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FM 7-40

WAR DEPARTMENT

INFANTRY FIELD MANUAL

RIFLE REGIMENT

February 9, 1942

CHANNON, R. L. FM 7-40
C 1

INFANTRY FIELD MANUAL
RIFLE REGIMENT

CHANGES No. 1

WAR DEPARTMENT,
WASHINGTON, July 11, 1942.

FM 7-40, February 9, 1942, is changed as follows:

■ 92. DISPOSITIONS.

* * * * * * *

e. Artillery.—Except for special operations * * * the regimental command group. (FM 6-20.)

* * * * * * *

[A. G. 062.11 (5-27-42).] (C 1, July 11, 1942.)

■ 161. CONTROL.—*a. General.*

* * * * * * *

(5) Axis of advance of each battalion command post and of the regimental command post.

* * * * * * *

[A. G. 062.11 (5-27-42).] (C 1, July 11, 1942.)

■ 162. RECONNAISSANCE.

* * * * * * *

b. Regimental reconnaissance detachment.

* * * * * * *

(3) Instructions to the commander of the motorized reconnaissance detachment should include—

* * * * * * *

(*b*) Vital areas and key terrain features to be reconnoitered by the detachment (e. g., ridge lines, defiles, stream crossings).

(*c*) Essential items of information to be sought.

(*d*) Arrangements for contact with friendly units operating to the front in the regimental zone.

(*e*) Times and places for periodic contacts with regimental (or advance guard) command post; any special instructions regarding reporting.

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[A. G. 062.11 (5-27-42).] (C 1, July 11, 1942.)

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■ 178. SECURITY.

* * * * * * *

b. Antimechanized.—Regimental antitank weapons are employed to reinforce the antitank defenses of the leading battalions, to deepen the defense within the regimental zone, and to provide antitank protection on an exposed flank. Platoons are ordinarily placed in firing or cover positions. The platoon(s) protecting the rear portions of the regimental zone is usually located in the area of the regimental command post and the regimental reserve. The situation may frequently require the employment of the rear platoon(s) in forward areas. To expedite such employment the rear platoon(s) will reconnoiter positions and routes to these positions in the forward areas of the regimental zone.

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[A. G. 062.11 (5–27–42).] (C 1, July 11, 1942.)

■ 183. INITIAL ADVANCE.

* * * * * * *

b. With tank support.—(1) When tanks lead the advance of an infantry regiment, light and heavy machine guns, 37-mm guns, and 60-mm and 81-mm mortars are assigned missions of supporting the tank advance by firing on hostile antitank weapons which disclose their positions. These fires must be so placed as not to endanger friendly tanks or hinder their maneuver.

* * * * * * *

[A. G. 062.11 (5–27–42).] (C 1, July 11, 1942.)

■ 225. PLANS.

* * * * * * *

c. Weapons designated to support * * * when the objective has been gained. Plans for supporting fires usually must be made for two purposes: first, to cover the reorganization of the attacking units and prevent hostile counterattack when the objective is attained; and, second, to cover a withdrawal if the attack is repulsed.

* * * * * * *

[A. G. 062.11 (5–27–42).] (C 1, July 11, 1942.)

■ 269. BATTLE POSITION.

* * * * * * *

b. Long-range fires.

* * * * * * *

(2) Long-range fires and antiaircraft fires against attacking enemy combat aviation within effective range of machine guns of units on the main line of resistance are delivered from positions which will not disclose the location of that line.

c. During advance of hostile attack.

* * * * * * *

(6) When fires have been opened by weapons on the main line of resistance, heavy machine guns located on or near that line fire on attacking enemy airplanes within effective range, when, in the judgment of machine-gun platoon and section leaders, such targets are more important than ground targets.

* * * * * * *

[A. G. 062.11 (5–27–42).] (C 1, July 11, 1942.)

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:

J. A. ULIO,
Major General,
The Adjutant General.

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INFANTRY FIELD MANUAL

RIFLE REGIMENT

CHANGES No. 2

WAR DEPARTMENT,
WASHINGTON, December 2, 1942.

FM 7–40, February 2, 1942, is changed as follows:

■ 269. BATTLE POSITIONS.

* * * * *

g. Action against tanks (Superseded).—(1) Mine fields and other obstacles in front of the position must be covered by the effective fire of rifles, machine guns, and mortars to prevent their removal or neutralization before or during hostile attack.

(2) (*a*) Hostile infantry usually accompanies or closely follows armored vehicles in the attack. Exposed personnel riding on or closely following armored vehicles are the primary targets of infantry small arms fire. In no circumstances will defending infantry be diverted from its basic mission of engaging and destroying the attacking hostile infantry.

(*b*) Infantry small arms fire is relatively ineffective against the armor of armored vehicles. However, under favorable conditions, the cumulative effect of small arms armor piercing ammunition may be effective against tank sprockets, bogie wheels, and track suspension. The fire of rifles, automatic rifles, and machine guns for the most part will be directed against armored vehicle crews who seek to operate with open turrets, doors, and vision slits in order to improve their field of view. Circumstances relative to the direction of attack of armored vehicles, their proximity to defending infantry, the matter of ammunition supply, the unnecessary disclosure of the position of crew served weapons, conditions of low visibility, and the presence of accompanying hostile infantry will determine how and to what extent small arms fire should be employed against such vehicles. Defenders employing small arms fire against hostile armored vehicles or the accompanying infantry, will continue to fire until they are forced to take cover to protect themselves and their weapons from the crushing action of such vehicles.

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(3) Antitank rifle grenadiers, rocketeers, and other individuals armed with antitank weapons engage all armored vehicles that come within effective range and continue their attack until vehicles are destroyed or have passed beyond range. If not required to engage accompanying hostile infantry, other personnel attack armored vehicles with incendiary or chemical grenades at the instant the vehicle passes over or beyond them.

(4) Antitank guns are sited to cover likely avenues of tank approach into the position, cover obstacles and mine fields, and provide mutual support. Fire is opened only when it can be delivered with killing effect. Every effort is made to prevent the premature disclosure of the guns.

(5) When a tank attack penetrates through the position, local commanders take immediate action to close any gap created, using local supports and reserves.

[A. G. 062.11 (11–29–42).] (C 2, Dec. 2, 1942.)

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:
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The Adjutant General.

U. S. GOVERNMENT PRINTING OFFICE: 1942

CHANNON, R. L.

FM 7-40

INFANTRY FIELD MANUAL

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RIFLE REGIMENT

Prepared under direction of the
Chief of Infantry

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WAR DEPARTMENT,
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BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
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(For explanation of symbols see FM 21–6.)

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INFANTRY FIELD MANUAL

RIFLE REGIMENT

CHAPTER 1

GENERAL

■ 1. REFERENCES.—For the general characteristics, organization, and tactics of infantry and its operations with other arms, see FM 7–5. For the organization and operations of the headquarters company and its components, see FM 7–25. For the organization and operation of the service company and medical detachment in regimental supply and evacuation, see FM 7–30. For the organization and tactics of the antitank company of the rifle regiment, see FM 7–35. For the general doctrines of troop leading and combat, see FM 100–5.

■ 2. SCOPE.—*a.* This manual deals primarily with the tactical employment of the infantry rifle regiment. The instructions are also applicable in many respects to other types of infantry regiments.

b. The procedures indicated in this manual should be considered as guides and not as fixed methods. Fixed rules and methods must be avoided; they limit the imagination and initiative which leaders must have to achieve success in battle, and they give the enemy a set pattern upon which to base his countering operations.

c. This manual should be studied in conjunction with FM 100–5 and FM 7–5.

■ 3. COMPOSITION.—*a. Organic units.*—(1) The infantry regiment, rifle, consists of the following (see fig. 1):

Headquarters.
Headquarters company.
Service company.
Antitank company.
Three rifle battalions.
Medical detachment (attached).
Attached chaplains.

(2) When specifically authorized, a regimental band may be organized and made a part of the regiment.

(3) The details of organization, the allotment of weapons, and the distribution of the major items of equipment and transportation are shown in Tables of Organization and Tables of Basic Allowances. Modifications are made from time to time in accordance with developments in weapons, equipment, and organization, and to meet changing conditions of warfare.

b. Motor transport.—The motor transportation of the regiment is divided functionally into company transport and regimental trains. Those vehicles which are used primarily for tactical purposes (command and reconnaissance, transport of weapons, and signal communication) are called company transport. Those which operate for purposes of supply, maintenance, and evacuation (kitchen and baggage, ammunition, maintenance, and medical detachment vehicles) constitute the regimental trains. Medical train vehicles are assigned to the medical detachment; all other vehicles of the regimental trains are assigned to the service company (see FM 7–30).

c. Attachments.—The regiment may have elements of other arms and services attached. The regimental commander coordinates their action with that of his own units.

■ 4. ROLE OF INFANTRY REGIMENT.—*a.* The infantry regiment, rifle, usually operates as a major element of a larger force (brigade or division). Its mission is assigned by the higher commander. Its movement and action are coordinated with other units of the larger force to assure the accomplishment of the mission of this force.

b. Exceptionally, the rifle regiment may be assigned an independent mission.

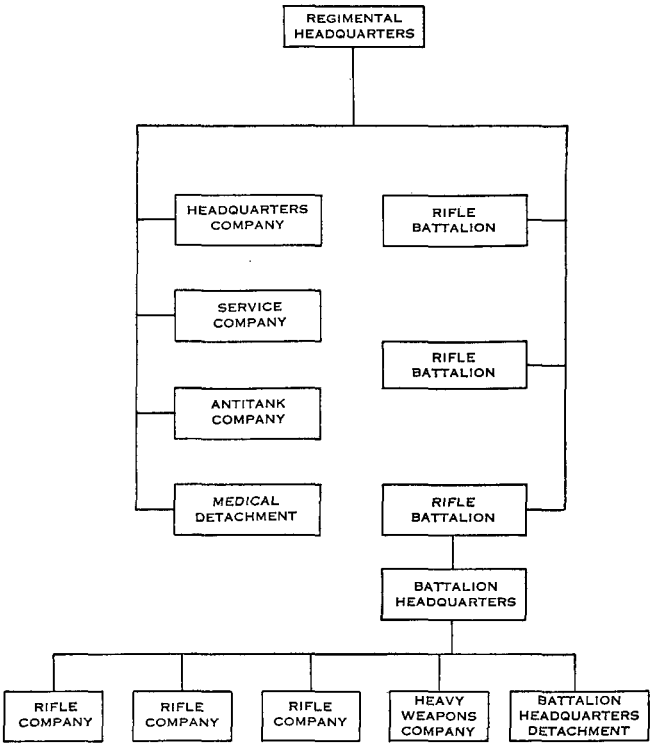


FIGURE 1.—Infantry regiment, rifle

NOTE.—The medical detachment is permanently attached to the regiment and is one of its integral parts.

