ground attacks. Usually, units of company size or smaller occupy terrain from which enemy forces can be stopped or delayed. The operation is either carefully coordinated with surface attacks to prevent defeat of the blocking force, or provision is made for withdrawing it by air or ground movement. Helicopterborne forces may be used to cover the withdrawal by delaying the enemy from successive critical terrain features.

g. Security and Reconnaissance. Flank guard or covering force missions may be performed by all or part of the battle group, as may small or large scale reconnaissance operations, including reconnaissance in force. The battle group may be employed to screen the advance or withdrawal of friendly forces.

h. Operation as Part of Other Forces. The division commander may detach elements of the battle group to reinforce other battle groups or to constitute a task force under division control.

Section II. PREPARATION

255. General

Preparations for airborne operations include training, rehearsals, planning, liaison, occupation of assembly areas, issuance and preparation of supplies and equipment for aerial delivery, movement to loading sites, loading the aircraft, and security measures.

256. Training

a. The training objective of the battle group is to attain maximum efficiency in airborne operations as well as in other ground operations. Training involves unilateral and joint training in aircraft loading techniques, air movement, and logistical and administrative procedures applied to airborne operations. Certain types of airborne operations require special training.

b. Individuals are trained in their primary ground role. In addition, they must be proficient in flight discipline and the loading and unloading of aircraft. Airborne division battle group personnel must be proficient in parachute techniques.

c. Unit training emphasizes tactical operations on the ground, speed and precision in loading aircraft, techniques of assault landing, and assembly after landing.

257. Rehearsals

a. Time permitting, an airborne operation is rehearsed to insure speed and precision. Some conditions may have to be simulated for rehearsals. This should be done only when aircraft, equipment, or training areas are lacking, or when security may be compromised.

b. Rehearsals should include as many of the following actions as practicable:

(1) Assembly area operations.
(2) Loading and unloading of aircraft.
(3) Communication procedures.
(4) Assembly and control after landing.
(5) Execution of the tactical plan.
(6) Logistical operations.
(7) Relift operations (when planned).

258. Assembly Areas

a. When not alerted for an operation, the battle group may occupy widely dispersed assembly areas to minimize its vulnerability to nuclear attack. Battle group units may be further dispersed within these areas.

The mobility and flexibility of air transportation make it possible to concentrate the forces rapidly.

b. The battle group supplements the security of its assembly areas as necessary to prevent intrusion by unauthorized persons or an attack by enemy partisans or guerrilla elements. When the battle group commander receives a warning order, he takes the necessary action to prevent all but key personnel from entering or leaving the assembly areas. The extent of the battle group's responsibility for security depends primarily on the effectiveness of counterintelligence measures employed, enemy capabilities, the location of the assembly areas, and the degree of security provided by supporting agencies. The battle group may be directed to move frequently to new assembly areas as a further security measure.

259. Liaison

On receiving orders for an airborne operation, the battle group exchanges liaison officers, as applicable, with the following agencies:

a. Other Army elements of the force.
b. Troop carrier elements.
c. Supporting naval forces.
d. Supporting Air Force.
e. Theater administrative zone agencies.
f. Linkup forces.

260. Preparations Prior To Marshaling

a. It is essential that the tactical planning as discussed in section III be completed prior to marshaling. Prepared aircraft requirement tables (TM 57–210 and FM 57–35) reduce planning time.

b. The battle group establishes complete coordination with supporting agencies. These agencies may provide transportation, supplies, equipment, maintenance, and other logistical and administrative support for assembly area activities and for the air movement and tactical operation.

Section III. TACTICAL PLANNING

261. General

a. Detailed planning for an airborne operation follows the principles that are applicable to other ground combat operations, but with consideration for the technical problems peculiar to airborne operations. The tactical plan depends directly on the mission, the availability of aircraft, logistical support, and intelligence.

b. Generally, plans are developed by working backward from the objective in the following sequence:

(1) Ground tactical plan.

(2) Landing plan, indicating the sequence, time, and place of arrival of troops and material, based on the ground tactical plan.

(3) Air movement plan, based on the landing plan.

(4) Marshaling or loading plan, based on the air movement plan.

c. Although planning follows generally the sequence indicated above, the plans are closely interrelated and are developed concurrently. Logistical and personnel planning begins with ground tactical planning and continues throughout the planning sequence.

d. The extent of the battle group's tactical planning depends upon the mission and the size and scope of the operation. When operating independently, the battle group is involved in joint planning to a greater degree than when operating as a part of the division. See FM 57–35 for planning when employing Army transport aircraft.

e. The battle group must be capable of planning and launching an operation in a very short time. Planning and execution time can be materially reduced by maintaining a state of operational and logistical readiness in or close to departure areas and by developing standing operating procedures. The larger the operation—in terms of the size of participating forces and required logistical support—the greater the time that must be allowed for planning and preparation. Joint operations are more complex and take longer to plan and launch than unilateral operations.

f. To the extent that security considerations permit, planning is conducted concurrently at all levels. The battle group commander and his staff participate in the development of division and transporting aviation unit plans. This insures close coordination and makes it possible for the battle group commander to reduce his planning time.

g. Plans for an airborne operation must be simple and flexible. All leaders must be prepared to overcome unforeseen difficulties and exploit unforeseen opportunities that may arise during the conduct of the operation. To attain simplicity, the planner—

(1) Insures that the plan is flexible so that it does not depend on the arrival of any one air serial or tactical unit.

(2) Makes simple landing and assembly plans.

(3) Uses landmarks that are easy to locate and identify from the air.

(4) Makes allowance for operational delays in takeoffs and landings.

(5) Maintains tactical integrity of units in loading plans.

(6) Prepares a simple plan for the distribution of troops and equipment at departure areas.

262. Division Plans

a. The division commander usually issues a warning order early in his planning phase so that the battle group commander can make his

plans and preparations concurrently. In addition to the information normally included in a warning order for other offensive operations, the warning order for an airborne operation may include special security measures and advance information of the number and types of aircraft allocated to the battle group.

b. Division plans and orders give the battle group commander his mission and designate the supporting and attached units. They also include—

(1) Information of the enemy, weather, and the terrain in the objective area.
(2) Specific battle group objectives including, where appropriate, priorities for their seizure.
(3) Areas of operations. The battle group is usually assigned a sector defined by boundaries and all or a portion of an airhead line.
(4) The location and assignment of drop or landing zones.
(5) Requirements for special reports not covered by SOP, security measures, and special instructions for starting the attack upon or before completing the reorganization.
(6) Data for the air movement plan. This includes the location of loading areas. (Aircraft movement from loading areas to a departure facility is usually covered by a separate air movement table.) The air movement plan also includes the allocation of aircraft, composition of aircraft serials, and the time for loading, takeoff, and arrival at the destination.
(7) Data on marshaling. This may be in a separate plan or order if the mission must remain a secret as long as possible.
(8) Details of fire support plans. When a nuclear preparation is used, the order includes information of obstacles created by blast damage and radioactive contamination, and other nuclear results that affect battle group operation.
(9) The mission of the division reserve.
(10) Elements of the defense plan that can be developed in advance.
(11) Reconnaissance and security missions. This includes the mission for the reconnaissance troop, elements of the division aviation company, and the battle groups. When RSP are to be established, the division designates the general location and the unit(s) responsible (par. 266*b*).
(12) Coordination with adjacent units.
(13) Air and antitank defense plans.
(14) Special measures for protection from the effects of friendly and enemy nuclear weapons.
(15) Plans for subsequent operations, as required.
(16) Communication within the division.

(17) Details of air-sea rescue, when applicable.
(18) Details of time and place of arrival and the use of troops and equipment in the followup echelon, when applicable.
(19) Organization of and instructions to the rear echelon.
(20) The supply and evacuation plan, including special measures for air resupply and air evacuation.
(21) Alternate plans.

263. Organization for Combat

a. Echelonment. To execute a specific mission, the battle group may organize into assault, followup, and rear echelons.

(1) The *assault echelon* consists of the elements that seize the initial airhead. The entire airborne division battle group with its organic weapons and transportation can be delivered by parachute or assault transport in the assault echelon. Except for elements of the reconnaissance platoon, the infantry division battle group can be air transported also.
(2) The *followup echelon* consists of the battle group combat elements (including vehicles and equipment) not required in the assault echelon but which join the assault echelon as soon as practicable by air, sea, or overland movement.
(3) The *rear echelon* consists of the battle group elements that are not needed for the mission. It includes administrative and service support personnel whose functions can be most efficiently performed in the rear area, personnel temporarily disqualified physically, and the battle group kitchens. The rear echelon usually operates under division control.

b. Combat Teams. The division organizes its basic combat unit for the assault around the battle group. This organization is formed at the beginning of the marshaling phase. It usually includes a battery of light artillery, a combat support flight of the division aviation company, a company (platoon) of engineers, and additional attachments as required by the situation.

c. Task Forces. The battle group commander may organize one or more reinforced rifle companies for the assault. When practicable, he controls them directly, but in some tactical situations he may have to employ them as subordinate task forces for the assault phase. The composition of a subordinate task force is determined by its specific task. As an example only, it may consist of two rifle companies, a mortar platoon or section, and elements of the assault weapon (gun) platoon. The organization of subordinate task forces is favored—

(1) When it is impracticable for the battle group commander to closely coordinate the operations of two rifle companies attacking an objective and also control the actions of the battle group as a whole.

(2) When the area of operations is so large that the battle group must split into two or more groups of companies. This situation may arise because of the separation of assigned objectives or the necessity to disperse for protection from nuclear weapons.
(3) When the nature of the terrain precludes effective direct control of the companies by the battle group commander.
(4) When the battle group is reinforced by one or more rifle companies from other battle groups.

d. Fire Support. In an airborne operation, the battle group commander relies upon the subordinate elements to seize their initial objectives or perform initial tasks rapidly by independent action. As a result, he may decentralize control of the supporting weapons to task force or company level. Attached artillery is normally retained under battle group control. Communication must be established before higher commanders can resume effective centralized control.

264. Reconnaissance and Intelligence

a. The battle group usually conducts an airborne operation without prior ground reconnaissance, being limited to a study of maps, terrain models, and photographs of the objective area. The battle group commander secures the latest aerial photographs and, whenever practicable, makes an aerial reconnaissance of the objective area with his staff and unit commanders. He relies upon higher commanders for additional information of the enemy and the terrain.

b. The battle group commander seeks the following information on which to base his plans for the attack:

(1) The nature and number of the drop and landing zones.
(2) The location of critical points and areas held by the enemy in or near his zone of action.
(3) The nature and extent of favorable assembly areas near the drop and landing zones.
(4) The location and extent of favorable routes of approach to the battle group objective.
(5) The location of suitable objectives and zones of action for assault units.
(6) The location, extent, and type of obstacles in his zone of action, including areas likely to become obstacles as a result of the employment of nuclear weapons.
(7) Locations for the reserve, supporting weapons, command posts, distributing points, and medical installations.
(8) The location, size, and composition of enemy forces, particularly air defense, mechanized, and armored units, that are capable of interfering with the mission.
(9) Guerrilla, partisan, underground, or other paramilitary activity in or near the objective area.

(10) Extent of enemy capability for electronic countermeasures.
(11) The type and number of enemy offensive aircraft that can operate in the objective area.
(12) The number, yield, and delivery means of nuclear weapons available to the enemy.

c. The commander prepares the plan for his after-landing reconnaissance before the air movement begins. The plan includes reconnaissance missions for the reconnaissance platoon, rifle companies, and attached elements of the division aviation company; and requests for reconnaissance support from higher headquarters. Ground reconnaissance begins immediately upon landing. Air reconnaissance is continuous. Air reconnaissance by Army aircraft begins as soon as they become operational in the objective area.

265. Ground Tactical Plan

The ground tactical plan encompasses a scheme of maneuver, a fire support plan, an operation time schedule, an attack plan, a defense plan, a ground linkup, withdrawal, or displacement plan, and alternate plans. It is based on a detailed analysis of the mission, enemy situation, terrain, and the battle group's capability.

266. Scheme of Maneuver

a. The scheme of maneuver in the assault is based on normal considerations governing the conduct of ground operations. It varies depending on whether the battle group operates as part of the division or independently. When operating as a part of the division, the scheme of maneuver varies according to the manner in which the division seizes and defends its objectives. Regardless of the relationship of the battle group to other major elements of the division during the assault, the units of the battle group are normally kept within mutual supporting distance of one another.

b. When the division seizes an objective area, it normally designates an airhead line and the required degree of mutual support between battle groups. A battle group is assigned a zone defined by boundaries and the airhead line. The battle group commander is responsible, first, for seizing the assigned objectives and, second, for destroying the enemy in his zone. The battle group boundaries may be extended beyond the airhead line and to the limit of ground observation forward of the RSP. The extension of battle group boundaries through the RSP fixes the responsibility of the battle group commander for providing forces to perform this mission. Within this framework of the division scheme of maneuver, the battle group commander develops his own scheme.

(1) *General.* The scheme of maneuver in an airborne assault is

developed generally as outlined in chapter 5. The main difference is in the divergence of operations of subordinate units in the initial stages of the assault.

(2) *Objectives.* The battle group commander selects objectives in the same manner as for any other attack. In addition, he selects as objectives those terrain features whose early seizure is essential to the defense of the airhead line.

(3) *Boundaries and zones.* The battle group commander defines zones of action by designating boundaries to define responsibilities for clearing the battle group zone. When used, boundaries are drawn so as to minimize the necessity for subordinate units to fight in divergent directions simultaneously and so as to minimize readjustment in the transition from the assault to the defensive phase.

(4) *Line of departure.* When a line of departure is used, the battle group commander designates it. Frequently, the lack of detailed information before the landing makes it difficult to select a suitable line of departure. Company assembly areas may serve as attack positions with the assault companies moving out from them in attack formation.