CHAPTER 2

REGIMENTAL COMMANDER

■ 5. REFERENCES.—See FM 100–5 and FM 7–5 for the doctrines of operations and the qualities of leadership; FM 100–10 for administration; FM 101–5 for staff duties and combat orders; FM 101–10 and FM 7–55 for organization and technical and logistical data.

■ 6. GENERAL.—*a.* Decisive action is a prime requisite for a successful regimental commander. He inspires confidence in his subordinates by decisive action and by his ability to gain material advantage over his adversaries and to overcome obstacles. The aggressive characteristics of the regimental commander influence individual and collective conduct and performance throughout his entire command.

b. The regimental commander personally controls the regiment and is responsible for its condition and operations. He meets this responsibility by anticipation; by timely decisions, plans, and orders; and by supervision of execution. His professional knowledge must include a thorough understanding of the combat and service elements in the regiment and of their tactical and technical employment, and a general understanding of the employment and limitations and capacities of units of other arms that may be associated with the regiment in combat.

c. In preparation for combat, the mission of the regimental commander is to bring his unit to a high state of training and combat proficiency. In carrying out this training mission, he subordinates administration to training, and thus insures that the training for combat of individuals and small units is a continuing process. He promotes group feeling within the regiment and cooperative action between its various parts. He encourages initiative, ingenuity, and aggressiveness throughout all echelons of the regiment. Having indicated his policies and given his directives, he allows his staff and subordinates the maximum freedom of action in order to foster self-reliance and initiative. To simplify and expedite the action of the regiment in combat, the regimental commander prescribes brief standing operating procedures covering the action to be taken in matters that lend them-

selves to routine handling without loss of effectiveness (see par. 62).

■ 7. EXERCISE OF COMMAND.—*a.* The regimental commander must make his authority felt and cause his will to be obeyed by each individual member of his command. He exercises his authority by means of orders and personal supervision. He observes the doctrines of command enunciated in FM 100–5. His orders are based on an estimate of the situation culminating in a decision (see pars. 52 to 54, incl.).

b. Whenever the situation requires, the regimental commander obtains the views of his staff officers and principal subordinates before he announces his decisions and issues his orders. However, he alone is responsible for what his unit does or fails to do.

■ 8. RELATIONS WITH STAFF.—*a.* The regimental commander makes all major decisions for the operations of the regiment. He is provided with a staff to relieve him of the details of planning and administration; to act as his agents in coordinating the plans and operations of the various units and services under his command; to prepare detailed orders for the execution of his plans; and to assist him in supervising the execution of these orders. He must use his staff judiciously for its intended purpose in order that he may devote himself to his most important command duties.

b. He encourages his staff officers to submit suggestions and recommendations. He supports the action taken by staff officers in carrying out his directives and policies. However, he does not hesitate to correct them and rectify their mistakes.

c. The regimental commander promotes cordial, cooperative relations between individuals of his staff and between them and unit commanders. He makes direct personal contact habitual procedure within the staff. He encourages similar procedure between staff officers and commanders of subordinate units, but requires that he be kept informed of important transactions.

d. The commander inspires the utmost efforts from his staff. He causes staff work to be properly organized, distributed, and simplified in order that excessive strain will not be placed upon individuals.

■ 9. RELATIONS WITH SUBORDINATE COMMANDERS AND TROOPS.—The relations of the commander with the commanders of

subordinate units are similar to the relations maintained with the staff. He spends considerable time with his unit commanders and their men. He makes inspections and informal visits during which he talks to individuals and to groups. During combat such visits promote confidence, respect, and loyalty. They give the commander first-hand knowledge of the tactical situation and of the needs and capabilities of his units. In issuing instructions, however, the regimental commander does not interfere with the command responsibilities of his subordinates except in emergencies.

■ 10. RELATIONS WITH COMMANDERS OF ASSOCIATED UNITS.—*a.* When units of other arms and services are attached to an infantry regiment they become a part of the regimental commander's command and are subject to his decisions and orders. The commander of an attached unit acts as technical adviser to the regimental commander on matters pertaining to the employment of the attached arm or service and its weapons or equipment.

b. When a unit of another arm or service supports the regiment but is not attached, the regimental commander may request, but cannot order, the desired assistance. Ordinarily his request is met unless this is impossible with the means available or is in conflict with the orders of higher headquarters.

c. Definite action must be taken by the regimental commander to insure full and complete liaison between his regiment and other units that may be operating with or supporting the operations of the regiment. Such units must be kept informed as to the movements and plans of the regiment and the locations of its forward elements and command posts in order to insure the maximum coordination and cooperation. (For technical details of signal communication and liaison, see FM 100–5, 101–5, 7–5, and 24–5.)

■ 11. CONDUCT IN BATTLE.—*a.* In combat the regimental commander personally and through his staff provides for—

(1) Reconnaissance and security.
(2) Liaison with higher headquarters and adjacent units.
(3) Timely dissemination of information and orders.
(4) Coordination of effort and cooperation by all units.
(5) Replacement of personnel and supplies.

b. With the assistance of his staff he studies possible contingencies and formulates tentative plans to meet them. So far as applicable to each of them, he makes these tentative plans known to subordinate commanders.

c. During combat it is essential that the regimental commander make reconnaissances and visits to his subordinate commanders and the troops. Before he leaves the command post, he orients his staff as the further plans to be made or measures to be taken in anticipation of future contingencies, and informs the staff of his itinerary and approximate schedule. In order to keep himself continuously in touch with developments and to maintain control of the operation, he keeps in contact with his command post by radio, telephone, or other available means of signal communication. If he has occasion to issue orders while away from his command post, or if he acquires information affecting the general situation, he informs his staff at the first opportunity.

CHAPTER 3

REGIMENTAL HEADQUARTERS AND STAFF

SECTION I

GENERAL

■ 12. REFERENCES.—The organization and functions of staffs are prescribed in FM 101–5.

■ 13. COMPOSITION.—*a.* The regimental staff includes the unit staff; the special staff; the commanders of attached units having no representative on the staff, such as artillery, tank, or engineer units; and liaison officers.

b. The unit staff consists of—

(1) Executive. (See par. 18.)

(2) Adjutant (S–1) and assistant adjutant (personnel officer). (See pars. 19, 20, 27, and 28.)

(3) Intelligence officer (S–2). (See pars. 21 and 22.)

(4) Plans and training officer (S–3). (See pars. 23 and 24.)

(5) Supply officer (S–4) (from the service company). (See pars. 25 and 26.)

c. The special staff consists of officers who command troops or are the heads of technical, supply, administrative, and morale services. Their primary duties are to command their

troops or direct their services. They are consulted when necessary on matters relating to their troops or services, but they do not frequent the command post except when their duties require. The officers who may be considered as members of the special staff are—

(1) Headquarters commandant (company commander, headquarters company). (See pars. 29 and 30.)

(2) Chaplain. (See pars. 31 and 32.)

(3) Communication officer (platoon leader, communication platoon, headquarters company). (See pars. 33 and 34.)

(4) Gas officer (executive of headquarters company). (See pars. 35 and 36.)

(5) Munitions officer (from the service company). (See pars. 37 and 38.)

(6) Transport officer (from the service company). (See pars. 39 and 40.)

(7) Maintenance officer (from the service company). (See pars. 41 and 42.)

(8) Antitank officer (company commander, antitank company). (See pars. 43 and 44.)

(9) Surgeon (commanding medical detachment). (See pars. 45 and 46.)

■ 14. ORGANIZATION OF REGIMENTAL HEADQUARTERS FOR COMBAT.—The unit staff is so organized that it can function continuously, day and night, throughout an operation. It is organized into two groups, each group capable of functioning while the other group rests. The composition of these groups is decided by the commander who takes into consideration the personalities and capabilities of the members of his staff. For example, he may put the executive and S–2 in one group and S–3 and S–1 in the other. The free or slack hours of S–4 seldom are fixed. The executive or S–3 may be designated to represent S–4 when he is resting. In certain situations it may be practicable to have the service company commander act as assistant S–4.

■ 15. STAFF OFFICER.—*a.* "A staff officer as such has no authority to command" (FM 101–5). Whenever a staff officer issues an order it is only to transmit the orders or desires of the commander. If a particular order has not been specifically authorized by his commander, the staff officer who issues it must inform his commander without delay of its content.

b. The staff officer assists his commander in the exercise of command, by relieving him of time-consuming and distracting details and presenting to him at the appropriate times comprehensive pictures of the essential facts and, in the light of those facts, feasible courses of action. He keeps himself posted on the situation and is prepared to make recommendations when they are called for, or voluntarily when material changes in the situation indicate specific recommendations.

c. The staff officer should be helpful to the commanders of subordinate units and cultivate friendly relations with them. He should consult them freely to determine the needs and capabilities of their units and the problems confronting them. He must visit the troops frequently to find out first-hand what conditions exist and how regimental headquarters can be of assistance. Before making a visit, the staff officer reports to the intervening commanders, stating the object of the visit. When he leaves he usually reports again, telling what he has seen and what action he intends to take. In his visits to lower units he should never assume the role of critic. He should not infringe upon the responsibility of subordinate commanders. However, he should offer suggestions for corrective action when he observes matters at variance with the commander's known desires. He must be meticulous in bringing about corrections through the commanders concerned and not by orders to individuals. Only in emergencies should he resort to the latter procedure, and should then report his action to the commander concerned.

d. In order to be able to make reconnaissances and visits to the troops during combat, the staff officer must organize and train his assistants so they can function in his absence. It is often possible to have one of the other staff officers act for him in his absence. Before he leaves the command post, he acquaints himself with the general situation, the location of all units, and the enemy situation. He announces his destination and probable hour of return, and finds out what he can do on the trip to help the other staff officers. On visits to lower units he acquaints the commanders with the general situation and finds out all he can of their particular situation and knowledge of the enemy, and any other information of value to headquarters.

■ 16. STAFF TEAM.—Each member of the unit staff must be trained to take over the duties of any other member. This is essential in order to organize the staff for continuous operation and to replace staff officers who become casualties or leave the command post for reconnaissances and visits. The proper keeping of staff records (sec. XXI) by each staff section will enable the relieving officer to inform himself quickly of the situation in any staff section he may take over.

■ 17. ENLISTED PERSONNEL.—Enlisted personnel of regimental headquarters comprise—

a. Certain members of the intelligence platoon of the headquarters company.

b. The regimental headquarters section of the communication platoon of the headquarters company.

c. Certain personnel from the regimental headquarters platoon of the service company.

SECTION II

EXECUTIVE

■ 18. DUTIES.—*a.* The regimental executive is the principal assistant to the regimental commander. In the temporary absence of the commander, he makes such decisions as the occasion demands based on the known wishes and policies of the commander. In order to be able to do this, he must keep abreast of the situation and be familiar with the commander's plans. The executive should remain at the command post when the regimental commander is away. If he too leaves the command post he designates the next senior member of the unit staff to represent the commander.

b. The executive performs those duties delegated to him by the commander, and in general those outlined for the chief of staff in FM 101–5. He adapts himself to the role assigned him by his particular commander. He relieves the commander of details, particularly those of an administrative nature. He sees that the commander is kept informed of matters pertaining to the strength, morale, organization, training, equipment, supply, and tactical situation of the regiment. He brings to the commander's attention all matters requiring correction. He presents facts concisely with appropriate recommendations. He amplifies decisions made by the commander.

c. The executive coordinates the activities of the staff. He sees that its members cooperate and exchange information. He transmits the instructions and decisions that the commander gives him. He examines the reports, plans, and orders prepared by members of the staff for correctness, completeness, clarity, and brevity. He causes staff officers to verify the execution of orders. He supervises the keeping of the unit situation map (see par. 65).

SECTION III

ADJUTANT (S–1)

■ 19. GENERAL.—*a.* The regimental adjutant is S–1 on the regimental staff, and is responsible for the work of the S–1 section when the entire section is together.

b. The S–1 section is divided into the adjutant's group and the personnel officer's group. The adjutant's group consists of the adjutant, the regimental sergeant major, and one or more clerks of the staff section of the service company. (For the personnel officer's group, see par. 27.)

■ 20. DUTIES.—*a.* The adjutant has duties similar to those outlined in FM 101–5 for the adjutant general and for the G–1, excluding those duties inapplicable to the infantry regiment or charged to the personnel officer. In post or camp the adjutant is assisted by the personnel officer, who is designated assistant adjutant, but during combat the personnel officer and his group are in the division or corps rear echelon or in the regimental train bivouac, while the adjutant and the regimental sergeant major with one or more assistants are at the regimental command post.

b. Under field service conditions the specific duties of the adjutant (S–1) may include—

(1) Securing replacements of personnel and making arrangements for receiving, processing, assigning, and quartering them.

(2) Securing means for recreation and for maintaining or building the morale of the unit. He works with the chaplain on religious, recreational, and welfare matters and he supervises nonmilitary agencies.

(3) Taking measures to secure decorations, citations, honors, and awards as prescribed in regulations.

(4) Maintaining strength reports, casualty reports, prisoners of war reports, and reports relative to enemy civilians (when applicable).

(5) Maintaining the unit journal (see secs. XXI and XXII).

(6) Arranging the interior of the command post including the allotting of space to the commander and staff sections, and supervising movements of the command post (see *c* below).

(7) Allotting of space or areas for camps, bivouacs, or other quarters of the regiment (see *d* below).

(8) Supervising mail clerks and arranging for mail distribution and collection.

c. The adjutant (S–1) normally is responsible for the interior arrangement of the command post, and the headquarters commandant is responsible for the movement and installation of command post impedimenta. If necessary the headquarters commandant may also be charged with the interior arrangement and S–1 relieved of this duty.

d. Ordinarily the headquarters commandant is placed in charge of quartering parties and quartering arrangements in camp or bivouac (see pars. 30 and 143). Otherwise, S–1 is responsible for—

(1) Composition of quartering parties, their time and place of reporting, rations and equipment to be taken, and arrangements for occupying selected sites.

(2) Assignment of areas to subordinate units under general instructions prepared by S–3.

(3) Arrangements for the comfort of troops, including facilities obtainable from the local community.

e. S–1 visits battalions and companies whenever neeessary to obtain information relative to casualties, replacements required, and the actual strength of units. He obtains data relating to the foregoing from reports of subordinate units received by S–3 and S–2. He keeps the commander informed of the strength of the command.

f. S–1 keeps in close touch with the tactical situation and the activities of other staff officers, so that he may take over their duties when necessary. (See also FM 101–5.)

SECTION IV

INTELLIGENCE OFFICER (S–2)

■ 21. GENERAL.—*a.* The regimental intelligence officer is S–2 on the regimental staff and during tactical training and in operations is commander of the intelligence platoon of the regimental headquarters company.

b. S–2 is assisted in his staff duties by certain members of the intelligence platoon. The remainder of the platoon serves as the special intelligence agency of the regimental commander for the collection of information under the supervision of S–2. The platoon is also charged with counterintelligence measures and surveillance.

c. For the doctrines governing combat intelligence, see FM 100–5; for the general considerations and special aspects of combat intelligence, see FM 30–5. For the operations of S–2 and the regimental intelligence platoon, see FM 7–25.

■ 22. DUTIES.—The regimental intelligence officer has both staff and command duties. These include—

a. Special training of regimental intelligence personnel, and such supervision of intelligence and counterintelligence instruction within the regiment as directed by the regimental commander.

b. Preparation of intelligence plans and of orders to information collecting agencies. (Orders to intelligence platoon direct; to other units through S–3.)

c. Coordination of regimental information collecting agencies. Maintenance of liaison and exchange of information with intelligence agencies of subordinate, higher, and neighboring units.

d. Recording, evaluating, and interpreting information; and distributing information and military intelligence to the commander, interested staff officers, and higher, subordinate, and neighboring units.

e. Command of the intelligence platoon in tactical training and in operations.

f. Examination of enemy personnel and captured documents and material for information of immediate importance to the regiment.

g. Procurement and issue of maps, aerial photographs, and photomaps. He determines the needs of the regiment,

prepares requests to be sent to the division, and supervises distribution.

h. General supervision of counterintelligence measures within the regiment. (See also FM 101–5.)

SECTION V

PLANS AND TRAINING OFFICER (S–3)

■ 23. GENERAL.—*a.* The plans and training officer (S–3) is concerned primarily with the training and tactical operations of the regiment.

b. S–3 is assisted by an operations sergeant and clerical personnel from the staff section of the regimental headquarters platoon of the service company. S–3 is responsible for the training of his assistants. He trains them to keep the staff records and situation map, to make operation maps, overlays, and sketches, and to prepare routine paper work.

■ 24. DUTIES.—The duties of S–3 include—

a. Assembly of facts to assist the commander in his preparation of the estimate of the training situation.

b. Formulation of training plans for the regiment in accordance with the commander's directive.

c. Preparation and coordination of plans for and supervision of—

(1) Allocation and use of training facilities.

(2) Organization and conduct of regimental schools.

(3) Allocation of equipment (coordination with S–4).

(4) Assignment of replacements (coordination with S–1).

(5) Troop movements (coordination with S–4 on matters of transportation and supply).

(6) Distribution of troops in bivouac, assembly areas, and in combat (coordination with other staff officers concerned).

(7) Reconnaissance and security measures (coordination with S–2).

d. Maintenance of training records and preparation of reports of training.

e. Continuous study of the tactical situation and preparation of tactical plans (coordination with S–2 and S–4).

f. Preparation of field orders and operation maps (coordination with other staff officers; see sec. XX).

g. Planning and supervision of liaison with higher, adjacent, and subordinate units.

h. Posting of S–3 data on the situation map.

i. Preparation of tactical reports as required by the executive.

j. Supervision of signal communication and advance planning for special signal communication measures. (See also FM 101–5.)

SECTION VI

SUPPLY OFFICER (S–4)

■ 25. GENERAL.—*a.* The regimental supply officer (S–4) supervises the regimental supply service and is responsible to the regimental commander for its functioning in accordance with the orders of higher headquarters and the tactical plan of the regiment. His duties require him to keep in close touch with S–3 and the tactical situation, with the service company, with subordinate commanders and the troops, with the division G–4, and with all supply installations.

b. S–4 is assisted by certain members of the supply section of the regimental headquarters platoon of the service company. These constitute the supply office group. S–4 supervises their training and operation.

c. The service company commander is the principal assistant of S–4 in the execution of the regimental supply plan, except for class V supply. He commands the regimental train bivouac and operates from it. He is kept fully informed of supply plans and uses the personnel and facilities of the service company in their execution.

d. The munitions officer is assistant to S–4 in all matters involving ammunition and other class V supply (see sec. XII).

e. For details of supply operations, see FM 7–30.