(5) *Reconnaissance and security positions.* The RSP's mark the locations forward of the airhead line to be covered by a series of outposts, roadblocks, observation posts, and reconnaissance detachments. The mission of the forces occupying the RSP is to provide early warning of enemy attack and to prevent enemy reconnaissance and close observation of the objective area. Within their capabilities and without becoming decisively engaged, forces along the RSP delay, disorganize, and deceive the enemy. The battle group normally retains control of forces on the RSP during the assault. After the objectives are secured, rifle companies along the airhead line usually assume responsibility for the RSP within their sectors.

(6) *Task organization.*

(*a*) So far as possible, tasks assigned to a subordinate unit are proportionate to its combat capability. The following factors influence the battle group commander toward decentralized control during the assault phase: the number of tasks that must be accomplished simultaneously; the fact that units may be attacking in different directions; the fact that distances vary between units because of the difference in the size of their areas of responsibility that results from the landing pattern.

(*b*) The battle group commander provides commanders with the means to accomplish their missions. When the heavy

mortar platoon (mortar battery) and assault weapon (gun) platoon cannot properly support companies and task forces under centralized control, elements of these units are attached. The mortars are attached by platoon (section). Assault weapons (guns) are usually attached by pairs (section) but may be attached singly.

(*c*) The task organization provides for a reserve, even though no immediate task or area of responsibility may be assigned. The number of tasks to be accomplished simultaneously usually permits the retention of only a small reserve in the initial stages of the airborne assault. Frequently, it consists of as little as a rifle platoon. Additional forces may become available for reserves as other elements accomplish their initial tasks.

(7) *Employment of the reserve.* The reserve normally enters the objective area in the assault echelon. It is frequently assigned security missions to protect supporting artillery and mortars under battle group control and to protect supplies and installations in the vicinity of drop and landing zones, or other missions which will not preclude its availability for execution of its primary mission. For the employment of the reserve in the attack, see paragraph 114. The battle group commander considers the following in determining the location of the reserve within the airhead:

(*a*) Proximity to areas of probable employment.

(*b*) Availability of routes for movement.

(*c*) Availability of cover and concealment.

(*d*) Enemy capabilities.

(*e*) Depth desired in the most threatened area.

c. The battle group, operating independently or as part of a larger force, may seize a separate objective area. In such a case, the battle group commander develops his scheme of maneuver generally as described in *b* above, but selects his own airhead line and RSP.

(1) *Airhead line.* The battle group commander translates his mission into terms of objectives on the ground which must be seized to accomplish the mission. He draws an airhead line to encompass the objectives and to mark the outer limits of the area to be denied the enemy. The airhead should include adequate drop and landing zones, and enough depth for maneuver and protection of critical installations. The selection and location of the airhead line, and the size of the area it circumscribes, are influenced by the following interrelated factors:

(*a*) Mission of the airborne force.

(*b*) Enemy situation and capabilities.

(*c*) Characteristics of the terrain.
(*d*) Landing areas available.
(*e*) Capability of the airborne force.
(*f*) Nature of subsequent operations.

(2) *Reconnaissance and security positions.* Considerations influencing the location and composition of R&S forces are—
(*a*) R&S mission.
(*b*) Location of dominant terrain, obstacles, and observation forward of the airhead line.
(*c*) Troops available.
(*d*) Enemy threats and likely avenues of approach.
(*e*) Communication facilities available.
(*f*) Capabilities of fire support means.

d. The battle group scheme of maneuver is influenced by the employment of nuclear weapons as follows:

(1) The battle groups operate more widely separated or on independent missions. At the same time, enemy units may conduct a more fluid type of warfare to reduce their vulnerability to nuclear attack. These factors impose greater problems of security upon the battle group.

(2) The battle group conducts the airborne assault with the maximum dispersion consistent with accomplishing its mission. Operations in the objective area are characterized by dispersed formations and by offensive action. Units move rapidly and frequently. This allows but little mutual support, but it avoids confinement to a clearly defined position from which the enemy can disengage and then destroy the battle group by nuclear attack.

(3) A nuclear preparation on the enemy in the objective area permits the battle group to employ dispersed formations without undue risk of piecemeal defeat.

(4) Both friendly and enemy use of nuclear weapons may create obstacles by blast damage, fires in woods and built-up areas, and radioactive contamination, which obstruct the movement of the battle group.

e. The battle group plus the defense of an airhead generally as described in chapter 6. The assault and defense plans are developed together and both are reflected in the schemes of maneuver.

267. Fire Support Plan

a. General. The plan for supporting fires includes those delivered before the assault to neutralize enemy forces in the objective area as well as those during and after the assault in support of maneuvering elements.

(1) Heavily defended areas are neutralized by intensive preas-

sault fires. Preassault fire plans may be developed at division and higher levels. The fires are delivered by tactical aircraft, artillery (including rockets and guided missiles) and naval gunfire. They must be closely coordinated with major friendly forces and the transporting aviation unit.

(2) Plans are developed for fires to protect the air column en route to and from the objective area. The battle group commander normally is not involved in planning these fires except when the battle group is transported in Army aircraft.

(3) The battle group commander requests fires as necessary to support his scheme of maneuver. Provisions are made for closely coordinating the fires of weapons organic to the battle group with those of the division artillery and agencies supporting the operation from outside the objective area. Lack of communication and the decentralized nature of operations during the assault make fire support coordination extremely difficult and may restrict the delivery of fires in the initial stages. As soon as centralized control of fire support means can be regained, the fires are coordinated as in other operations.

b. Heavy Mortar Platoon (Mortar Battery) Fires. The heavy mortar platoon (mortar battery) is used as in other operations except that control may be decentralized during the early stages of the assault. (Normally, the mortar battery does not break down into firing units smaller than a platoon.) Centralized control is regained as soon as possible. Plans for employing the heavy mortar platoon (mortar battery) emphasize speed in occupying initial firing positions to provide fire support during the reorganization and initial stages of the attack, when fires of division artillery may not yet be available. After the objective has been seized, the heavy mortar platoon (mortar battery) may occupy supplementary positions from which it can fire in support of the security echelon and of subsequent operations.

c. Assault Weapon (Gun) Platoon Fires. The assault weapon (gun) platoon is employed in generally the same manner as for other offensive operations. Elements may be attached to subordinate units for the initial stages of the assault, but the battle group commander regains control at the earliest opportunity. Because of the absence of friendly armor in the objective area, the assault weapons (guns) assume greater importance as the primary antitank weapon, and the battle group commander makes detailed plans for their use.

d. Division Artillery Fires.

(1) Fire planning and coordination of division artillery units for the airborne assault are essentially the same as for other operations, but there is added emphasis on safety restrictions and procedures. When the rocket battery can be airlifted

into the airhead, it occupies a central position and fires in support of the battle groups. Division artillery fires are supplemented by artillery, including rocket and guided missile units, that are located within range behind friendly lines.

(2) Artillery may be attached to the battle group. The battle group FSC coordinates the positions of attached artillery with those of the heavy mortar platoon (mortar battery) to insure adequate close supporting fires for the entire battle group.

e. Air Defense Artillery Fires. The division usually relies on supporting tactical aviation for protection from enemy air attack, but when air defense artillery is attached, it is normally employed under centralized control.

f. Air Support. Cooperating tactical aircraft provide air escort during the air movement, neutralize targets in the objective area before the assault landing, and give close support to the battle group in the seizure of initial objectives and subsequent operations. Close air support supplements artillery and antitank weapons which usually are limited in number. Aircraft on air alert may be scheduled for the duration of the operation to insure the immediate execution of on-call strikes. Control of close air support in the initial stages of the operation requires a tactical air coordinator, accompanied by a representative of the ground commander, who operates over the objective area in an aircraft. The air control team organic to the direct support artillery battalion (mortar battery) lands with the battle group to assist the forward air controller (FAC) in directing air strikes. The team normally operates out of battle group headquarters under control of the FAC. Initially, requests for air strikes go directly from the FAC to the tactical air coordinator who allocates aircraft from those that may be maintained on air alert over the objective area. The FAC then directs the strike. When centralized control is regained, requests are routed through the airborne force headquarters where priorities are established and the approved requests are relayed to the tactical air coordinator. As soon as practicable, requests are routed through normal channels. A system of visual signals is developed in the air support plan to inform tactical air of the position of friendly troops on the ground.

g. Naval Gunfire. Naval gunfire may provide fire support before and during the airborne assault and during subsequent operations. When naval gunfire is available to the battle group, naval gunfire spot and liaison teams normally accompany the assault elements into the objective area. These teams may be delivered into the airhead by helicopters directly from the fire support ships shortly after the initial assault.

h. Nuclear Fire Support.

(1) A nuclear preparation prior to an airborne assault makes it

possible to deliver units directly on or immediately adjacent to objectives that otherwise would be too strongly defended, and enables small forces to seize the objectives quickly. The preparation must be carefully timed with the air movement and landing, and must be coordinated with the transporting aviation unit, supporting tactical air forces and other fire support agencies, and all participating ground forces. The preparation may create obstacles to the landing and to movement on the ground. See also paragraph 268*b*.

(2) Employing nuclear weapons in support of operations after the landing permits greater dispersion of friendly forces, thus decreasing vulnerability to enemy nuclear attack.

268. Landing Plan

a. General

(1) The landing plan is based on the ground tactical plan. It covers the sequence, time, and place of arrival of troops and material in the objective area. Landing areas are selected on objectives or as close to them as the terrain and enemy situation permit. When landing areas are limited, the landing plan may require changes in the ground tactical plan.

(2) The battle group usually lands intact on a single or adjacent drop or landing zones, but elements may land on separate drop or landing zones when it facilitates the seizure of their objectives. In either case, elements of the battle group are normally kept within supporting distance of one another.

(3) When landing entirely by parachute, equipment and supplies delivered by heavy drop may land on the same drop zone just before the unit personnel; they may land simultaneously on another drop zone; or they may follow the unit personnel into the same drop zone after a short time interval. Usually the heavy drop follows the unit personnel into the same drop zone because this provides the most security for equipment and supplies and reduces the distance troops must move to recover them.

(4) Alternate drop and landing zones are selected whenever practicable.

b. Nuclear Considerations.

(1) A nuclear preparation before the landing requires consideration of the following:

(*a*) Smoke and dust created by nuclear explosions may obscure drop and landing zones and prominent landmarks in the objective area. Nuclear explosions may create radioactive areas, start fires, and scatter trees and other debris over drop and landing zones for considerable distances from ground

zero. Debris constitutes an obstacle for the landing of fixed- and rotary-wing aricraft more often than for parachutists. The landing plan must be flexible since the exact nature and extent of the hazards created by nuclear weapons are difficult to predict. Consequently, alternate plans are prepared. Plans include an aerial reconnaissance of landing areas to determine whether the drop and landing zones can be used and which alternate plan to put into effect.

(*b*) Neutralization of the enemy offers the advantages stated in paragraph 267*h*.

(2) Landings should be dispersed and swiftly executed when there is a threat of enemy nuclear attack.

269. Assembly and Reorganization Plan

The battle group commander plans for the rapid assembly and reorganization of the battle group after the landing.

a. The battle group may assemble and reorganize as a unit in one general assembly area, or it may assemble and reorganize as subordinate task forces or as reinforced companies. The method is influenced by the following:

(1) Units should assemble in the way that makes it easiest for them to seize their objectives quickly.

(2) The probability that strong enemy forces may be engaged soon after landing favors reorganization of the battle group in one assembly area.

(3) The probability of enemy nuclear attack favors reorganization in dispersed assembly areas by task forces or reinforced companies.

b. When a nuclear preparation is used, units reorganize swiftly to exploit its effects. Security is sacrificed for speed, although neutralization of the enemy reduces the requirements for security. The use of dispersed assembly areas plus rapid reorganization and initiation of the attack also provide a measure of protection from enemy nuclear fires. Alternate assembly areas are used when blast damage, fires, and radioactive contamination make it necessary.

270. Air Movement Plan

a. The air movement plan is based on the decisions reached in the landing plan. It includes the composition of serials and instructions for loading units into aircraft and moving the aircraft from the loading area to the objective area.

b. The available aircraft are divided into serials. It is desirable to avoid splitting subordinate units between two serials.

c. The amount of detail required in the movement plan to insure its successful execution depends on the size of the force and scope of the

operation. The plan should contain all the instructions that subordinates need to execute the move in the desired manner.

d. An air movement table (FM 57–35 and FM 57–100) which is published as an annex to the operation order or as an appendix to the air movement plan annex, is developed jointly by the ground and transport unit commanders. The table gives the executing units detailed instructions on flight serial composition, the number of aircraft allocated, time for loading and takeoff, loading sites, and drop or landing zones. An air loading table (FM 57–35 and FM 57–100), based on the air movement table, is used to give detailed instructions to subordinate units.

271. Timing the Operation

a. In selecting the time for landing, the commander considers the enemy situation and capabilities, the influence of predicted weather, visibility both day and night, the availability of fire support, and the plan for supporting fires. Care must be exercised to prevent setting a pattern of habitually launching airborne operations at a particular period, such as BMNT.

b. The battle group may land at first light to take advantage of darkness during the air movement and reorganize and attack in daylight, or it may land at last light to facilitate delivery and reorganization, then attack during darkness. Airborne operations conducted during daylight present fewer command and control problems, can be greater in scope, and can be assisted by close air support.

c. The battle group may conduct an assault at night or under other conditions of reduced visibility to gain tactical surprise or to reduce the effectiveness of enemy fire. Operations under these conditions have the following disadvantages:

(1) Delivery of units to their objective areas is more difficult.
(2) Air and Artillery support is less effective.
(3) Reorganization on the ground is more difficult and time-consuming.

d. Timing the operation with respect to the operations of cooperating ground forces requires consideration of the—

(1) Missions of the airborne force.
(2) Depth of the operation.
(3) Capabilities and limitations of fire support agencies.
(4) Nature of subsequent operations.

e. When a nuclear preparation is used, the operation is timed to exploit the destruction and shock effect upon the enemy. Only the minimum time is allowed after the explosion for necessary reconnaissance and air strikes before the airborne force lands. The threat of enemy nuclear attack favors the conduct of the airborne operations at night, particularly the marshaling and air movement phases.