■ 26. DUTIES.—The duties of S–4 include planning for and supervising matters concerning the following:

a. Procurement, storage, transportation, and distribution of all supplies except emergency medical supplies.

b. Location of supply, medical, and maintenance installations.

c. Maintenance of equipment.

d. Salvage (as directed by higher authority).

e. Collection and disposal of captured supplies (coordination with S–2 for examination of material and with division G–4 for disposition).

f. Evacuation of personnel.

g. Traffic control (coordination with S–3 and headquarters commandant).

h. Recommendations concerning protection of the regimental train bivouac and other rear installations (coordination with S–3).

i. Property responsibility and accountability.

j. Preparation of administrative plans, paragraph 4 of written field orders, and fragmentary administrative orders (see sec. XX). (See also FM 101–5.)

SECTION VII

PERSONNEL OFFICER

■ 27. GENERAL.—*a.* The personnel officer heads the personnel officer's group of the S–1 section. This group includes the regimental personnel sergeant and designated clerks from the staff section of the service company; it may include one clerk from each company of the regiment. It maintains the company and regimental records, reports, rosters, returns, files, and correspondence prescribed by AR 345–5.

b. The personnel officer is designated as assistant adjutant. In the field the personnel officer's group may be separated from the regiment and located at the rear echelon of division or corps headquarters; otherwise it operates in the regimental train bivouac.

■ 28. DUTIES.—In general the personnel officer is charged with the preparation, maintenance, and safekeeping of all records, documents, correspondence, and statistics of a personnel and administrative nature that are not required to be kept at the command posts of the companies, the battalions, or the regiment (see AR 345–5). He is responsible under the adjutant for the administration of all company and detachment personnel records of which the regimental adjutant is custodian. (These do not include basic company records retained by company commanders.) (See AR 345–5.) He is charged with the custody of company funds when the companies go into combat or when in the opinion of the regimental 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 and returns the funds to the permanent custodians

when the situation permits. (See TM 12–250.) He is also charged with the training of personnel to replace clerks with the regimental staff.

SECTION VIII

HEADQUARTERS COMMANDANT

■ 29. GENERAL.—*a.* The commanding officer of headquarters company is the headquarters commandant.

b. He is assisted by personnel of his company headquarters group. The regimental color sergeants may be detailed for duty under supervision of the headquarters commandant.

■ 30. DUTIES.—*a.* The duties of the headquarters commandant include the following:

(1) Marking of routes and supervision of guides and advanced details for a march.

(2) Acting as quartering officer under, or in place of, S–1.

(3) Supervision of the physical movement of the command post, and furnishing the necessary men and transportation from company headquarters.

(4) Supervision of the messing and quartering of command post personnel.

(5) Provision for the security of the command post in combat, using available personnel of his company headquarters and such combat troops as may be detailed for the purpose.

(6) Provision for the concealment of the command post from ground and air observation (see sec. XXII).

(7) Enforcement of traffic control regulations within the regimental area.

(8) Custody and evacuation of prisoners of war; selection of regimental prisoner-of-war collecting point (coordination with S–2).

(9) Custody and return of stragglers to organizations.

b. Some of the duties listed in *a* above may be performed by S–1, and some of the duties normally charged to S–1 may be assigned to the headquarters commandant (see par. 20).

SECTION IX

CHAPLAIN

■ 31. GENERAL.—The chaplain is adviser to the commander and staff on all matters dealing with the spiritual and moral welfare of the command.

■ 32. DUTIES.—The duties of the chaplain are outlined in FM 101–5 and are more specifically covered in AR 60–5 and in TM 16–205.

SECTION X

COMMUNICATION OFFICER

■ 33. GENERAL.—*a.* The commander of the communication platoon of headquarters company is the regimental communication officer. As a special staff officer he is adviser to the regimental commander and staff on matters of signal communication technique. He prepares the plans and recommendations for the regimental communication system. As commander of the communication platoon and of the regimental section of the platoon, he is charged with establishing, operating, and maintaining the regimental communication system.

b. The regimental commander is responsible for the installation, operation, and maintenance of the regimental communication system, and for supervision of the systems of his battalions in accordance with signal operation instructions of higher units. His orders for the tactical employment of the regiment include provisions for signal communication. He usually exercises his control of signal communication and supervision of the communication officer through S–3. S–3 sees that the technical plan of signal communication fits and serves the tactical plan of operations.

■ 34. DUTIES.—*a.* In addition to his normal duties of command of the communication platoon and direction of the operations of the regimental section, the regimental communication officer has the following staff duties:

(1) Such supervision of the technical training of communication personnel throughout the regiment as may be delegated to him by the commander.

(2) Technical advice and assistance to S–4 regarding the supply of signal communication material for the regiment.

(3) Plans and recommendations for establishing a system of signal communication throughout the regiment during combat and technical supervision of the system to insure maximum coordination within the regiment and between it and the systems of adjacent, supporting, attached, and higher units.

(4) Recommendations for the initial and successive locations of the command post of his own unit, if these have not been prescribed by higher authority, and for the next subordinate units when practicable.

(5) In combat, preparing or securing from higher headquarters such orders and signal operation instructions as may be needed to insure tactical and technical control of the signal communication system of his unit. Distribution of such orders and signal operation instructions throughout his unit.

(6) Recommendations for procurement and replacement of signal communication personnel.

b. For the detailed duties of the communication officer in combat, and for the manner of performing these duties, see FM 7–25.

SECTION XI

GAS OFFICER

■ 35. GENERAL.—The executive officer of headquarters company is the regimental gas officer. He is adviser to the regimental commander and staff in all matters involving the use of gas and smoke and the defense against chemicals (see FM 21–40).

■ 36. DUTIES.—The duties of the gas officer include the following:

a. Recommendation to S–4 concerning the supply of chemical munitions and antichemical protective equipment.

b. Supervision and coordination of gas defense training in the regiment and periodic inspections of gas defense equipment.

c. Supervision of the installation and maintenance of gas defense measures.

d. Supervision of the use of decontaminating agents.

e. Supervision of gas reconnaissance of routes and areas before their use by troops.

f. Recommendations concerning the use of chemicals and smoke.

g. Recommendations for standing orders concerning gas defense measures.

h. Study of types and characteristics of chemicals and chemical equipment used by the enemy, and his methods of employing them.

SECTION XII

MUNITIONS OFFICER

■ 37. GENERAL.—The regimental munitions officer is a member of the service company and an assistant of S–4.

■ 38. DUTIES.—*a.* The munitions officer's duties in combat include—

(1) Procuring ammunition and other class V items from the supply point designated by higher headquarters and distributing them to battalions and other combat units in accordance with the approved plan and unit needs.

(2) Establishing, operating, and moving the regimental ammunition distributing point.

(3) Keeping informed of the ammunition needs of subordinate units.

(4) Keeping ammunition records and preparing ammunition reports required by the regiment.

(5) Commanding elements of the regimental ammunition train not released to lower units.

b. The detailed procedure of ammunition supply is covered in FM 7–30.

SECTION XIII

TRANSPORT OFFICER

■ 39. GENERAL.—*a.* The commander of the transportation platoon of the service company is the regimental transport officer. The personnel and vehicles of his platoon, together with the medical detachment vehicles and their operating personnel, constitute the regimental train; the vehicles of his platoon comprise the supply and maintenance transportation of the regiment (for composition and use, see FM 7–30).

b. The transport officer must be qualified through training and experience to direct the supply and maintenance operations of the transportation platoon and to advise the regimental commander, his staff, and subordinate commanders in technical aspects of automotive operations and maintenance.

c. The transport officer usually performs his duties under the direct supervision of the service company commander,

who receives orders from the regimental supply officer (S–4) relating to supply and maintenance missions for the service company.

■ 40. DUTIES.—*a.* In general, the transport officer has the normal duties of a platoon commander. He commands those parts of his platoon which are not released to the control of the munitions officer or to subordinate units. He employs elements of his platoon as directed by the service company commander to procure and distribute supplies and perform second echelon maintenance on motor vehicles of the regiment. He assists the service company commander in the establishment, defense, and operation of the regimental train bivouac.

b. For details of his duties in connection with motor maintenance, see FM 25–10. Certain of the duties prescribed in that manual for the motor officer (transport officer) may properly be delegated to the maintenance officer (see par. 42).

SECTION XIV

MAINTENANCE OFFICER

■ 41. GENERAL.—*a.* Motor operations and maintenance are functions of command. Continuous and efficient operations require that all command personnel give to maintenance activities the necessary time and effort to obtain desired results. Although a regimental commander may properly delegate authority to his subordinates, considerable personal and active control on the part of the commander is necessary to maintain vehicles in a high state of operating efficiency.

b. The commander of the maintenance section of the transportation platoon of the service company is the regimental maintenance officer. He is responsible to the transport officer (commander of the transportation platoon) for the operations of the maintenance section. He must be qualified through training and experience to supervise motor maintenance operations and to advise his superiors and unit commanders regarding maintenance matters and the condition of vehicles in the regiment.

c. The maintenance section is charged with performing second echelon motor maintenance for all units of the regiment, except such second echelon maintenance as can be

performed in the companies having assigned motor mechanics.

d. Second echelon maintenance embraces preventive maintenance adjustments, minor repairs, and unit replacements within the limits of the time available, utilizing hand tools and light portable equipment authorized in Tables of Basic Allowances.

e. For details of automotive maintenance, methods, and procedure, see FM 7–30 and 25–10.

■ 42. DUTIES.—The specific duties of the maintenance officer are prescribed by his unit commander. Details of the duties he must perform in connection with maintenance are contained in FM 25–10 under the duties of the motor officer and maintenance procedure. Certain of the motor officer's duties pertain to the transport officer and others to the maintenance officer. An appropriate division is made by the service company commander.

SECTION XV

ANTITANK OFFICER

■ 43. GENERAL.—The company commander of the regimental antitank company is the antitank officer. He advises the regimental commander and staff on matters pertaining to defense against armored vehicles. He maintains close contact with S–3; he may submit his recommendations through S–3 and usually receives the commander's orders through S–3.

■ 44. DUTIES.—The duties of the antitank officer include—

a. Recommendations for the antimechanized defense of the regiment to include procurement and use of antitank mines and the location and construction of antitank obstacles.

b. Establishment and supervision of antimechanized warning system in coordination with the regimental S–2 and the communication officer, and coordination of this system with the observation system of supporting artillery, and with similar systems in adjacent and higher units.

c. Execution of missions assigned to regimental antitank company.

d. Coordination of all antimechanized activities within the regimental area and coordination of these activities with the measures taken by higher and adjacent units.

SECTION XVI

SURGEON

■ 45. GENERAL.—*a.* The regimental surgeon commands the regimental medical detachment and supervises the medical service of the regiment. He advises the regimental commander and staff on all matters pertaining to the health of the command and the sanitation of the regimental area; the training of all troops in military sanitation and first aid; the location and operation of medical establishments and the evacuation service.

b. For the duties and operations of the medical detachment and the evacuation service, see FM 7–30 and 8–10. For military sanitation and first aid, see FM 21–10; for field sanitation, FM 8–40. For records of sick and wounded, see FM 8–45; for medical reference data, FM 8–55.

■ 46. DUTIES.—*a.* The regimental surgeon performs the following duties:

(1) He supervises the instruction of the regiment in personal hygiene, military sanitation, and first aid.

(2) He makes medical and sanitary inspections and keeps the regimental commander informed of the medical situation in the regiment.

(3) He establishes and operates the regimental dispensary and supervises the operation of battalion dispensaries.

(4) He requisitions for medical and dental supplies and equipment required by the medical detachment.

(5) He prepares the medical plan, including recommendation for the location of the regimental aid station.

(6) He arranges with the division surgeon for the evacuation of casualties from aid stations.

(7) He verifies the status of medical supplies in all units of the regiment and takes steps to insure timely replenishment.

(8) He supervises the collection and evacuation of wounded.

(9) He supervises the preparation of casualty lists and other required records pertaining to the medical service.

b. Detailed duties of the surgeon are contained in Army Regulations and in FM 8–10.

SECTION XVII

COMMANDERS OF ATTACHED UNITS

■ 47. GENERAL.—Commanders of attached units are advisers to the regimental commander and staff on matters pertaining to employment of their units.

■ 48. DUTIES.—The staff duties of commanders of attached units include—

a. Submitting plans and recommendations to the regimental commander and staff for the tactical employment of their units.

b. Assisting S–3 in the preparation of the parts of the field order which concern their units.

c. Keeping the commander and staff advised of the combat capabilities of their units.

SECTION XVIII

LIAISON OFFICERS

■ 49. GENERAL.—Liaison officers are officers sent to or received from other units for the purpose of promoting cooperation and coordination by personal contact.

■ 50. DUTIES.—A liaison officer represents his commander at the command post to which he is sent. For detailed duties see FM 100–5 and 101–5.

SECTION XIX

ESTIMATE OF THE SITUATION

■ 51. GENERAL.—The estimate of the situation is a logical process of reasoning by which a commander considers all available data affecting the military situation and arrives at a decision as to a course of action, including the expression of his decision.

■ 52. ESTIMATE AND DECISION.—*a. General.*—The form for an estimate of the situation is described in FM 101–5.

b. Use of form for estimate of the situation.—Seldom will the regimental commander have time to write out an estimate of the situation. However he should accustom himself to thinking logically to a sound decision whenever he makes a mental estimate of any situation. To this end he should

be familiar with the form given in FM 101–5 and with the essential factors to be considered in making an estimate of a tactical situation.

■ 53. CONTINUING ESTIMATE.—The regimental commander, assisted by his staff, must make a continuous estimate of the situation throughout an operation. He may make a partial decision and plan, and as the situation develops, complete them. With each change in the situation he must revise his estimate and decide whether to change or continue his line of action. He and his staff must be constantly thinking ahead and making plans for future operations and for contingent situations that may develop, so that orders may be issued promptly when any plan must be put into effect.

SECTION XX

COMBAT ORDERS

■ 54. PREPARATION OF ORDERS.—*a.* After arriving at a decision, the regimental commander may call upon members of his staff for additional recommendations or information needed to prepare the orders for the operation.

b. Orders must be clear and explicit and as brief as is consistent with clarity; short sentences are easily understood. *Clarity is more important than technique.* Detailed instructions for a variety of contingencies or prescriptions that are a matter of training are avoided. Trivial, meaningless, or bombastic expressions weaken the force of an order.

c. Orders should prescribe only so far as conditions can be foreseen. Orders which attempt to regulate matters too far in the future result in frequent changes.

d. The orders of the regimental commander should not be mere repetitions of those from higher authority with required additions; new orders are more satisfactory.

e. For the technique employed in the preparation of field orders, see FM 101–5.

■ 55. TYPES OF ORDERS AND THEIR ISSUE.—*a.* Combat orders are classified as field orders, administrative orders, and letters of instruction. Letters of instruction deal with the strategical phases of operations of large units and regulate operations over a large area for a considerable period of time. Signal operation instructions are a form of combat orders issued

by division or higher commanders for the technical control and coordination of signal agencies. The regimental commander issues administrative instructions in paragraph 4 of his field order or separately in fragmentary form.

b. The regimental commander issues field orders to direct operations or to warn his command of impending operations (warning orders). He may issue written, dictated, or oral field orders in complete or fragmentary form. For details of the form and content of field orders, see FM 101–5.

c. The form of the order and method of issue are determined by the regimental commander when he makes his decision. Principally he considers the time available for orders to reach all the lower units before action is to be initiated. Also he considers the training and experience of subordinate commanders and their units; the location and dispersion of units at the moment; their situation with regard to the enemy; the means of signal communication that can be used; and the routes, weather, and enemy capabilities. He issues orders to subordinate commanders so that they can make reconnaissances and prepare plans while their units are moving forward. In mobile situations he rarely has time to prepare and issue complete written field orders, but usually must issue oral or fragmentary orders. In some situations he may direct that fragmentary orders be issued to initiate necessary action and that more complete orders be prepared for later issue.

d. Field orders are issued direct to subordinate commanders or their representatives, or are delivered to them by staff or liaison officers or special messengers. Fragmentary orders are often transmitted by wire, radio, or visual means of signal communication.

■ 56. ORAL ORDERS.—*a. Receipt of oral order.*—When the regimental commander receives an oral order, he takes the notes necessary to outline his mission and to assist him in planning his own order. His stenographer, if present, records the entire order. The commander's notes must be sufficiently clear and comprehensive to permit his successor to understand the assigned mission should the commander become a casualty.

b. Preparation for issue.—(1) Having received his orders from higher headquarters or being confronted with a situation which requires action that will further the plan of the higher commander, the regimental commander makes his de-

cisions and formulates his general plan. He discusses details with the staff and prepares brief notes for his oral order to insure inclusion of all items to be covered. Where time permits he may issue a directive to his staff as a basis for preparing the substance of his order. A complete oral order follows the sequence for the complete written order prescribed in FM 101–5.

(2) When time and the tactical situation permit the assembly of subordinate commanders, they are advised, as early as practicable, of the time and place of issue. The place of issue preferably is one from which much of the field of operations is visible, but areas exposed to hostile fire are avoided. If subordinates are unfamiliar with the terrain, the regimental commander or one of his staff orients the group on the ground and on the map before the order is issued. Those terrain features involved in the order which can be seen are pointed out. The friendly and hostile situations are described at this time.

c. Issue.—After this orientation, the regimental commander directs his subordinates to take notes and issues his oral order. Much of the data in the order may be placed by subordinates on their own maps if no operation map is furnished them. The commander uses clear, concise language and speaks slowly enough to permit subordinates to understand his instructions and take such notes as may be necessary. After he completes his order, he invites questions, and answers them patiently and thoroughly. When he is sure of mutual understanding, he announces the time and has watches synchronized. Whenever feasible a stenographer records the orders or S–3 makes notes, so that a record of the order may be entered in the journal and confirming copies may be issued.

■ 57. DICTATED ORDERS.—The receiver of a dictated order copies the order verbatim. In all other respects the dictated order is similar to the oral order. Like an oral order, it may be complete or fragmentary.

■ 58. WRITTEN ORDERS.—*a.* Written orders are issued in complete or fragmentary form. The complete written order is described in detail in FM 101–5. Complete written orders are accurate, give detailed information, and lessen the chances

of misunderstanding. However, time may not permit the preparation of the complete written order. The regimental commander will frequently use written fragmentary field orders. When practicable, written confirming orders may be prepared during or after the issue of oral orders and distributed to those concerned at the earliest opportunity.

b. In the preparation of complete written orders (or of notes for complete oral or dictated orders) the staff operates as follows:

(1) The executive coordinates the work.

(2) S–1 and S–4 prepare paragraph 4.

(3) S–2 prepares paragraph 1*a*.

(4) S–3 prepares the remaining paragraphs and assembles the entire order. He may require the communication officer to submit recommendations for the contents of paragraph 5.

■ 59. WARNING ORDERS.—Warning orders give preliminary notice of contemplated action and enable subordinates to make necessary preparations. The warning order should be brief and contain only enough information to permit making preparation for executing the detailed order which is to follow.

■ 60. FRAGMENTARY ORDERS.—*a.* Fragmentary orders are orders to one or more subordinate units affecting one or more phases of an operation. Operation maps, sketches, or overlays having brief instructions written on them may accompany fragmentary orders, or may themselves be the orders.

b. The regimental commander issues fragmentary orders when speed in delivery and execution are imperative. He may issue them orally in person, direct a staff officer to issue them orally, or have them sent as messages.

c. In fragmentary orders adequate information must be included regarding the action of units other than the particular one(s) to which the orders are issued.

■ 61. OPERATION MAP.—*a.* The operation map is a graphic presentation of all or parts of a field order. Little written matter is put on an operation map, other than brief notes and the heading and authentication. Detailed instructions that cannot be shown graphically are put into the oral or written part of the order. The operation map should present a clear picture. FM 101–5 gives examples of the items which may be placed on the operation map.

b. When practicable the regimental commander issues some form of operation map. It may be only a rough sketch or an overlay. The operation map should simplify and clarify the tactical plan for subordinate commanders and serve to shorten the order. Sufficient copies are reproduced to furnish one to each unit concerned. S–3 is charged with the preparation and issue of operation maps. At least one of his assistants is trained to prepare and reproduce them.