272. Reserve Battle Group

a. The battle group may constitute all or a part of the division reserve in the airborne assault. Elements of the battle group in division reserve may be detached to reinforce other battle groups, particularly in the initial stages of the assault. When initial tasks assigned other elements of the division have been accomplished, detached elements of the reserve battle group are returned to their parent unit and other additional forces are made available for reserves.

b. The reserve battle group normally is brought into the airhead in the assault echelon. It plans for the air movement, landing, and reorganization the same as the other battle groups. It is located with the same considerations as the battle group reserve (par. 266*b*(7)). Usually, the reserve lands on a drop or landing zone with elements of division troops. When it lands in an area not previously secured by other friendly elements, it seizes and protects its own drop or landing zones and provides security during the reorganization for itself and accompanying division troops. The reserve battle group may be assigned one or more limited objectives to seize in the vicinity of the drop or landing zones. The reserve commander plans for commitment during the attack and subsequent operations generally as described in chapters 5 and 6. Since he is restricted in planning possible missions by the lack of detailed enemy information and ground reconnaissance before the landing, he starts his ground reconnaissance promptly after landing.

c. The reserve battle group commander's plan includes the maximum use of available transportation within the airhead, including transport helicopters organic to the division and any other available Army transport aircraft.

d. When elements of the division are simultaneously committed in widely separated areas, division may hold the reserve battle group in readiness in a departure area, prepared for aerial delivery in an assault role. The reserve battle group commander prepares plans for commitment in the areas of each of the major division elements in the priority established by the division commander. When committed, control is decentralized. All or a part of the reserve may be committed and may land under a variety of conditions. It may land in a secure area and be attached to a force that has been particularly successful; it may reinforce a unit by making an assault landing; or it may assume the mission of a unit that has been subjected to nuclear attack or other enemy action which has largely destroyed its combat effectiveness. Planning must be flexible and the reserve must be maintained in a high state of readiness.

273. Communication Plan

Signal communication plans are prepared at division and higher levels so that communication facilities of each component of the force may

be integrated and coordinated. These plans provide for communication between the battle group and—

a. Transporting aviation units (Air Force troop carrier or Army transport aviation) during the marshaling phase as well as in the objective area.

b. Artillery, naval, and air units providing fire support.

c. Army aviation units concerned with aerial observation, reconnaissance, supply, and evacuation.

d. Logistical support installations in friendly territory.

e. Forces, including linkup forces, with a common or coordinated mission.

f. The next higher headquarters.

Section IV. MARSHALING AND LOADING

274. Marshaling

a. Marshaling is the process by which units complete final preparations for combat, move to loading sites, and prepare to load aboard assigned aircraft with their supplies and equipment. It is characterized by detailed prior planning and preparations, and speed of execution.

b. The air movement plan forms the basis of marshaling. Air movement forms (a part of the air movement plan) indicate the personnel, vehicles, and equipment assigned to each aircraft; the loading site; and the times of arrival and departure. For further details, see section III.

c. The battle group completes preparations in an assembly area and moves directly from it to designated loading sites. The loading site is the place where the aircraft are loaded for the operation. It may be at the departure airfield, or it may be a point where the aircraft land only long enough to load and then fly to the departure airfield or the objective area. Several units may outload at the same loading site in succession. Concentrations of aircraft, troops, or equipment at the loading site should be controlled to prevent presenting a remunerative target. The loading site should be as near as possible to the assembly area to reduce the time required to move the airborne unit.

d. In nuclear warfare both air and ground units avoid concentration during the marshaling phase to retain secrecy and to deny lucrative nuclear targets to the enemy. This requires that both air and ground elements remain dispersed to the maximum extent practicable, that their preparations be concealed, and that movements to loading sites and loading be executed swiftly.

e. To meet the requirements in *d* above, airborne forces—

(1) Disperse and carefully conceal their assembly areas and take maximum passive measures to protect their personnel, equip-

ment, and supplies. They dig personnel shelters immediately upon occupying an assembly area and improve them as long as they remain. They protect equipment and supplies, particularly those most vulnerable to the effects of nuclear weapons, by revetments, dugouts, and underground shelters to the extent time permits.

(2) May make frequent and rapid shifts to new assembly areas.

(3) Conduct movements between assembly areas and to loading sites at night to the maximum extent practicable.

(4) Prepare their supplies and equipment early for aerial delivery. This may make it impossible to use organic vehicles and other equipment for training, rehearsals, and other activities in assembly areas.

(5) Time their movement to loading sites so that the bulk of the personnel arrive after the equipment and supplies are loaded.

275. Briefing

a. Troops are briefed in minute detail. All available briefing aids are used.

b. Commanders of battle groups and companies receive a common briefing on the missions of all like units participating in the operation. Thus, in the event of inaccurate landings or unforeseen enemy action, missions may be shifted with a minimum of delay.

276. Loading

a. The battle group commander assigns priorities for the movement of companies, supplies, and equipment to the loading sites based on the time required for loading and the scheduled time of takeoffs. Maximum security and secrecy are enforced.

b. Movement may be by foot, vehicle, or aircraft. Transportation requirements and movement control are preplanned in coordination with supporting agencies.

c. Supplies and equipment are broken down into aircraft loads in the assembly area and carried to loading sites, together with the personnel required to load and lash the material in the aircraft. Plane loads of supplies leave the assembly area on a preplanned schedule to meet assigned aircraft at the loading sites.

d. The troops are organized into aircraft loads in the assembly areas. They move to loading sites by aircraft load under the supervision of the aircraft load commander. Upon arrival at the loading site, each group moves directly to its assigned aircraft and loads.

e. The battle group commander is responsible for the loading of personnel, supplies and equipment, under the supervision of transport aviation representatives, in accordance with the air loading plan.

Section V. CONDUCT

277. General

a. Airborne operations are conducted with surprise and are completed in the shortest practical time. Tactical surprise is achieved through rapid air movement and aggressive ground attack to seize initial objectives. The rapidity of the attack reduces the vulnerability of the airborne force to enemy counteraction, including nuclear weapons.

b. Airborne forces are not employed on missions that can be performed as expeditiously and effectively by other forces or weapons.

c. Unity of command throughout the operation is essential.

d. For additional details, see FM 100–5.

278. Air Movement

The air movement to the drop and landing zones is under control of the commander of the transporting aviation unit. During this phase, the battle group commander relinquishes control of his troops and does not regain it until after the landing. The air movement is made in accordance with the battle group air movement table.

279. Landing and Reorganization

a. General. The landing and reorganization for the initial assault are the most critical periods for the battle group. These operations must be executed with maximum speed and precision. When necessary, security is sacrificed for speed and control of reorganization.

b. Landing.

(1) Battle group elements are landed on or as close to their objectives as possible. They need time to collect their equipment and assemble as tactical units before engaging in combat. Surprise is enhanced by landing on the objective or making the move to the objective as short as possible. In addition, a short move is less exhausting to the troops.

(2) Parachute serials, if utilized, usually land first, followed by the heavy drop or airlanded serials. The serials are organized to facilitate implementation of the tactical plan. As a security precaution, command echelons of the battle group are split during the air movement.

c. Reorganization.

(1) Reorganization after the landing consists of collecting equipment, assembling the tactical units, and regaining command control of the units. The battle group reorganizes according to a prearranged plan, using predesignated assembly areas, assembly aids, and identification markings for personnel and equipment.

(2) Elements of the battle group charged with providing security

during the reorganization assemble by squads or platoons and move out directly on their missions. The remaining elements move quickly to their assembly areas, carrying the equipment and supplies required for their missions.

(3) Elements that land with their parent units but are attached to other units upon landing, join the other units as soon as possible. Organic mortars and attached artillery units occupy their initial firing positions and prepare to support the reorganization.

(4) Radio nets are opened on landing. Company and attached unit commanders periodically report their status in personnel and equipment until they are assembled as prescribed in the battle group SOP. The battle group sends similar reports to the division. The battle group reorganization is complete when all its units have assembled and it has established command and fire control communication channels.

(5) Troops that land outside the planned area assemble rapidly under the senior officer or noncommissioned officer present. He establishes contact with their respective headquarters as soon as possible. Lacking other orders, such groups direct their efforts toward accomplishing the general mission. Individual stragglers join the nearest unit and rejoin their own units as soon as the situation permits.

280. Start of the Attack

a. The situation may require the battle group to start the ground attack before completing its reorganization. The battle group commander usually makes the decision to do this. In the absence of other orders, unit commanders decide when their units are adequately assembled to start the mission. All commanders move their units as rapidly as possible to capitalize on surprise. If the battle group becomes engaged immediately upon landing, subordinate units fight as best they can to accomplish the battle group mission. Successively larger units establish control and reorganize as the situation permits.

b. When the objective is a considerable distance from the assembly area and enemy resistance is expected to be light, the battle group or smaller units may leave the assembly area in an approach march formation with patrols protecting the flanks and rear.

281. Conduct of the Attack

a. The attack phase of the airborne operation is conducted generally as prescribed in chapter 5. The battle group commander considers the following additional factors, particularly during the initial stages of the attack:

(1) The possibility of engagement immediately after the landing, with resultant difficulties in control and reconnaissance.
(2) Limited artillery support. Elements of the battle group may have to attack before light artillery and, in some cases, the heavy mortar platoon (mortar battery) have occupied firing positions.
(3) Exposed flanks and rear.
(4) Lack of accurate information on both sides concerning the situation of the opposing forces.
(5) The difficulty of command control in fast moving or obscure situations.
(6) The possibility that all or a major portion of the battle group may be unable to assemble before the attack because of enemy action or inaccurate landings.
(7) Lack of armor support.
(8) The advantage of surprise.

b. The battle group commander orders changes in the original attack plans by radio or messenger. He can rarely assemble his unit commanders before the attack to issue instructions.

c. During the initial stages of the attack, combat consists primarily of aggressive action by small units to seize initial objectives rapidly before the advantage of surprise is lost.

d. The reconnaissance platoon and other units assigned reconnaissance and security missions move out rapidly to establish roadblocks, to locate enemy forces, to disrupt enemy communication facilities, and to provide early warning, security, and information. When the objective area is lightly defended, R&S units may land on or move early to the planned RSL. Army aircraft start their surveillance of the battle group sector and enemy avenues of approach and start acting as observers for supporting weapons.

e. Antitank defense plans are put into effect. Organic and attached antitank weapons cover approaches favorable to enemy armor. Elements of the assault weapon (gun) platoon that are attached to subordinate elements are returned to battle group control as soon as practicable.

f. Supporting weapons give close continuous support to assault units. Landing the battle group near its objective facilitates support by the heavy mortar platoon (mortar battery) since it reduces the frequency of displacement and the distance ammunition has to be carried. Attached or reinforcing light artillery provides fire support for reconnaissance and security elements that are beyond supporting range of the heavy mortar platoon (mortar battery). Close support aircraft of the tactical air force augment the artillery and antitank weapons and supplement the striking power of assault units, in addition to maintaining air superiority.

g. When the battle group has seized its objectives, it immediately begins preparing for subsequent operations.

282. Reserve Battle Group in Attack

The reserve battle group accomplishes its missions as described in chapter 5. When it is assigned limited offensive or security missions, the reserve battle group commander allocates the minimum force needed, retaining the maximum force to support the attacking battle groups or to take over their missions. When so ordered, he employs his heavy mortar platoon (mortar battery) and other fire support means to support the attacking battle groups.

283. Supply

Enough supplies accompany units into the objective area to meet their initial requirements. Subordinate units assigned offensive missions upon landing are not burdened with large amounts of supplies which they will have to recover and protect. Rifle companies usually land with only those supplies that can be carried on organic vehicles or by their personnel. Additional supplies are landed with and recovered by the battle group, which promptly establishes distributing points and sends supplies forward to the rifle companies on organic transportation. Units operating on separate missions or isolated from the battle group may be supplied by direct air delivery. The battle group's freedom of maneuver will be restricted if required to protect landing zones for delivery of resupply. Followup supply should be air delivered to the battle group units as close to their positions as possible. Casualties may be evacuated by helicopter.

Section VI. SUBSEQUENT OPERATIONS

284. General

After seizing the airhead, an airborne force may defend until linkup with surface forces; it may be reinforced and conduct further offensive operations from the airhead; and it may be withdrawn by air because of enemy action, or to be employed in another area.

285. Defense

a. Defense of Division Airhead Line.

(1) When practicable, the battle group defends its sector as described for the extended variation of the position defense in chapter 6. When the battle group sector is too wide for extensive portions of the airhead line to be organized, the battle group may organize a strong point variation. Surveillance of unoccupied portions of the airhead line is conducted

by elements under battle group or subordinate unit control. This surveillance is accomplished by observation and listening posts, ground patrols, observation aircraft, and air-transported patrols. Units employed on surveillance missions may be elements withdrawn from the RSP, a portion of the battle group reserve, or elements sent out by subordinate units within their sectors.

(2) The battle group commander takes timely action to eject, block, or destroy enemy forces which seek to bypass, accomplishing this to the extent possible without jeopardizing the defense of the critical terrain within his sector. When unable to prevent penetration of the airhead line within his sector, he defends the critical terrain and requests assistance from division.