■ 62. STANDING OPERATING PROCEDURE.—*a.* Standing operating procedure is routine procedure prescribed to be carried out in the absence of orders to the contrary. In the standing operating procedure of a unit are included standing procedures for those tactical and administrative features of operations that lend themselves to routine or standardized procedure without loss of effectiveness. A standing operating procedure helps to simplify and abbreviate combat orders, expedite operations, and promote teamwork. It is published as an order and governs except when specified otherwise.

b. Each regiment develops its own standing operating procedure conforming to that established by the next higher unit. In effect, the standing operating procedure of a regiment is largely an outgrowth of its training as a team combined with the policies and methods of its commander and of the next higher commander. To be effective, it must be revised from time to time. (See FM 7–55.)

c. Among the matters that lend themselves to inclusion in standing operating procedures are the following:

(1) Composition of combat teams (including attached units).

(2) Composition of motorized detachments, motorized reconnaissance detachments, and motorized patrols.

(3) Responsibility of subordinate units for security against ground and air attack; protection of flanks.

(4) Liaison personnel to be detailed by subordinate units, the occasions when they will report, and places to which they will report.

(5) Employment of signal communication agencies, including provisions for matters such as radio secrecy, special codes, and the use of clear text.

(6) The security and interior arrangement of the command post.

(7) Certain features of intelligence operations. (See FM 7–25.)

(8) Command post procedure.

(9) Instructions relative to marches, such as formations, halts, liaison, and periodic reports.

(10) Quartering parties—including composition and duties.

(11) Traffic control measures.

(12) Certain features of administrative operations.

d. Speed of movement in modern warfare demands a high degree of flexibility and initiative to meet rapidly changing situations, and a commander must not permit a standing operating procedure to *standardize* the tactical operations of his troops or narrow the scope of their training.

SECTION XXI

STAFF RECORDS, REPORTS, MAPS

■ 63. GENERAL.—Staff records should make information readily available; form a basis for reports and historical record; and enable any member of the staff to orient himself quickly concerning the situation of any other staff section he may take over. To enable the staff to function in rapidly moving situations, in the field, at night with little or no light, and under adverse weather conditions, staff records must be reduced to the simplest form and fewest number consistent with the purposes outlined above.

■ 64. JOURNAL.—A form for a journal and a description of its use are contained in FM 101–5. The regimental headquarters keeps one unit journal. It is kept under the supervision of S–1.

■ 65. UNIT SITUATION MAP.—*a.* The unit situation map is a graphic record of the tactical and administrative situation of the unit at any time. The regimental situation map is also a graphic record of known information of the enemy situation. It should not be confused with an operation map (see pars. 55 and 61). In the regimental headquarters the unit situation map is usually maintained by S–3 under the supervision of the executive. It is placed where it is conveniently accessible to the commander and members of the staff, usually in that part of the command post occupied by S–2 and S–3.

b. Military symbols prescribed in FM 21–30 are used on the situation map. Entries are removed as they become obsolete so that the situation map is always up to date. The map may show, as far as they are known, such items as friendly and enemy forces in contact, their supporting troops, assembly areas, obstacles, supply establishments, artillery, observation posts, command posts, and boundaries. Other important information that can be shown graphically may also be entered. When appropriate, the time of origin of the information concerning an item should be entered.

c. Copies or overlay tracings of the map as it stands at the close of given periods may be prepared to accompany unit reports.

d. When a map becomes so marked or worn as to be unserviceable, it is replaced by a new one to which pertinent data are transferred from the old map. The old map is filed as a record.

e. The map may be covered with tracing paper or a sheet of transparent cellulose plastic, so that symbols and notes can easily be entered over points on the map and subsequently erased or revised without obliterating topographic details on the map. The use of such a covering sheet also facilitates transfer to the map of information received in the form of overlay, and protects the map against the weather.

■ 66. WORK SHEETS.—Each unit staff officer of the regiment keeps a work sheet. There is no prescribed form for a work sheet. Any notebook or pad of paper will suffice. In it are entered information and data which are pertinent to the staff section concerned and which are not suitable for entry on the situation map. Data put on the map may also be noted in the work sheet if desirable. The work sheet should be divided into sections, the headings of which are the subjects the staff officer will cover in his part of the unit report described in paragraph 67. Items of information no longer needed are crossed out or torn out of the work sheet. By reference to his work sheet and the unit situation map a staff officer should be able to furnish at any time any information called for.

■ 67. UNIT REPORT.—A form for a unit report and instructions concerning it are contained in FM 101–5. It is pre-

pared under the supervision of the executive. Members of the staff furnish material to be included under topics pertaining to their staff functions. The report may be rendered by personal conference, by telephone or telegraph, or in writing. When the report is rendered by personal conference or in writing it should be accompanied by a situation map, overlay, or sketch.

■ 68. MAPS, OVERLAYS, AND SKETCHES.—Maps, overlays, or sketches showing graphically the situation of the regiment as of a particular time are a valuable aid in shortening and clarifying unit reports sent to higher headquarters, and in clarifying the situation for the regimental commander, staff, and subordinates. Maps, overlays, and sketches are also valuable and simple means which reconnaissance and security detachments and companies and battalions should use to advise the next higher headquarters of their situation and of information of the enemy. Clerical personnel in each infantry headquarters are trained to prepare these graphical reports.

SECTION XXII

COMMAND POST

■ 69. REFERENCES.—For duties of personnel, and installations of the regimental headquarters company at the regimental command post, see FM 7–25.

■ 70. GENERAL.—In the field the headquarters of the regiment and of its subordinate units are called command posts. All agencies of signal communication center at the command post. The regimental commander, the unit staff, and such special staff officers as are required by the commander (usually the headquarters commandant, the communication officer, gas officer, surgeon, and liaison personnel) constitute the command group that operates at and from the regimental command post.

■ 71. ORGANIZATION.—The command post is organized to furnish space and facilities for the commander, each staff section, communication agencies, and such special staff and liaison officers and enlisted personnel as must be present. The command post should be concealed from air observation. The larger installations at the command post should be sepa-

rated to avoid destruction of more than one by a single shell or bomb; preferably the distances between them should be from 35 to 50 yards.

■ 72. LOCATION.—*a.* During tactical marches the regimental command group usually moves by motor near the head of the main body of the regiment. The number of vehicles is held to a minimum; those not necessary for command purposes move at the head of the regimental motor echelon. Part of the regimental communication personnel march near the command group, prepared to furnish signal communication. The command group and accompanying signal communication agencies constitute a march command post.

b. If not prescribed by higher authority, the location of the regimental command post during combat is prescribed by the regimental commander. Recommendations for its location are made to the commander by S–3 following consultation with the communication officer.

c. The command post is so located as to facilitate control of the regiment. Other considerations that influence the location of the command post are: type of tactical operation involved (attack, defense); routes of communication and distance to subordinate units; routes of communication to higher headquarters; cover and concealment; closeness to good observation; and obstacles to mechanized attack. Entrances to towns and villages, crossroads, and other places which attract enemy fire are avoided. An alternate location is selected to which the command post can move if necessary. In the attack the initial locations of infantry command posts are well forward in order to avoid early displacement. In wooded or rolling terrain, command posts can usually be located farther forward than in terrain which offers less cover and concealment. In defensive situations they are generally located in the rear part of their respective areas in order to avoid displacement in the event of a local enemy penetration.

d. The command post should be designated by reference to some terrain feature easily located on the ground and on the map. At this point markers or guides are posted to direct personnel to the exact location.

e. S–1 (or the headquarters commandant), accompanied when practicable by the communication officer, selects the

exact site of the command post in the general vicinity of the designated point.

■ 73. ESTABLISHMENT.—Having selected the exact site, S–1 (or the headquarters commandant) determines the interior arrangement. He designates the space or area to be occupied by the commander, executive, and each staff section. He coordinates the locations of other activities. Usually the regimental commander and executive are placed near each other as also are S–2 and S–3, and S–1 and S–4. The headquarters commandant supervises the movement and setting up of command post equipment. The communication officer directs the installation of communication facilities. Installations are dispersed. Arrangements are made to park motor vehicles in a concealed location whose detection from the air will not disclose the command post. Tents are pitched only at night or when concealment is assured. Sentries are posted to enforce orders relative to camouflage and concealment.

■ 74. OPERATION.—*a.* The command post is organized for continuous operation and to insure the necessary rest for personnel. Staff officers relieve each other and the regimental commander as necessary. Enlisted personnel work in shifts.

b. All incoming messengers go first to the message center. Messages delivered by scheduled messengers are receipted for at the message center and turned over to the sergeant major, who represents the addressee. All other messages are delivered direct to the sergeant major. He supervises the delivery of all messages to addressees, their circulation to interested staff officers, and their return for entry in the unit journal. Staff officers mark on the message any action taken.

c. Outgoing written messages are usually sent through the message center. After the message center chief receives notice that the message has been delivered, he places the duplicate copy in his dead file for entry in the unit journal.

d. Each officer is responsible that a synopsis of each message or order sent or received by him orally, or by telephone or radiotelephone, is sent to the unit journal.

■ 75. DISPLACEMENT.—*a.* When it appears that the command post may have to move, S–3 confers with the communication officer and submits recommendations to the regimental commander. The commander prescribes the new command post location and at the proper time orders the movement made.

The movement must be anticipated and reconnaissance and installations made in time to permit its accomplishment at the desired time. A procedure similar to the following is customary. S–1 (or the headquarters commandant) goes to the new location accompanied by guides and the communication officer with personnel of the communication platoon. He selects the exact site and determines the location of the various installations as indicated in paragraph 73, and the communication officer has signal communication means installed. S–1 then instructs and posts guides to meet the incoming personnel and vehicles and direct them to their places. When signal communication is operating at the new command post, the remainder of the command group moves to the site.

b. A staff officer remains at the old location with enough communication personnel to operate the agencies of signal communication and to close these agencies when they are no longer required.

c. When the command group arrives at the new location, signal communication is closed at the old location. All personnel left behind go to the new location, except a guide left to direct messengers.