(3) The situation may require the battle group to send task forces or reinforced companies outward from the battle area before they can completely organize their positions in order to gain dispersion or to conduct limited offensive action. Before moving out from their defensive positions, these units organize the positions to the extent time permits. As a minimum, each unit conducts a detailed reconnaissance of its position. Units operating outside of the battle area may occupy concealed assembly areas or may be assigned missions of establishing a patrol base, establishing roadblocks, conducting raids, or conducting limited objective attacks against enemy forces and installations in the vicinity. They do not become engaged to the extent that they cannot disengage and withdraw to their defensive positions, unless ordered to do so.

b. Defense of Battle Group Airhead. When the battle group operates independently or widely separated from other groups, it usually organizes the defense of its airhead like the strong point defense described in paragraph 192.

c. Antitank Defense. The battle group emphasizes antitank measures in the defense. Positions are selected with particular regard to natural and artificial obstacles to enemy armor. Antitank mines and demolitions accompany small units on light weapons carriers and all personnel are trained to establish hasty antitank obstacles. By aggressive use of organics and attached antitank weapons and skillful use of the terrain, the battle group can greatly reduce its vulnerability to enemy armor.

d. Reserve Battle Group. The battle group in division reserve may be employed in the counterattack or blocking role, or both. It is employed generally as described in paragraph 184.

(1) When the division seizes an airhead too large to be organized and defended in great part, the reserve battle group may

organize one or more important strongpoints for all-round defense.

(2) Counterattack plans include maximum use of available Army transport aircraft.

(3) When elements of the division are committed under division control in widely separated areas, the reserve battle group remains in a departure area prepared for air delivery in an assault role.

e. Nuclear Considerations. Many of the same measures employed to reduce vulnerability to the effects of nuclear weapons in the attack may also be employed in the defense. Passive measures such as camouflage, overhead cover for foxholes, and warning systems are emphasized. The battle group conducts its defensive operations so as to avoid being forced into clearly defined defensive positions which present lucrative targets to enemy nuclear weapons. The battle group does not occupy its defensive positions until forced to by enemy action. At other times it occupies concealed assembly areas or conducts offensive action as described in *b* above. The defensive capabilities of larger units are enhanced by the use of supporting nuclear fires. These fires are restricted by safety considerations for friendly troops. Establishing SOP's and effective communication to battle group elements permits delivery of timely nuclear fires as close as possible to friendly troops.

286. Linkup

a. When the battle group operates as a part of a larger airborne force, the battle group commander is concerned with the following elements of linkup planning:

(1) *Coordination of schemes of maneuver.* The battle group commander is concerned primarily with making physical contact with the linkup force at linkup points. These are predesignated points on the ground where earliest contact between the two forces is expected to take place. Alternate linkup points are designated along the airhead line or battle group perimeter in case the security echelon is driven in. Division headquarters keeps the bottle group informed of the scheme of maneuver and progress of the linkup force, including objectives, axes of advance, and unit identifications. The battle group may be ordered to send patrols to meet the linkup force. Battle group or division reserves may conduct offensive action to assist the linkup force.

(2) *Coordination of fires.*

(*a*) Effective coordination of fires at battle group level depends largely on accurate information of the approaching linkup force. All fire requests are monitored by the artillery bat-

talion (mortar battery) fire direction center to avoid firing on advancing friendly units.

(*b*) Locations of the no-fire lines are exchanged.

(*c*) During the closing phases of the linkup, all information as to the locations of elements of the linkup force is given promptly to the reconnaissance and security elements, the frontline companies, and battle group supporting weapons. Utilizing direct communication and assisted by Army aircraft, the battle group delivers fires to assist the linkup force until visual and, finally, physical contact is made.

(*d*) The fire coordination line (FCL) is established between the airborne force and the linkup force by the headquarters directing the linkup. This line is used to regulate flat trajectory and high angle fires as well as offensive air strikes. A unit will not fire beyond the FCL without coordinating with the unit on the other side.

(3) *Coordination of communication.* Communication must be effectively coordinated to insure successful coordination of the schemes of maneuver and fire plans. Frequencies are assigned by division and higher headquarters to enable the battle group to communicate directly with elements of the linkup force. The battle group and linkup force may exchange radios, if necessary, before the operation starts.

(4) *System of mutual recognition.* Special measures to facilitate recognition between elements of the two friendly forces are disseminated to all battle group personnel.

b. If a battle group is conducting a separate airborne operation, the commander is concerned with all the elements of planning for the ground linkup.

287. Retrograde and Breakout From Encirclement

After executing an airborne assault, the battle group may have to conduct retrograde operations (voluntarily or involuntarily) independently or as part of a larger force (ch. 7).

Section VII. AIRBORNE RAIDS

288. General

An airborne raid may be either strategic or tactical. The raiding force makes a planned withdrawal after accomplishing the assigned mission. Army, Air Force, or Navy aircraft may be used to transport the raiding force.

289. Role of the Battle Group

The battle group may participate in a raid as a part of a larger force; it may conduct a raid with all or a major portion of the battle group as the nucleus of the raiding force and the battle group commander in command; or it may control and coordinate a raid composed of subordinate units. The material in this section emphasizes the second role, although it is applicable to the other two. Specific guidance for the conduct and planning of raids by the rifle company is in FM 7–10.

290. Characteristics

Airborne raids are similar to ground raids except that the raiding force uses air transport to move to the objective area and may withdraw by air. Air transport permits the raiding force to bypass enemy positions, terrain, or distance barriers that might preclude a ground raid. An airborne raid is more apt to be beyond supporting distance of the parent unit than a ground raid.

291. Mission and Objectives

The airborne raid may be conducted to selectively destroy enemy installations or positions, capture or kill enemy personnel, rescue friendly personnel, harass or disrupt enemy operations, or to seize critical equipment or similar intelligence objectives. The raiding force may be assigned an area of operations rather than a specific objective. Suitable objectives may be found deep in enemy territory or relatively close to the area of combat. The airborne force may operate separately or in conjunction with partisan or guerrilla forces to attain the objectives most likely to hamper enemy operations, and to promote the success of friendly forces. Suitable objectives include—

a. Command posts.
b. Communication centers.
c. Transportation system bottlenecks.
d. Airfield installations.
e. Key personnel.
f. Supply installations and facilities.
g. Rear area headquarters.
h. Intelligence targets.
i. Prisoner enclosures.
j. Nuclear weapon facilities.

292. Planning and Preparation

The planning and preparation for airborne raids closely parallel the planning and preparation for the airborne assault. The scheme of maneuver and fire support plan are modified as for ground raids (pars.

143 and 144). The following aspects of planning and preparation are emphasized:

a. Detailed intelligence is essential: the major source of intelligence is higher headquarters. The difficulty of entering the objective area precludes a ground reconnaissance; the study of detailed air photos, maps, and intelligence studies of the area must substitute for the ground reconnaissance. All intelligence should be circulated at the lowest level, consistent with the requirement for security.

b. Airborne raids are characterized by boldness of concept and execution; plans should not be rejected solely because they appear novel or unconventional.

c. Deception and counterintelligence plans.

d. The nature of the mission may require the attachment of specialized personnel teams or units to the battle group. The size of the force is kept to the minimum that can be expected to accomplish the mission. Personnel not required by the mission are left in the departure area. The battle group is normally reorganized into elements tailored to accomplish special tasks. Such elements include assault parties, security parties, and a reserve. TOE organizational structure is retained to the greatest degree practicable to permit use of the established chain of command.

e. The airborne raid may require special weapons or equipment; e.g., if the mission requires the evacuation of heavy equipment, the plan should provide the means.

f. Plans for movement should be designed to deliver the raiding force to the objective area intact with the minimum risk of detection.

g. Due to the normal depth of penetration, withdrawal is particularly difficult and requires detailed plans, including alternate plans.

h. Detailed information of the situation in the objective area is required. Efforts to gain such information are continued up to the time of execution.

i. Coordination may be necessary with other services and paramilitary forces in the area of operation.

293. Time and Duration

Airborne raids are preferably carried out at night, dawn, twilight, or in fog, mist, or other conditions of low visibility to facilitate surprise. However, successful raids can be executed in daylight. The successful execution of a daylight raid usually requires the extensive use of supporting fires, including tactical air support, and measures to limit enemy observation and detection. The raid is executed as swiftly as possible, and the force is withdrawn before the enemy can react with significant force.

294. Rehearsal

Raids are rehearsed whenever possible; the more complex the planned operation, the greater the need for rehearsal. When Air Force and Navy personnel are to participate in the raid, they take part in the rehearsal. The ground phase is rehearsed on terrain similar to the objective area and under conditions similar to those anticipated for the raid.

295. Conduct of the Raid

a. Immediately upon landing, the elements of the raiding force assemble independently and carry out their assigned tasks without further assembly. The actions of the raiding parties are decentralized, and each operates as required by its own mission. As far as practicable, these actions are coordinated by the raid commander.

b. The raid commander can influence the action by using supporting fires and the reserve. He must be constantly alert for unexpected hostile reactions and take proper measures to meet them.

296. Withdrawal

Alternate plans must be made for withdrawal because this is frequently the most difficult and hazardous part of the operation. The raiding force may be withdrawn by air, land, or sea. It may withdraw overland for some distance to rendezvous with aircraft away from the objective area.

a. For details of the withdrawal by air, see paragraphs 218 through 237.

b. The raiding force may withdraw overland by evasion and infiltration. This method is favored in the following circumstances:

(1) The distance to friendly lines is relatively short.
(2) The terrain provides cover and concealment for the movement of small groups on foot, and limits the employment of mobile units against the raiding force.
(3) Enemy forces are widely dispersed or under such pressure that they have difficulty in concentrating against the raiding force.
(4) The raiding force is lightly equipped and does not have the mission of evacuating captured personnel or materiel.
(5) The raiding force moves through an area occupied by friendly civilians, or where partisan or guerrilla forces can assist the withdrawal.
(6) Enemy fire, enemy air, adverse weather, or other factors prevent withdrawal by air.

c. Submarines, destroyers, and landing craft may be used for withdrawal by sea. Plans provide for alternate beaches and for naval gunfire to cover the withdrawal.

297. Resupply

a. Normally, the raiding force carries the supplies and equipment necessary to accomplish its mission, but the withdrawal plans may require resupply. Resupply may be made by airdrop direct to the raiding force, or through paramilitary force. Also, the raiding force uses captured material and weapons to the maximum.

b. The amount of demolitions a raiding force can carry is limited. When it has a destruction mission, it may use captured explosives or gasoline to destroy or help destroy the objective.

CHAPTER 9

FIRE SUPPORT

Section I. GENERAL

298. Definitions

a. Fire Support (Supporting Fires). Fires delivered by supporting units or weapons to assist or protect a unit in combat.

b. Fire Support Coordinator. The artillery officer of any particular echelon who coordinates the fire support of that echelon. The commander of the direct support artillery battalion is normally the fire support coordinator for the infantry division battle group. The commander of the battle group mortar battery is normally the airborne division battle group's fire support coordinator.

c. Fire Support Plan. The coordinated and integrated plan for the employment of all fire support available to the commander.

d. Weapons Fire Plan. A detailed plan for the employment of specific weapons or type weapons in support of a unit; e.g., artillery fire plan, nuclear fire plan.

e. Scheduled Fires. Prearranged nuclear and nonnuclear fires for which the fire date are prepared in advance and which are delivered on a time schedule during the course of a combat operation.

f. On-Call Fires. Unscheduled nuclear and nonnuclear fires planned for delivery, if requested, on designated locations. Complete data for on-call fires, including required target analysis, are prepared in advance and kept current.

g. Fires on Targets of Opportunity. Fires delivered on targets which appear unexpectedly in locations for which fires have not been planned.

299. Relationship of Plans

The battle group fire support plan usually contains the details required for the necessary initial coordination and employment of all fire support available to the battle group. This fire support plan is an annex to the operation order. Detailed weapons fire plans (such as the artillery fire plan, air fire plan, naval gunfire plan) are appended to the fire support plan.

300. Responsibilities

The coordination of all available fires is a command responsibility:

the S3 has unit staff responsibility while the fire support coordinator is responsible for working out the details.

301. Influence of Fire Support

a. The fire support available to the battle group materially influences the formulation of the overall operation plan. The greater the firepower available, the greater this influence becomes, especially when nuclear support is available.

b. The ability of the battle group to successfully perform various combat missions depends to a considerable extent on the amount and type of fire support made available from higher headquarters.

Section II. EMPLOYMENT

302. Nonnuclear Fires

a. The maximum effective employment of all available fires is essential to the successful accomplishment of the battle group's mission. The most critical phase of the attack is the assault. It is essential, during the assault, to have the necessary supporting fire placed on the enemy position and to have that fire continue as long as the safety of the assaulting troops permits.

b. The battle group commander normally plans to employ to the fullest extent the fires of his organic and attached supporting weapons before requesting additional fires from higher headquarters. He employs allocated artillery fire, naval gunfire, and close air support for missions that are beyond the capabilities of his organic and attached weapons.

303. Nuclear Fires

a. When nuclear fires are being used or their use is contemplated, battle groups that are assigned combat missions receive guidance from the division as to the nuclear support they may expect. This guidance may be quite specific and detailed, appearing as a definite allocation of nuclear weapons and/or fires; or it may be very general. Normally, the guidance is contained in the division fire support plan, but it may be furnished separately in a warning order or other communication.

b. Regardless of the level of nuclear weapon control and regardless of whether he receives an allocation, the battle group commander should submit appropriate requests and recommendations for the employment of nuclear fires within his area of responsibility. He usually has a better knowledge of both friendly and enemy troop dispositions and activities within the area than the higher headquarters.

c. When the battle group commander receives an allocation of nuclear weapons or fires, he has the sole responsibility for insuring that their employment most effectively supports his operations. He bases

his decision as to their employment on the considerations discussed in paragraphs 312 through 317. The commander must be prepared to submit specific information on employment to the delivery system.

d. Subkiloton yield nuclear weapons and delivery systems give the battle group an immediately available nuclear capability that it can use with minimum restrictions. The use of these weapons reduces the need for detailed target analysis, reduces the extent of required coordination with adjacent units and higher headquarters, and simplifies the problem of troop safety. The commander's responsibilities for employing these weapons and displacing their delivery systems are like those for any other fire support delivery system available to him.

304. Integration of Nuclear and Nonnuclear Fires

a. The battle group commander must insure that his nonnuclear fires are completely integrated with the nuclear fires used to assist his operations. He does this whether the nuclear fires are specifically controlled or requested by him or are plannned and directed by higher headquarters.

b. The capabilities of nuclear and nonnuclear fires must be carefully considered to insure the appropriate use of both. It may sometimes be better to use only nonnuclear fires. In most instances both nuclear and nonnuclear fires are most effective when employed to complement each other. The use of a quick-acting, nonpersistent effect chemical agent should be considered for attacking selected targets and those in the buffer zone of a nuclear weapon attack. Persistent effect CBR agents should be considered for use on terrain or targets that are not in the path of friendly attack and that the commander wants to bypass, and on which he wants to restrict enemy activity.

c. Nonnuclear fires may be used to attack close-in targets which escape nuclear fire damage. They may be placed in areas of great nuclear fire damage to prevent or delay reorganization, or in areas of lesser damage to increase the damage and prevent or delay reorganization. They may be placed to interdict enemy routes of reinforcement and withdrawal. They may also be the sole means employed against a target area. Quick acting nonpersistent effect chemical agents are particularly useful in increasing the level of casualties and the area of effectiveness.

d. When the battle group commander has the responsibility for planning or recommending the employment of nuclear weapons, his latitude in deciding how to integrate them with nonnuclear fires is extended materially. He may shift or relocate the planned nuclear as well as nonnuclear fires to insure their complete integration and maximum effective use.

e. In planning the integration of fires, the battle group commander must consider the possibility that the planned nuclear fires may not

achieve the expected results, or that they may suddenly be withdrawn or become unavailable because of operational or technical conditions. Insofar as possible, he should plan other courses of action for these eventualities. If the success of an overall operation plan is based on the availability and employment of certain nuclear fires, the battle group commander will have to alter, revise, or perhaps discard the plan entirely if the nuclear fires are not employed. He must be prepared to make these changes rapidly or to make specific recommendations to higher headquarters concerning alternate courses of action.

Section III. PLANNING AND COORDINATION

305. Purpose

A fire support plan is formulated to insure that all available supporting fires are utilized in the most effective manner to assist in accomplishing the assigned mission. It is coordinated and integrated with plans for the employment of other combat means and becomes part of the commander's overall plan of operation. An effective fire support plan requires continuous, detailed, concurrent planning and coordination by all echelons.

306. Personnel and Duties

a. Fire Support Coordinator. See paragraphs 28 and 298.

b. The S3. See paragraph 21.

c. Others. Personnel who participate in fire support coordination are determined by the type of operation and fire support means available. They may include—

(1) Representatives of other Army support agencies.
(2) The assistant S3 Air.
(3) A forward air controller.
(4) A naval gunfire liaison officer.
(5) Others as required, including intelligence personnel.

307. The Planning Locale

The battle group commander decides where fire support planning is to be coordinated. Normally, it is accomplished within or immediately adjacent to the battle group command post or forward with the battle group commander. Channels for requesting fire support are shown in figure 26.

308. Fire Support Portion of the Commander's Concept

a. The commander includes a statement of his desires as to the employment of supporting fires in his concept of operations. He points out general target areas which he feels will be of primary concern to his battle group. He indicates the results he wishes to obtain from fire

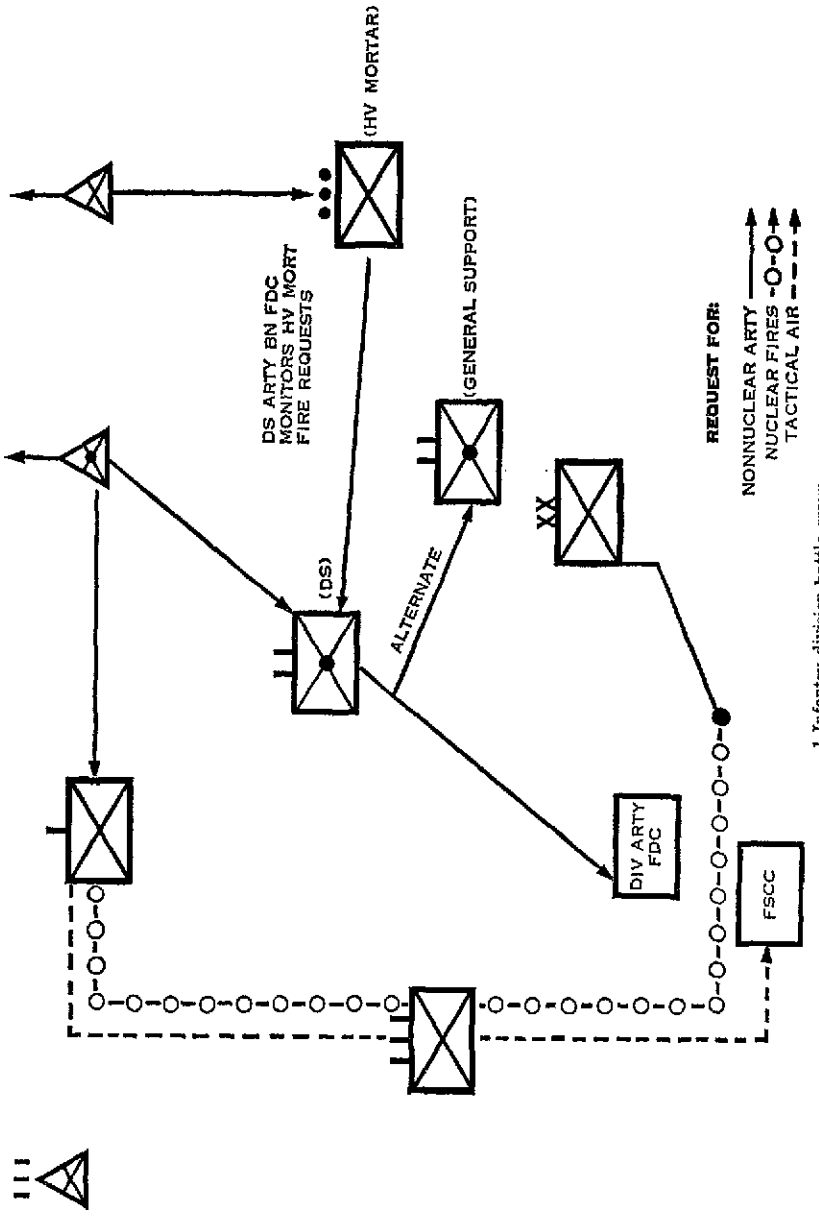
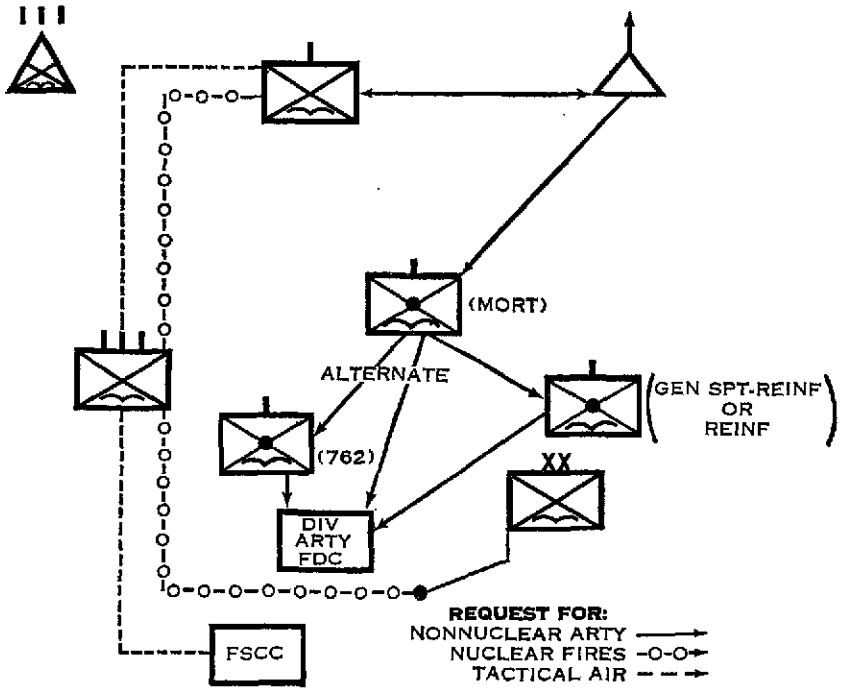


Figure 26. Fire support request channels.



2 Airborne division battle group.

Figure 26—Continued.

support and may prescribe a schedule for employment. He generally states his concept orally to interested members of his staff during the early planning phases of an operation. The staff completes the detailed planning.

b. As part of his plan for attack the commander indicates which unit will receive the priority of fires.

309. Production of the Fire Support Plan

a. After the commander issues his concept of operations, his staff and company commanders immediately start developing the plans of operation, including the employment of fire support. Each unit commander and his forward observer(s) plan the employment of fires as required to support the other elements of the unit's plan of operation. Targets suitable for attack by the unit's organic weapons are so designated insofar as weapons and ammunition availability permit. Additional fires for the attack of targets are then requested by the forward observer(s) from the fire direction center of the direct support artillery battalion and/or heavy mortar platoon in the infantry division battle group, and from the fire direction center of the mortar battery in the airborne division battle group. The fire support coordinator integrates

into the battle group fire support plan the requirements established by the following:

(1) The battle group commander and his staff.

(2) The companies.

(3) Higher headquarters; e.g., a requirement to support the attack of another battle group.

(4) Targets obtained from artillery intelligence.

b. To meet the fire support needs established, the fire support coordinator first applies the fire support means under battle group control. He informally requests additional fires from the division fire support coordinator. When approved by the battle group commander, the completed fire support plan is disseminated to all concerned. Portions of the plan dealing with requests for artillery fires, nuclear and naval fires, and preplanned air strikes, all previously approved informally by the division FSCC, are forwarded to division headquarters for final coordination and allocation of the required means. The fire support plan is added to and modified continuously as required by the situation.

c. The completed fire support plan is designed to provide detailed coverage of all critical areas within range of organic, attached, and other fire support means available to the battle group. In offensive operations, plans are also prepared for fires on critical areas initially beyond the range of these means, but which will come within range when the weapons displace as the attack progresses. Such areas normally extend at least through the first objective assigned by division. Supporting fires can then be shifted rapidly to targets or areas not specifically included in the fire support plan.

d. Concentrations are referred to in the fire support plan by a common numbering system that is usually specified in the division SOP. Groups of concentrations may be designated by a code to facilitate the simultaneous delivery of heavy volumes of fire in certain areas.

e. Ideally, the fire support plan is produced as a completed plan prior to dissemination. This may be impractical because of time limitations. In this case, the operation order is frequently issued initially without the detailed fire support plan annex and its detailed appendixes. The initial order will contain the fire support portion of the commander's concept of operation, as well as information of direct support, and reinforcing or attached fire support units or means available. Details of the fire support plan and approval of these details are sent piecemeal between the battle group and subordinate units. Ultimately, the completed fire support plan becomes an annex to the operation order and the detailed weapons fire plans such as artillery, air, naval, and nuclear fire plans become appendixes to this annex.

310. Special Considerations

a. Tanks, weapons of the assault weapon (gun) platoon, and other direct fire means are normally assigned primary missions which preclude their integration into the battle group fire support plan. If these weapons are employed as fire support and are included in the battle group fire support plan, it must be understood by all concerned that their fires may be withdrawn any time they are needed for their primary mission. On occasion, the battle group or higher commander may assign certain organic or otherwise available direct fire weapons a primary mission of providing fire support for prescribed periods. If so, these fires become a part of the battle group or higher echelon fire support plan.

b. The plan for firing toxic chemicals in offensive or defensive operations is coordinated with the other elements of the operation plan and is integrated with the fire support plan.

c. Preplanned air strikes should be incorporated into the fire support plan as well as pertinent information concerning requests for air strikes on targets not planned initially. Alternate plans should be made to cover the targets in case air strikes cannot be delivered. Safety measures are planned if strikes are to be delivered within the bomb line. Troops whose positions may become endangered by bombs delivered from high speed aircraft are warned, and appropriate markers are employed.

d. To preclude casualties from friendly fires, a battle group no-fire line is designated for the artillery of higher echelons. The no-fire line is recommended by the fire support coordinator based on information received from the forward observers supporting the forward companies. After it is coordinated with the battle group staff and approved by the battle group commander, the fire support coordinator forwards it to division artillery headquarters. No artillery unit may fire short of this no-fire line without prior clearance from the battle group commander. The responsibility for giving clearance may be delegated to the FSC.

e. At times, air defense units may be placed in support of or attached to the battle group for use in a ground support role. Appropriate information concerning their fires is included in the detailed fire support plan. If portions of these units are further attached to subordinate units of the battle group, integration of their fires is based upon the same considerations as indicated in *a* above. The use of these units in the air defense role is covered in paragraphs 104*b*(3) and 185*b*.

311. Methods of Requesting and Controlling Fire Support Other Than Artillery

a. Naval Gunfire. Naval gunfire is planned by the naval gunfire liaison officer and integrated in the fire support plan by the battle group fire support coordinator. The request for this fire is forwarded to the

division fire support coordinator at the same time the request for other fire support is made. For targets of opportunity, gunfire from direct or general support ships is requested and adjusted by attached shore fire control parties, or by any observer through naval gunfire communication channels.

b. Close Air Support. Battle group requirements for close air support are submitted by the battle group S3 Air to division G3 Air. Requirements for tactical air reconnaissance support are submitted by the battle group S2 to division G2 Air. If approved at division level, the request is forwarded to the army operations center at field army for submission to the supporting air support operations center. Corps G3 Air monitors the request and indicates approval by remaining silent. Requirements for preplanned close air support are incorporated into the battle group fire support plan and forwarded to successively higher echelons through fire support coordination channels. Requirements for tactical air reconnaissance support are forwarded through intelligence channels and coordinated at each echelon of command except at corps where the G2 Air monitors the request and indicates approval by remaining silent. A forward air controller is provided the battle group as the chief adviser to the battle group commander on matters of close air support. He is responsible for vectoring aircraft to targets located in the vicinity of supported ground forces. Communication and transportation for the forward air controller are provided by the air control team organic to the direct support artillery battalion (mortar battery).