■ 76. SECURITY.—The headquarters commandant is responsible for the security of the command post. He is responsible for the camouflage and concealment of installations and vehicles and the enforcement of concealment discipline. He makes plans for alerting command post personnel. When the situation is such that additional troops are needed to protect the command post, he arranges with S–3 to have them detailed. *Hasty entrenchments are dug at the command post to provide individual protection against air and mechanized attack.*

CHAPTER 4

TROOP MOVEMENTS AND BIVOUACS

SECTION I

GENERAL

■ 77. REFERENCES.—For the fundamental doctrines governing troop movements, see FM 100–5. For technical and logistical data pertaining to troop movements, see FM 101–10 and 7–55. For operation of regimental trains, see FM 7–30. For detailed treatment of motor movements, see FM 25–10. For details of march hygiene, see FM 21–10. For forms for march orders, see FM 101–5.

■ 78. TYPES OF MOVEMENTS.—*a.* Troop movements are made by marching, by motor transport, by rail, by water, by air, and by various combinations of these methods. This chapter deals with movements of the infantry rifle regiment made by marching, by motor, and by rail. For movements by air, see FM 100–5.

b. All marches in the combat zone are classed as tactical. While the comfort and convenience of the troops are considered in such marches, the tactical situation necessarily governs.

■ 79. TRAINING.—*a.* The ability of a command to achieve decisive results on the battlefield depends in large measure upon the marching capacity of the troops. While mechanical means of transport are employed extensively for troop movements, sustained mobility in or near the battlefield requires that all troops be thoroughly conditioned to march exertions; therefore, from the first days of training, advantage is taken of every opportunity to condition troops for marching.

b. The regiment will be trained to the point where it can average on foot 15 to 20 miles a day without excessive fatigue

and, under favorable circumstances, march 30 to 35 miles in 24 hours and be fit for battle at the termination of the march.

c. The regimental staff will be trained in the tactical, technical, and logistical procedures concerning marches as prescribed in this manual and in those pertinent references cited in paragraph 77.

■ 80. PREPARATORY MEASURES.—*a. Warning order.*—A warning order for a march is issued by the regimental commander as early as possible in order to afford subordinate units the maximum opportunity for preparation. The warning order should include information that a march is to be made, how it is to be made, and the approximate time it will start. Any other pertinent information that is available, that can be issued quickly, and that does not conflict with secrecy requirements may also be included. Units charged with missions that require special planning or reconnaissance should receive a more detailed warning order.

b. Inspections.—Inspections of personnel and equipment to determine their fitness is an important precaution taken by the commanders of small units prior to a movement.

c. Reconnaissance.—(1) The route of march is reconnoitered and, when necessary and time and the tactical situation permit, is marked. Reconnaissance parties are kept to the minimum. Vehicles move individually at extended distances. Reconnaissance parties are charged particularly with securing information covering the following matters:

(*a*) Type and condition of the road and cross-country routes.

(*b*) Condition of bridges, culverts, and fords.

(*c*) Obstacles, defiles, and bypasses around them.

(*d*) Road blocks, barriers, mines, and other enemy devices affecting the route.

(*e*) Alternate routes.

(*f*) Points at which direction is likely to be lost.

(*g*) Points of probable traffic danger or interference.

(*h*) Location of halt sites.

(2) The regimental commander's order to reconnaissance elements includes such of the following points as are not covered in standing operating procedure:

(*a*) Brief statement of situation which requires the reconnaissance.

(*b*) Mission of reconnaissance party, including routes or area to be reconnoitered, the exact extent and nature of the information to be obtained, and the form of report desired.

(*c*) Personnel, transport, and equipment available for the reconnaissance.

(*d*) Maximum loads expected, maximum over-all lengths, widths, and heights of vehicles when loaded, and minimum turning requirements.

(*e*) Time and place report is to be submitted.

d. Traffic control.—In addition to stationary traffic control posts, at critical points en route, control is exercised by personnel who station themselves at successive critical points as directed. The amount of traffic control required is dependent upon the nature of the route and the traffic control measures provided by higher authority. For details, see FM 25–10.

e. Pioneer work.—Unless provided by higher authority, route repair and other essential pioneer work is undertaken by the regiment with attached engineers or its organic pioneer elements. Engineers or pioneers should accompany the reconnaissance party. For details of pioneer work, see FM 25–10.

f. Trail party.—Arrangements are made for a trail party commanded by a *trail officer*. This party moves at the rear of the motor column or under certain circumstances at the tail of each motor serial. (See sec. V.) The trail party includes such personnel and vehicles as are necessary to assist the trail officer in the performance of the following duties:

(1) Dispatching of individual vehicles or motor march units from the initial point (IP).

(2) Reporting or, where necessary, taking action to correct infractions of discipline.

(3) Preventing unauthorized passing of the column from the rear.

(4) When the column halts, placing necessary guards, flags, or lights to warn traffic approaching from the rear.

(5) Picking up guides, traffic control personnel, and markers.

g. Quartering party.—Provisions are also made for a quartering party whose functions are to subdivide the bivouac area and to facilitate the movement of components of the regiment into their assigned locations by posting guides and marking routes. (See par. 143.)

h. Supply, evacuation, and maintenance.—Arrangements must be thorough for supply, evacuation, and maintenance prior to, during, and at the termination of the movement.

i. March order.—The march order for the regiment may be either written or oral. (See pars. 56 to 61.) Routine details should be covered in standing operating procedure. The order must be issued in ample time to permit the necessary preparations by battalion and separate unit commanders. It may be supplemented by a march graph, a march table, or an operation map. For the form for a march order, see FM 101–5. For march graphs and march tables, see FM 101–10.

■ 81. STANDING OPERATING PROCEDURE.—March planning, march orders, and the conduct of marches are greatly facilitated by the adoption of a standing operating procedure. Accordingly the regimental commander establishes the necessary standing operating procedure for the regiment as a whole and requires his battalion and separate unit commanders to establish similar procedures for their units. For a guide for standing operating procedure, see FM 7–55.

SECTION II

MARCH TECHNIQUE

■ 82. SUBDIVISIONS OF COLUMN.—*a. Serials.*—The designation of serials is principally for convenience and simplicity in the issuance and reading of march orders, including graphs and tables. The determining factor in the decision as to the number of serials necessary will usually be as follows:

A serial should be formed for each unit or group of units to which a single set of instructions in a march table will apply. This usually implies the same initial location, the same initial point, the same route, the same destination, the same restrictions, and the same rate of movement. Insofar as practicable, the infantry regiment on the march is usually divided into a foot serial and a motor serial (foot echelon and motor echelon).

b. March units.—(1) March units are formed to facilitate march control en route, and their size is governed by the size of the unit that can be readily controlled by a single commander. In foot serials, the battalion is a suitable march

unit. Foot elements of organizations not included in the battalions may be attached to the battalions or may be constituted into an additional march unit. The march units for motorized columns should be as small as tactical grouping will permit. March units of from 15 to 25 vehicles are usually satisfactory. Platoons and smaller units should not be divided but should be assigned to a single march unit.

(2) When the situation permits, the order of march units is rotated daily.

■ 83. FORMING THE COLUMN.—A march column is formed by the successive arrival of its component units at an *initial point*. This point should be an easily recognizable or well known terrain feature near all units which are to move, and in their direction of march. Concealment from air observation is desirable. The march order or march table prescribes the initial point and the exact times at which both the heads and tails of the subordinate units pass it. Subordinate commanders calculate the time required to reach the initial point at the prescribed hour and start their commands so that there will be neither delay nor unnecessary waiting at the initial point or elsewhere. Activities at the initial point are supervised by the trail officer (par. 80*f*) or other designated staff officer. (See FM 101–5 and 101–10.)

■ 84. MOVEMENT OF MOTOR ELEMENTS.—Where the situation permits, motor vehicles not required for reconnaissance, security, and control are moved independently of the foot elements. When there is adequate security, it is advantageous to send the motor elements in advance, as they include kitchens and other service facilities, and, as a result of their faster rate of movement, they can be prepared to operate in the new area when the foot troops arrive. However the tactical situation usually requires that the motor echelon of the regiment follow the foot echelon. (See pars. 92*c* and 109*d*(3).)

■ 85. DISTANCES.—Distances between march units and between elements within march units are prescribed by standing operating procedure or for each march in accordance with the situation. For night marches of foot troops there are usually no distances between platoons and companies, and 10 yards between battalions. For road spaces of infantry units, see FM 7–55.

■ 86. CONDUCT OF MARCH.—*a.* The commander of each march unit regulates the rate of march in accordance with instructions issued for the march. For average rates of march, see FM 7–55.

b. When an unforeseen crossing of two columns occurs and no control personnel of a superior headquarters is present, the senior commander regulates the crossing, basing his action on the situation and the mission of each column.

c. Provision for periodic halts should be covered in standing operating procedure. Foot elements, or columns containing foot elements, halt for 15 minutes after the first 45 minutes of marching. Thereafter, troops march 50 minutes and rest 10 minutes. Motor columns usually halt for 10 or 15 minutes after the first hour. Thereafter, halts are made every 2 or 3 hours.

d. Each march unit of foot troops halts and resumes marching simultaneously according to a prescribed time schedule; march units of motor columns may halt and move simultaneously or successively.

e. Ordinarily, troops keep to the right of the road, leaving the left free for passage of other traffic along the column. On muddy, sandy, or dusty roads, or when both sides of the road provide concealment from air observation, or when attack by hostile combat aviation is probable, troops may be directed to march on both sides of the road; the middle of the road is kept clear for other traffic.

f. If on the road at the signal for a halt, troops fall out to the side of the road. The road must be left clear by foot troops at a halt. Motor vehicles clear the road if practicable; if they are forced to halt on the road, gaps are left between march units to facilitate the flow of traffic.

g. Shortly before the termination of the halt, the commander of each march unit gives the preparatory signal for the resumption of the march. Troops fall in, drivers resume their seats. Each march unit moves out at the signal of its commander.

h. Men are not permitted to fall out during the march or to leave the immediate vicinity of their unit during halts without the specific authority of an officer of their unit. An officer marches at the tail of each march unit. He is charged with keeping the unit closed up and with preventing straggling. He examines men who fall out on account of

sickness or sore feet. He gives them a written note to the surgeon or requires them to continue the march.

i. A small guard marches at the tail of the foot echelon of the regiment to control stragglers not admitted to medical vehicles by the surgeon. Stragglers are returned to their unit at the first opportunity.

j. A medical officer and one or more medical vehicles march at the tail of the regiment. The medical officer examines men authorized to wait until he comes by. He admits them to a medical vehicle or authorizes them to put all or part of their arms and equipment on a medical vehicle or on other transportation provided for that purpose, or directs them to report to the guard at the tail of the regiment. For details concerning collection and evacuation of casualties, see FM 100–10 and 7–30.