Section IV. SPECIAL NUCLEAR CONSIDERATIONS

312. Importance of Nuclear Fires

A sizable portion of the potential combat power of the infantry division lies in its organic nuclear support capability and in the additional nuclear support available from higher headquarters. A portion of this combat power will often be available to the battle group commander and must be carefully considered by him in reaching tactical decisions. Plans must be developed to provide a reasonable assurance that the weapons employed will make a significant contribution to the accomplishment of the assigned mission.

313. Integration of Plan of Nuclear Fires With the Plan of Operations

a. The plan for nuclear weapons employment both supports and influences all other elements of the plan of operations. When nuclear weapons are available, the scheme of maneuver and the plan for nuclear and nonnuclear fire support are inseparable and must be prepared concurrently. The availability of nuclear fires may favor the adoption of an operation plan which may otherwise be impracticable. The battle group commander may find that his scheme of maneuver will be based

upon or significantly influenced by the nuclear fire plan of a higher headquarters.

b. Nuclear fires are most effective when exploited by ground action. Therefore, where practicable, provisions should be made for their timely exploitation in all types of tactical action, including defense. However, the inability to fully exploit the effects of a nuclear burst does not necessarily preclude its employment.

c. The disadvantages of employing nuclear weapons must be considered. The obstacles and debris created by nuclear fires may slow an attacking force more than action by the enemy. Obstacles and debris may be a hindrance or an aid to a defending force. Residual radiation produced by neutron-induced gamma activity and from fallout can seriously interfere with friendly operations.

314. Types of Nuclear Fires

a. Nuclear fires, like nonnuclear fires, are classified as scheduled, on-call, or fires on targets of opportunity.

b. The frequency with which scheduled fires are used may be limited by the availability of intelligence concerning suitable targets. Targets selected for scheduled nuclear fires must be kept under constant surveillance to insure necessary adjustment or cancellation of the fires in case the target moves or otherwise changes its vulnerability. Scheduled nuclear fires are included in the nuclear fire plan. Priorities are assigned to scheduled fires according to their relative importance to the accomplishment of the mission.

c. The target analysis and weapon delivery data, exclusive of employment time, are calculated for on-call fires and included in the nuclear fire plan. The number of planned targets is limited only by the availability of time and personnel to compute the necessary data. On-call fires may be planned for areas where the suitable targets are likely to develop. To the degree possible, plans are made to use all available types of delivery means against on-call targets. Selected on-call targets are assigned relative priorities for the preparation of employment data. It is often possible to obtain on-call nuclear fires within a very short time after they have been requested and approved. Minor changes in distance or direction can usually 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. On-call nuclear fires are included in the nuclear fire plan.

d. 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 fleeting targets should not be attacked by nuclear fire. In planning nuclear fires on targets of opportunity, the fastest means of delivery consistent with troop safety and

the maximum contribution to the accomplishment of the mission should be utilized. Nonnuclear fires may be used to fix fleeting targets until nuclear fires can be employed. Difficulties and delays in attacking targets of opportunity highlight the need for thoughtful planning of on-call fires.

315. Selection of Weapons

a. In determining what nuclear weapons to use, the commander should consider the number, type, and characteristics of the warheads available; delivery means available; extent of damage desired; troop safety requirements; permanence of target; and means available to exploit the effects.

b. The number and type of warheads available to the battle group 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 battle group commander must make maximum 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 are generally 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 full utilization of a nuclear weapon's potential in some situations. Such situations arise when the supported unit is beyond the range of ground delivery units, when enemy 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. Delivery means under the direct control of the lowest commander should be used to the maximum to speed the process of delivery and permit higher commands to conserve their delivery means until urgently required.

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 his state of combat training and his 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 selecting nuclear weapons. Commanders must determine the safety criteria desired for each nuclear strike and inform nuclear weapons employment officers and other operational planners during the planning stage. Commanders must approve any deviation from the safety criteria.

f. The changeability of a target may vitally affect all other considerations and may be the deciding factor as to employing a nuclear weapon on it. Intelligence processes and confirmation reports concerning the target must be expedited to the maximum.

g. Both large and small yield nuclear weapons should be considered for attacking a target. A large yield weapon tends to increase the problems of troop safety and coordination with adjacent and supporting units. On the other hand, it may give greater coverage in a particular area than several smaller weapons, or its size may compensate for inaccuracies in delivery and intelligence.

h. A linear target generally is less vulnerable to a nuclear strike than a circular target. Several small yield weapons are generally superior to one or a few large yield weapons for attacking a linear target.

316. Type of Burst

a. The type of burst (subsurface, surface, low or high air) is selected that will cause maximum casualties or damage to the target consistent with troop safety and schemes of maneuver.

b. When it is desired to deny the enemy an area that will not be used by friendly forces, a surface or subsurface burst may be used to contaminate it with residual radiation and to form a crater. 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.

317. Troop Safety Procedures

a. A nuclear safety line for each nuclear weapon or group of nuclear weapons employed is established in advance of the time of employment. It should be easily identifiable on the ground. Its location is based on the degree of risk to be accepted and the amount of protection assumed to be available to friendly troops. All friendly units that may be affected are notified of its location.

b. In an attack, nuclear safety lines may be preplanned in conjunction with either on-call or scheduled fires. Friendly troops do not advance beyond a safety line without clearance from the commander who controls the employment of the nuclear weapons. Phase lines may be employed as nuclear safety lines.

c. Troops must be warned of a nuclear attack in time to take necessary protective measures as directed by the commander.

d. A nuclear no-fire line is established by division based on recommendations from the battle group. It is similar in purpose to the artillery no-fire line and may correspond to it. Higher echelons of command may employ nuclear weapons without coordinating with the force that establishes the line, provided the casualty or damage-producing effects (including flash blindness) do not fall short of the line. When possible, commanders of subordinate units should be informed of such employment.

e. In conjunction with plans for nuclear fires, CBR plans must provide for radiological monitoring and surveying, and for actions to be taken in the event of radiological contamination.

CHAPTER 10

BRIGADE (INFANTRY DIVISION)

Section I. GENERAL

318. General

a. The brigade command post is established by the brigade headquarters section (TOE 7-2D) under the command of the assistant division commander (brigade commander). It includes the brigade commander, a deputy, an executive, an S1, S2, S3, S4, an assistant S2, and two assistant S3's.

b. The brigade command post normally operates in one echelon far enough from division headquarters to preclude destruction of both headquarters by a single nuclear weapon.

c. The missions of the brigade headquarters are to—

(1) Be prepared to assume the functions of the division headquarters.

(2) Command, control, and supervise operations of subordinate and attached elements of the division as directed by the division commander.

(3) Assume such other functions as may be assigned by the division commander.

319. Alternate Division Headquarters

Both the brigade command post and the division artillery command post serve as alternates to the division command post. The priority in which they assume command varies with the policy of the division commander and the situation. Since the decision as to which headquarters will assume command is a local command prerogative, the priority should be included in the division SOP. For sustained operation as a division headquarters, the brigade headquarters can only be considered as a nucleus since it is organized on an austere basis to provide representation of elements of the division headquarters.

320. Operations

a. When assigned a combat role, the brigade commander assumes command of attached units and organizes his staff so it can most effectively accomplish his mission. Special staff functions are performed

by commanders or liaison officers from supporting units or by additional personnel furnished by the division commander.

b. In general, the brigade commander and his staff function according to the principles outlined in chapter 2 and FM 101–5, except that when the brigade conducts independent operations the brigade S4 is not an operator in logistical activities. His specific functions are to—

(1) Advise the commander and staff of the status of the logistical situation for current and future operations.
(2) Maintain liaison with subordinate unit supply officers, the division G4, and the technical service units of the division.
(3) Assist subordinate units in logistical matters.
(4) Receive reports from subordinate units as to their supply and maintenance status, and to forward these reports to higher echelons without consolidation.
(5) Control, coordinate, move, and provide for the security of the trains, and to control the movement and provide for the security of resupply convoys.

c. The brigade may be employed to perform varied missions, such as—

(1) Division covering force in advance to contact.
(2) Division main attack.
(3) Division reserve (or a part of it).
(4) Exploitation force.
(5) Reconnaissance in force.
(6) Occupation and defense of localities.
(7) Division security force.
(8) Counterattacking force.
(9) Economy of force unit.
(10) Task force operations.

d. In a night withdrawal the brigade headquarters may be utilized to command the division detachments left in contact.

e. During combat, the brigade commander's responsibilities are usually operational. Except when the brigade conducts independent operations, the brigade commander has few administrative functions.

f. Brigade operations are strongly influenced by the operations of the remainder of the division of which it normally remains an integral part. The brigade may be given a mission type order when the mission takes it beyond the range of division's control and support. For example, the brigade may operate independently—

(1) As the encircling force in a turning movement or pursuit.
(2) In amphibious or airborne operations.
(3) When performing distant security missions.
(4) When conducting raids.

321. Command

The brigade consists of such elements as are made available to accomplish the mission.

322. Training

a. The brigade staff may supervise the training of elements of the division, particularly during the unit training phase, by—

(1) Planning, preparing, and conducting field and command post exercises for divisional units.
(2) Conducting tests as required.
(3) Conducting training inspections.
(4) Preparing training reports.

b. During combat, it may supervise the training of replacements or replacement units, when not otherwise employed.

Section II. OFFENSE, DEFENSE, AND RETROGRADE

323. General

Operations conducted by the brigade are similar to those conducted by the battle group, although on a larger scale. See chapters 5, 6, and 7.

324. Fire Support

Fire support considerations are similar to those discussed for the battle group in chapter 9. When artillery units are attached or in support of the brigade, the senior artilleryman is the fire support coordinator. Because of the variable composition of the brigade and the likelihood of rapid gains and losses of units, the fire support plan must be flexible to provide for any contingency. The brigade commander effects maximum coordination of the fire support means available to subordinate units.

APPENDIX I

REFERENCES

SR 210–50–50	Chaplains' Funds.
AR 55–355	Military Traffic Management Regulation.
AR 59–106	Operation of Air Force Terminals.
AR 165–15	Function of Chaplains, Commanders' Responsibilities.
AR 320–5	Dictionary of United States Army Terms.
AR 320–50	Authorized Abbreviations and Brevity Codes.
AR 345–5	Personnel Management—Personnel Records.
AR 600–30	Character Guidance Program.
AR 735–35	Supply Procedures for TOE Units, Organizations, and Non-TOE Activities.
AR 750–5	Maintenance Responsibilities and Shop Operation.
AR 750–8	Command and Maintenance Inspections.
FM 3–5	Tactics and Techniques CBR Warfare.
FM 5–6	Operations of Engineer Troop Units.
FM 5–132	Infantry Division, Engineer Battalion.
FM 6–18	Mortar Battery, Infantry Division Battle Group.
FM 6–20	Field Artillery Tactics and Technique.
FM 7–( )	Combat Support Company, Infantry Division Battle Group (when published).
FM 7–10	Rifle Company, Infantry and Airborne Division Battle Groups.
FM 7–21	Headquarters and Headquarters Company, Infantry Division Battle Group.
FM 7–100	The Infantry Division.
FM 16–5	The Chaplain.
FM 17–33	Tank Units, Platoon, Company and Battalion.
FM 21–5	Military Training.
FM 21–6	Techniques of Military Instruction.
FM 21–18	Foot Marches.
FM 21–30	Military Symbols.
FM 24–20	Field-Wire Techniques.
FM 27–10	The Law of Land Warfare.
FM 30–5	Combat Intelligence.
FM 30–7	Combat Intelligence Battle Group, Combat Command, and Smaller Units.
FM 30–9	Battalion, Field Army.

FM 31–10	Barriers and Denial Operations.
FM 31–21	Guerilla Warfare and Special Forces Operations.
FM 31–50	Combat in Fortified Areas and Towns.
FM 31–60	River Crossing Operations.
FM 31–71	Northern Operations.
FM 31–72	Mountain Operations.
FM 41–5	Joint Manual of Civil Affairs/Military Government.
FM 41–10	Civil Affairs/Military Government Operations.
FM 41–15	Civil Affairs/Military Government Units.
FM 55–37	Transportation Battalion, Infantry Division.
FM 57–17	Reconnaissance Troop, Airborne Division.
FM 57–21	Headquarters and Headquarters Company, Airborne Division Battle Group.
FM 57–30	Airborne Operations.
FM 57–35	Army Transport Aviation, Combat Operations.
FM 57–100	The Airborne Division.
FM 72–20	Jungle Warfare.
FM 100–1 (S)	Field Service Regulations; Doctrinal Guidance (U).
FM 100–5	Field Service Regulations; Operations.
FM 101–5	Staff Officer's Field Manual—Staff Organization and Procedure.
FM 101–10	Staff Officer's Field Manual—Organization, Technical, and Logistical Data.
FM 101–31 (S)	Nuclear Weapons Employment (U).
TM 57–210	Air Movement of Troops and Equipment.
DA Pam 108–1	Index of Army Motion Pictures, Filmstrips, Slides, and Phono-Recordings.
DA Pam 310–3	Index of Training Publications.
DA Pam 750–1	Preventive Maintenance Guide for Commanders.

APPENDIX II

TROOP LEADING

1. General

a. Troop leading is the procedure followed by a commander in preparing for and executing his assigned mission.

b. The procedure for troop leading is as thorough as time permits. Under conditions of nuclear warfare, time for detailed ground reconnaissance may be limited or nonexistent. Thus, the commander employs proper procedure to insure that concurrent planning, reconnaissance, and staff actions are accomplished. The need for concurrent reconnaissance is emphasized at all echelons to insure that timely decisions are made with maximum speed and efficiency.

2. Procedure

The procedure described below is followed when time and the situation permit. Frequently all the actions indicated cannot be taken, or some may have to be carried out concurrently.

a. Analysis of Mission. Upon receipt of the division order, the battle group commander analyzes his mission to insure that he knows and understands what specific and implied tasks it imposes. After completing his analysis he issues a warning order to his command. Next he makes a map reconnaissance and, based on this reconnaissance, a hasty estimate of the situation.

b. Planning Guidance. Based on his estimate, the commander issues planning guidance to provide his staff with a basis for their reconnaissance and staff estimates. The guidance may include, but is not limited to, specific courses of action to be considered and an indication of information required by the commander. The commander may issue a tentative plan instead of planning guidance when time is not available to follow, in sequence, the procedure described in *c, d,* and *e* below.

c. Coordination. Coordination between battle group commanders, their unit and special staffs, and subordinate unit commanders should start when commanders and staffs are assembled at division headquarters to receive the order, but it may start before or after the battle group commander issues his planning guidance. Coordination is continuous and is carried out in subsequent meetings of the staffs and

commanders, as required, during the planning and conduct of the operation.

d. Reconnaissance. Reconnaissance, like coordination, is continuous. A ground and/or air reconnaissance is desirable, but it may not be possible to make one before the order is issued. In this case, the commander may make his estimate and issue his order or tentative plan based on a map reconnaissance only. He reconnoiters the ground as time becomes available and the situation requires.

e. Tentative Plan. Following the reconnaissance, the commander receives the staff recommendations, makes a decision, and issues a tentative plan. At this time he also indicates when and where he will issue the order. The tentative plan provides the subordinate commanders information on which to base their reconnaissance and issue tentative orders to their subordinates. When a tentative plan is issued instead of planning guidance, company commanders as well as the battle group commander and staff, can coordinate and reconnoiter simultaneously, thus saving time and telescoping the troop leading procedure.

f. Issuance of Orders. After the battle group commander issues his tentative plan, the company commanders make their reconnaissance, then go to the appropriate place to receive the order. The battle group commander usually issues his order verbally and may follow it shortly with a written order.

g. Supervision. Supervision is probably the most important part of troop leading procedure. By proper supervision, the commander and staff insure that details of the plan are fully understood and properly executed. In supervising subordinates who are busy preparing their units and formulating their plans, harassment is avoided.

3. Commander's Checklists

Following are checklists to assist battle group commanders in attack, defense and retrograde situations. These checklists are not inflexible rules but guides which should be modified to fit the situation. They must not become substitutes for thinking.

a. Attack.

(1) After receiving the warning order—

(*a*) What information should I furnish my subordinate commanders and staff?

(*b*) Who will I take with me to receive the division order?

(*c*) What action can I initiate based on the information furnished me in the warning order?

(2) Upon receipt of the attack order—

(*a*) What is my mission? Enemy situation? Troops available? Terrain and weather?

(*b*) How much time do my subordinate units and I have for reconnaissance, planning, and issuance of orders?

(*c*) What is the mobility of my command?
(*d*) What supporting nuclear fires are available to me? How can I employ my nonnuclear fires?
(*e*) What general scheme of maneuver do I want to employ?
(*f*) What formation(s) are feasible?
(*g*) How can I best employ my supporting elements?
(*h*) Are communication facilities adequate? Can I communicate with my supporting elements?
(*i*) How can I best control the attack?
(*j*) What must I be ready to do next when I have seized and secured the objective?
(*k*) How shall I accomplish my reconnaissance? Who will accompany me? What reconnaissance tasks can I assign my subordinates? When and where will I receive reports and recommendations?
(*l*) Have I furnished my staff and subordinates with adequate planning guidance?
(*m*) How, when and where should I issue my attack order?

(3) While on reconnaissance—
(*a*) What approaches are available into the enemy position? Will they permit the use of my scheme of maneuver?
(*b*) Are there any obstacles to movement? How much cover and concealment is available? Can I adequately disperse my forces?
(*c*) Are forward assembly areas or attack positions required for the attack? If so, where?
(*d*) Where is the line of departure? Is it appropriate?
(*e*) What additional objectives are required?
(*f*) What effect will nuclear weapons have on the terrain over which I am attacking? Blowdown? Contaminated areas? Secondary fires?
(*g*) Are there large numbers of civilians in the area? Will they hamper my use of nuclear weapons?

(4) Upon completion of reconnaissance—
(*a*) Have I received recommendations from my staff and the commanders of organic, attached, and supporting units?
(*b*) Does my estimate need revising?
(*c*) What is my plan?
(*d*) Have I based my plan on knowledge gained through active ground, map, and aerial reconnaissance and knowledge of the enemy situation?
(*e*) Have I analyzed the enemy defense thoroughly, taking advantage of weaknesses in enemy dispositions or in terrain where the defender cannot use his weapons or obstacles to advantage?

(*f*) Have I given adequate consideration to terrain and weather?
(*g*) Have I planned for maximum exploitation of all my resources, including organic and attached units and all available fires?
(*h*) Have I considered troop safety in the planning of nuclear fires and the scheme of maneuver? What effects will nuclear weapons have on the terrain over which I am attacking? Has due consideration been given to civilians in the area?
(*i*) Does my plan call for weighting the main attack?
(*j*) Have I selected unnecessary intermediate objectives?
(*k*) Does my plan of attack foresee and provide for the next step in case of success, partial success, or failure?
(*l*) Have I provided for flank protection?
(*m*) Have I provided for consolidation and reorganization after the objective is seized?

(5) After completion of the plan—
(*a*) Does the order I issue fully implement my plan?
(*b*) Have I thoroughly oriented personnel who are to receive the order on the situation and the terrain?
(*c*) Can the order be clearly understood by all of my subordinates?

(6) After issuing the order—
(*a*) Was the order clearly understood by all of my subordinates?
(*b*) What assistance can I furnish my organic, attached, and supporting units?
(*c*) Have I correctly supervised the implementation of my order?

(7) During the conduct of the attack—
(*a*) Where can I best position myself to influence the action?
(*b*) Am I prepared to influence the battle by shifting supporting fires, by maneuver, and the use of reserves?

b. Defense.

(1) After receiving the warning order—
(*a*) What information should I furnish my subordinate commanders and staff?
(*b*) Who will I take with me to receive the division order?
(*c*) What action can I initiate based on information furnished me in the warning order?

(2) Upon receipt of the division defense order—
(*a*) What coordination can I undertake now? Have I arranged for final coordination with adjacent and supporting units?
(*b*) How much time do my subordinate units and I have for reconnaissance, planning, and issuance of orders?
(*c*) What additional support has been furnished me to assist in the accomplishment of my mission? How can I best employ it?

(*d*) What is my estimate of the situation?

(*e*) What is my tentative plan for defense? How many companies will I employ on the FEBA? Who will establish the COPL? What fires, including nuclear fires, are available? How can I best employ them? Have I furnished my staff and subordinates with adequate planning guidance?

(*f*) How shall I accomplish my reconnaissance? Who will accompany me? What reconnaissance tasks can I assign my subordinates? When and where will I receive reports and recommendations?

(*g*) How, when, and where should I issue my order?

(3) While on reconnaissance—

(*a*) What are the avenues of approach available to the enemy? What natural obstacles exist? What is the general trace of the COPL? What areas within the battle area are exposed to enemy observation? What terrain must be defended? Where should the forward companies be disposed? Where should the reserve be located? Are there civilians in the area? Should they be evacuated? Partially? Totally?

(*b*) What general locations are available for supporting weapons? Have I provided for routes of ammunition resupply? Where can I locate my command and logistical installations? Should I establish an alternate CP?

(*c*) Have I completed my coordination with adjacent units?

(4) Upon completion of reconnaissance—

(*a*) Have I received recommendations from my staff and the commanders of organic, attached, and supporting units?

(*b*) Does my estimate need revising?

(*c*) What is my plan for defense? What boundaries and limiting points between companies will I prescribe? Who will establish the COPL? In what strength? Where shall I locate the reserve? What supplementary positions are required? How will I employ my supporting fires. How will I employ my antitank weapons? What is my barrier plan? Must civilians be evacuated from the area?

(*d*) Have I based my plan on knowledge gained through active ground, map, and aerial reconnaissance, sound recommendations from my subordinates, and knowledge of the enemy situation?

(*e*) Have I employed all the resources available to me?

(5) After completion of the plan—

(*a*) Does the order that I am to issue fully implement my plan?

(*b*) Have I thoroughly oriented the personnel who are to receive the order on the situation and the terrain?

(c) Can the order be clearly understood by all of my subordinates?

(6) After issuing the order—

(a) Was the order clearly understood by all of my subordinates?

(b) What assistance can I furnish my organic, attached, and supporting units?

(c) Have I correctly supervised the implementation of my order?

(d) Have I initiated planning for counterattack?

(e) Are my security measures (to include CBR considerations) adequate?

(7) During the conduct of the defense—

(a) Where can I best position myself to control the action?

(b) Am I keeping my higher, lower, and adjacent commanders adequately informed of my situation?

(c) Are my supporting fires being best employed to facilitate the defense?

(d) Am I prepared to shift my forces to defend against attacks from the flanks or rear?

(e) Am I prepared to execute counterattacks appropriately against penetrations?

c. *Retrograde.*

(1) After receiving the warning order—

(a) What information should I furnish my subordinate commanders and staff?

(b) Who shall I take with me to receive the division order?

(c) What action can I initiate now based on the information furnished me in the warning order?

(2) Upon receipt of the division order—

(a) What coordination can I undertake now? Have I arranged for final coordination with adjacent and supporting units?

(b) How much time do my subordinate units and I have for reconnaissance, planning, and issuance of orders?

(c) What additional support has been furnished me to assist in the accomplishment of my mission? How can I best employ it?

(d) What is my estimate of the situation?

(e) Based on a map study, my estimate, and recommendations from my staff, what is my tentative plan? Does it include employment of all organic and attached units (including available personnel carriers and army aircraft), and employment of available fire support; designation of assembly areas, routes (zones), initial points, release points, delaying positions; specification of the command and composition of detachments left in contact; and a schedule of movement?

Have I furnished my staff and subordinates with adequate planning guidance?

(3) Before leaving on reconnaissance—

(*a*) Have I properly planned my reconnaissance to include best use of available time, assignment of reconnaissance missions to subordinates, and designation of times and places to receive recommendations? Who will go with me on my reconnaissance? Can I use an aircraft to make my reconnaissance? How, when, and where will I issue my order?

(*b*) Have I announced my reconnaissance route and schedule? Have I arranged for coordination with adjacent, attached, and supporting units?

(4) While on reconnaissance—

(*a*) What positions are available from which units can gain good observation and long-range fields of fire? What natural obstacles exist in front of, within, or near these positions? Do covered routes of withdrawal exist? Where should I locate my units on the position?

(*b*) What general locations are available for supporting weapons? Where can I best locate my command installations and field trains?

(*c*) Have I coordinated with adjacent units?

(*d*) Having selected the delaying position(s), where can I best locate my security force?

(*e*) Where can my reserve be located if it must cover the withdrawal of forward units?

(5) Upon completion of reconnaissance—

(*a*) Have I received recommendations from my staff and the commanders of organic, attached, and supporting units?

(*b*) Does my estimate need revising?

(*c*) What is my plan for the operation? What is to be the composition of the detachments left in contact (covering force)? Who will command this force? When will it withdraw? Have I designated assembly areas, routes (zones) of withdrawal, initial points, release points, and traffic points? Have I provided for security to front, flanks, and rear? Have I assigned priority for use of road nets? Have I planned roadblocks, destruction of bridges, and use of artificial barriers? When will reserve and administrative facilities withdraw? In delaying position(s), have I clearly designated sectors and the units to occupy them? How will I employ my antitank means, supporting fires, engineers, Army aviation and attached personnel carriers? Where can I best locate my command group during withdrawal and at delaying position(s)? Must civilians be evacuated?

(*d*) Have I based my plan on knowledge gained through active ground, map, and aerial reconnaissance, sound recommendations from my subordinates, and knowledge of the enemy situation?

(*e*) Have I employed all resources available?

(6) After completion of the plan—

(*a*) Does the order that I am to issue fully implement my plan?

(*b*) Have I thoroughly oriented the personnel who are to receive the order on the situation and the terrain?

(*c*) Is the order clear, concise, and understandable? Can my subordinates carry it out without further reference to me?

(7) After issuing the order—

(*a*) Was the order understood?

(*b*) What assistance can I furnish my organic, attached, and supporting units?

(*c*) Have I correctly supervised the implementation of my order?

(*d*) Are all plans still adequate, based on developments thus far? Need I make changes?

(8) During the conduct of the operation—

(*a*) Where can I best position myself and my command group?

(*b*) Am I keeping higher, lower, and adjacent units fully informed?

(*c*) Are supporting fires being best employed?

(*d*) When can the detachments left in contact (covering force) withdraw?

(*e*) Am I properly supervising the occupation of the delaying position(s)?

(*f*) Am I doing all that is possible to accomplish my mission?

APPENDIX III

TASK FORCES

1. General

a. A task force is a temporary grouping of units under one commander to perform a specific mission in either an offensive, defensive, or retrograde operation. The size and composition of the force is determined after a consideration of METT. When formed from elements of the battle group, its nucleus is normally a mobile infantry unit mounted in personnel carriers and/or helicopters. Attachments of other arms and services are made as appropriate to the mission. Because of the independent nature of its operations, a task force should be self-contained and will usually include—

(1) Maneuver elements (usually both infantry and tanks).
(2) Direct fire support elements (assault weapons (guns) and/or tanks).
(3) Indirect fire support elements (howitzers and/or mortars).
(4) Reconnaissance and security elements (aircraft, reconnaissance platoon, armored cavalry units, or infantry troops designated for this purpose).
(5) Service support elements (supply, maintenance, and medical personnel).
(6) Command and control elements (commander and necessary staff personnel, aircraft, air control team, and/or communication personnel and equipment).

b. A task force is assigned a mission for which a TOE unit is not suitable because of too much or too little strength, improper balance, or inadequate mobility. Appropriate missions include—

(1) Seizure of critical terrain or installations at a considerable distance from the main body.
(2) Raids.
(3) Reconnaissance in force.
(4) Expoitation of penetrations.
(5) Pursuit.
(6) Frontal, flank, or rear security.
(7) Defense of outlying localities.
(8) Destruction of bypassed or isolated enemy.
(9) Delay.

c. Training in task force organization and operation is necessary to accustom the various units to working closely together and to develop a mutual understanding of capabilities and limitations. Type task forces may be designated and trained so that they can be formed and dispatched on appropriate missions on short notice.

2. Task Force Organization

a. Reinforced Battle Group as a Task Force. Because of the large areas of operation and the fluidity that typify nuclear warfare, the battle group commander is frequently required to employ his entire command as the nucleus of a task force operating on division missions. Division attaches armor, artillery, Army aircraft, engineers, and other support elements appropriate to the mission. A typical task force with the battle group as nucleus is shown in figure 27.

b. Task Forces Formed Within the Battle Group. Within the framework of battle group standing operating procedure, which may prescribe certain basic task force organizations, a commander at any echelon can tailor a task form to the mission assigned. In forming and employing a task force, the commander insures that the parent unit retains the capability of performing its assigned mission. Also, higher commanders should consider the reduced combat power of the parent unit when assigning it a mission.

(1) A typical task force is shown in figure 28. Many combinations of combat, combat support, and service elements are possible, utilizing the rifle company(ies) as the nucleus. When a mission takes the task force beyond supporting range of its usual nuclear delivery means, action must be taken to insure that it receives nuclear support, if required. Air delivered nuclear weapons will have to be provided or ground nuclear delivery means will have to be attached to the task force. A task force of this type may be commanded by the deputy battle group commander.

(2) (*a*) In the defense, attack, delaying action, and occupation of the GOPL or RSP, the battle group may form reinforced company size task forces (fig. 29). The degree of latitude given these task forces varies with the type action being conducted. Generally, the wider the battle group's front the greater will be the latitude given the task forces in carrying out their missions. The commander on the spot must have the authority to make decisions required by sudden changes in the situation which necessitate immediate action. Any action taken by the rifle (TF) company commander which will affect the battle group must be reported immediately so that the battle group commander can take appropriate action.

(*b*) Reinforced company task forces may perform a wide variety of missions such as locating nuclear targets, reconnaissance in force, defending critical terrain, conducting raids, and operating on an exposed flank.

(*c*) Upon receiving his mission, the commander of a reinforced company task force may organize his force into reinforced platoon task forces. He may change the number and composition of the task forces throughout the operation, but he maintains the tactical integrity of elements when possible.

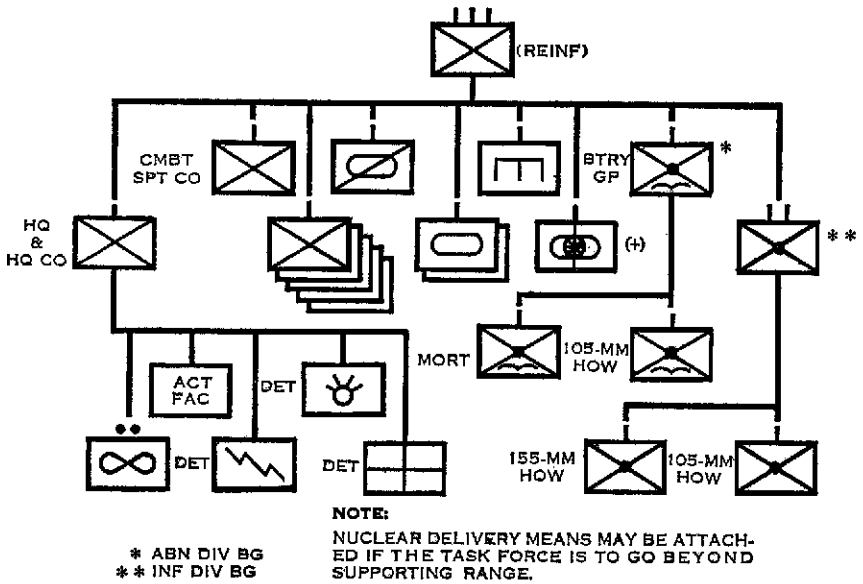
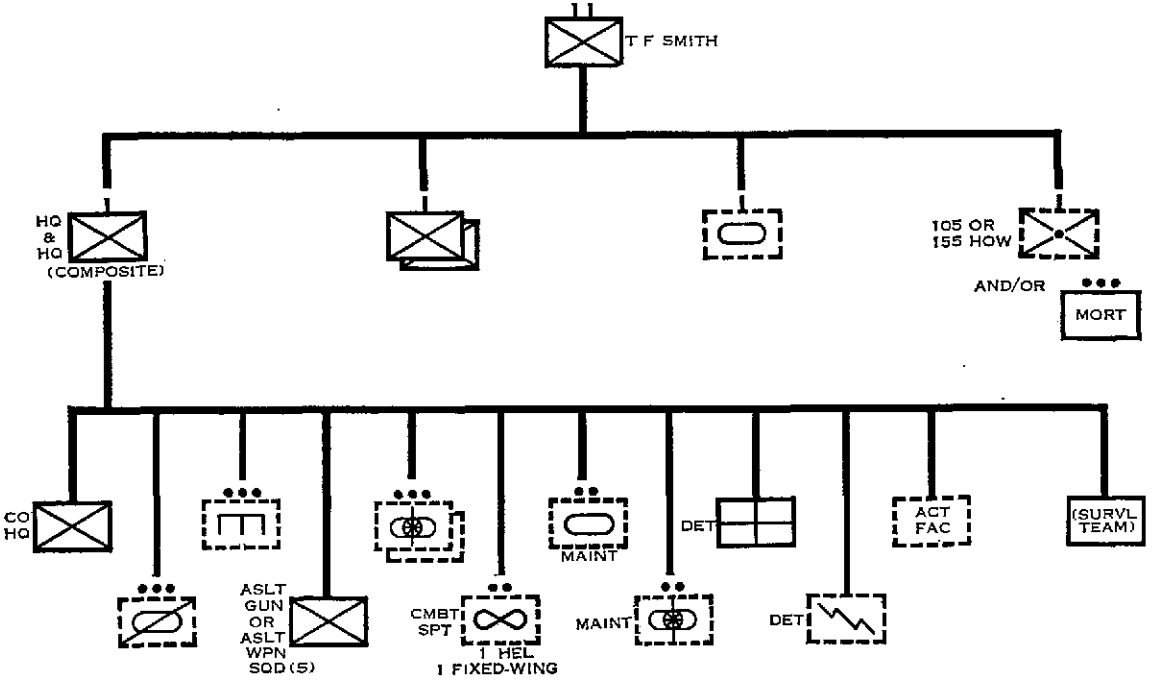


Figure 27. Reinforced battle group as a task force.

(*d*) Economy of force. In covering the battle group's assigned front, reinforced rifle platoons and the reconnaissance platoon may have to be utilized as economy of force units to cover the least likely avenues of enemy approach into the battle area. They must have great mobility so they can adequately patrol and screen their extended sectors. Such units are usually under the control of the battle group commander or his deputy.

(3) A smaller task force is discussed in FM 7–10.

c. Task Force Mobility. The means of mobility must be used to the maximum to insure the success of task force operations regardless of the size force employed. Helicopters may be used to transport the lighter elements of the force when speed is essential or when personnel carriers cannot be employed. When neither Army aviation nor carrier



NOTES:

1. BROKEN LINES INDICATE ATTACHMENTS FROM DIVISION
2. CARRIER PLATOONS WILL BE FURTHER ATTACHED TO THE RIFLE COMPANIES TO PROVIDE COMPLETE MOBILITY

Figure 28. Type task force (large).

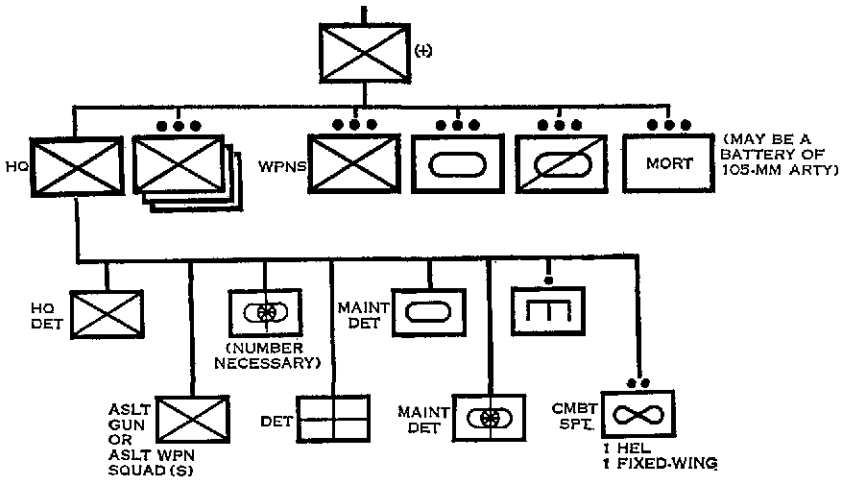


Figure 29. Type task force (small).

support is available, infantry troops ride on tanks and/or available wheeled vehicles. In the defense, task forces use their mobility to shift rapidly to meet enemy threats.

d. Security. Enough infantry is included in a task force to provide security for the fire support, logistical, and tank elements. Isolation of the task force increases the vulnerability of these elements, particularly at night.

e. Supply. Logistical plans should be completed before the task force departs. The required amounts of ammunition, fuel, food, water, and other supplies to care for anticipated needs are collected and vehicles are allocated for their transport. Arrangements should be made for aerial resupply and evacuation.

3. Task Force Operations

a. Task force operations are normally independent operations for which the force commander receives a mission type order and acts independently in carrying it out. A task force usually operates too far from its parent unit to be effectively controlled and supported by it. Since it is difficult to reinforce a task force once it is committed to an independent operation, it should be self-contained, and its missions should be commensurate with its capabilities. The mobility, firepower (including nuclear and nonnuclear weapons), and communications inherent in such organizations can best be utilized on missions requiring rapid movement and heavy striking power.

b. Tactical principles, doctrine, and concepts expressed in other chapters of this text are equally applicable to a task force on an independent mission. However, the task force commander must give additional consideration to the following matters:

(1) Control of the combat support elements.
(2) Self-sufficiency of the task force and, frequently, of its tactical subunits.
(3) Reconnaissance and security, especially to the flanks and rear.
(4) Logistics, for which the task force may have to assume complete responsibility.
(5) Communications, due to the distance and speed of movement involved.
(6) The use of aircraft for troop movement and logistical support.

c. Transportation and communication requirements beyond those organically available to units of the force are met by a unit one or two echelons higher than the task force, augmented as necessary by higher headquarters.

d. Weapons and means organic to or in direct support of the parent or higher unit are habitually attached to the task force.

4. Organizing a Task Force for Combat

a. On receiving his mission, the commander of the task force may organize his force into a group of subtask forces. Elements of fire support units may be attached to the subtask forces, or all of the fire support units may be placed in general support of the task force or direct support of one or more of the subordinate elements.

b. Subtask force teams are designed with the mission in mind. They may be tank-heavy, infantry-heavy, or balanced. Additional maneuver elements may be created by utilizing the reconnaissance or engineer platoon.

c. The number and composition of the subtask forces may be changed throughout the operation.

d. Service and support elements are grouped under a composite headquarters and headquarters company. The battle group commander usually provides necessary personnel for this unit. If not, the task force commander uses personnel from units attached to his force.

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By Order of *Wilber M. Brucker*, Secretary of the Army:

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General, United States Army,
Chief of Staff.

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R. V. LEE,
Major General, United States Army,
The Adjutant General

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USA ATB (2)
US ARADCOM (5)
US ARADCOM Rgn (2)
OS Maj Comd (10)
OS Base Comd (5)
Log Comd (3)
MDW (5)
Armies (10) except
First US Army (12)
Corps (5)
Abn Div (10)
Inf Div (10)
Armor Div (9) (3 ea CC)
USATC (10)
Brig (5)
Regt/Gp/bg (3) except
Abn bg (10)
Inf bg (10)
Bn (2)
Inf Co (2)
Abn Co (2)
USMA (15)
USAWC (15)
USACGSC (1350)
Br Svc Sch (5) except
USAIS (2000)
US ARADSCH (50)
USATSCH (410)
USASCS (275)
USAARMS (900)
USAAMS (605)
USACMLCSCH (10)
USA QM Sch (500)
USAES (250)
USA Army Med Svc Sch (15)
USAAVNS (10)
USA Sp Warfare Sch (60)
USAINTS (343)
USA CA Sch (400)
PMST Sr Div Units (5)
PMST Jr Div Units (5)
PMST Mil Sch Div Units (5)
Mil Dist (5)
USA Corps (Res) (5)
Sector Comd, USA Corps
(Res) (5)
Mil Msn (3)

NG: State AG (3); units—same as Active Army except allowance is two copies to each unit.

USAR: Same as Active Army.

For explanation of abbreviations used, see AR 320–50.

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