■ 87. FORCED MARCHES.—*a.* Forced marches impair the fighting power of troops and are undertaken only when necessary. At the end of the march, troops must be in condition to accomplish the object for which the march was made.

b. The length of marches for foot troops is increased by increasing the number of marching hours per day and not by increasing the hourly rate of march. The march may be broken into short stretches by halts of several hours' duration. A long forced march is, in effect, a succession of daily marches of greater than average length with shorter intervals of rest. See forced-march graph, FM 101–10.

■ 88. MOTOR COLUMNS.—For details of march technique of motor columns, see paragraphs 112 to 131, inclusive, and FM 25–10.

SECTION III

DAY MARCHES

■ 89. GENERAL.—Tactical marches by the infantry battalion and regiment are undertaken during daylight hours only when there is little danger of attack from the air or when the mission of the force and the time and space factors demand that the risk be taken. Marches under cover of darkness or conditions of poor visibility are advantageous not only for the security afforded but in the interest of secrecy.

■ 90. SCOPE.—Tactical marches by the infantry regiment by day are covered in this section. Modifications of formations and other provision for marches during hours of darkness are covered in section IV. Motor movements are discussed in section V.

■ 91. FORMATIONS.—*a.* The regiment ordinarily marches in one or two columns whether marching independently or as part of a larger force. Higher authority usually assigns a definite route of march.

b. In some situations a zone of advance instead of a definite route may be prescribed. If a zone of advance is prescribed, the decision as to the number of columns and the selection of march routes rests with the regimental commander. The composition and proximity of hostile ground forces, the activity of hostile aviation, and the available road net in his zone of advance determine in large measure the number of columns and their routes of march.

c. Should the regiment march on an exposed flank, its columns may be echeloned to that flank. If it is an interior regiment, its columns may march abreast, or with one column leading and the other(s) echeloned to the flank(s) and rear.

■ 92. DISPOSITIONS.—*a. General.*—The regiment on the march is disposed so as to provide continuous all-around protection and to permit its rapid development for combat.

b. Foot elements.—The foot elements of the regiment march in column under the protection of the necessary advance, flank, and rear guards with such intervals and distances between elements of the command as the situation dictates. The information relative to intervals and distances in figure 2 is to be used as a guide only.

c. Motor elements.—(1) In tactical marches, the situation precludes a complete separation of foot and motor elements. Security forces require immediate access to their vehicles.

(2) The motor elements, less those employed for reconnaissance, security, and control, and less kitchen and baggage trains, march in a regimental motor echelon in rear of the foot troops of the regiment.

(3) The kitchen and baggage trains, and some maintenance vehicles, are usually held in the old bivouac and moved forward under cover of darkness.

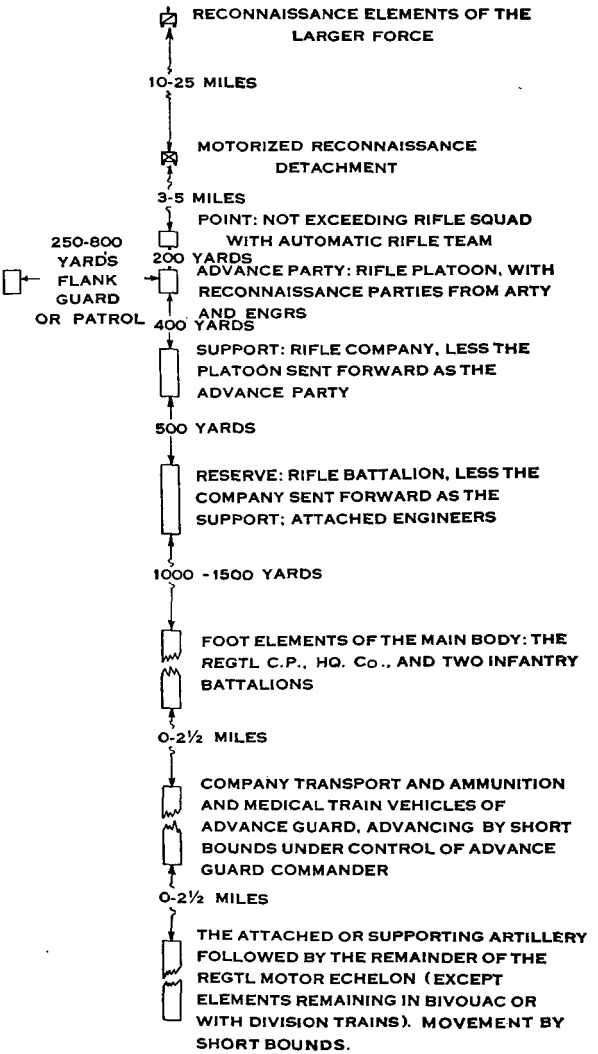


FIGURE 2.—Diagram of route column (to be used as a guide only).

(4) When the regiment marches in more than one column, motor elements march in a generally similar manner in rear of the foot elements to which they pertain.

(5) The order of march within the motor echelon(s) depends upon the probable order of entry into action of the units and vehicles involved. So far as practicable, motor elements advance by bounds from one concealed area to another.

d. Antitank company.—The distribution of the antitank company varies according to the terrain, the hostile mechanized threat, and the location of adjacent march columns. For an interior regiment the most probable direction of hostile armored attack is from the front; therefore the bulk of the company marches well forward in the column, one or more platoons usually being attached to the advance guard. For an exterior regiment with an exposed flank, some of the regimental antitank guns also are attached to the flank and rear guards. For further details of dispositions of the antitank company, see FM 7–35.

e. Attached artillery.—Except for special operations or when the terrain and road net are such that support by the artillery with the main body would be unduly delayed, it is seldom necessary to attach motorized artillery to an advance guard the size of an infantry battalion. It is usual to support an advance guard of this size by motorized artillery with the main body. When the attachment of artillery to an advance guard the size of an infantry battalion becomes necessary, usually one battery is attached. For larger advance guards, the attachment of a battalion of light artillery is usually appropriate. The artillery commander and his party march with the regimental command group. (See FM 6–20.)

f. Engineers.—When engineer troops are attached to the infantry regiment on the march, some or all are attached to the leading elements to facilitate the march. Some may be attached to flank guards to execute demolitions, construct road blocks, and assist in other passive antimechanized measures for the defense of the column. Any foot elements of engineers not attached to security units march near the head of the main body; motor elements not attached to security units march near the head of the regimental motor echelon or

with the motor echelon of the leading battalion of the main body.

g. Other attached units.—Other units attached to the regiment are disposed in the march column in accordance with their combat mission, in the order of their probable entry into combat, and with due consideration for their security and tactical integrity.

h. Command group.—The regimental command group moves in motors in the interval between the main body and the advance guard. The number of vehicles is held to a minimum; those not necessary for command purposes move at the head of the regimental motor echelon.

■ 93. SECURITY ON THE MARCH.—*a.* The regimental commander is responsible for the security of his regiment, regardless of the protective measures taken by higher authority. He prescribes the security measures to be taken for the protection of his command as a whole and coordinates those measures adopted by subordinate commanders. The measures he adopts are appropriate to the hostile threat. As the danger becomes greater, he increases his security measures.

b. Security detachments regulate their movements so as to give the main body the protection required by the tactical situation and the terrain.

c. The regiment protects itself on the march by some or all of the following:

(1) Motorized detachments.

(2) Advance, flank, and rear guards.

(3) Antiaircraft, antimechanized, and antichemical warning systems.

(4) Antimechanized defense.

(5) Antiaircraft security.

■ 94. MOTORIZED RECONNAISSANCE DETACHMENTS.—*a. General.*—In proximity to the enemy, an advancing force secures itself to the front by mobile reconnaissance elements sent out in advance of the command and by an advance guard. (See FM 100–5.)

b. Composition.—A motorized reconnaissance detachment for an infantry regiment should include personnel, transportation, and equipment sufficient to permit formation of one or more motorized patrols, each consisting of three or four vehicles. More than three such patrols will seldom

be needed. The detachment should be under one commander and should be provided with radio facilities permitting two-way communication between the commander and each patrol and between the commander and the regimental command post. The armament of motorized reconnaissance detachments should be light. Vehicles should possess a high degree of cross-country mobility.

c. Operation.—The detachment may be attached to the advance guard or may operate under the control of the regimental commander. One vehicle in each patrol is designated "get-away vehicle"; it follows the remainder of the patrol at the limit of visibility. The remaining vehicles move forward individually by bounds from one observation point to another. One vehicle is always in position to cover the forward bound of the other. In close terrain or conditions of low visibility much reconnaissance on foot will be necessary.

d. Missions.—The motorized reconnaissance detachment reconnoiters far enough to the front and flanks to get timely information of the enemy and terrain and to warn the column of threats by hostile mechanized forces and artillery fire. It may be charged with such missions as reconnoitering routes, clearing away road blocks, and maintaining contact with advance security and reconnaissance elements of higher echelons. Exceptionally it may be charged with seizing and holding critical terrain features. Usually, however, a special motorized detachment of greater strength should be organized for such missions.

■ 95. ADVANCE GUARD.—*a. Mission.*—The mission of an advance guard is to prevent unnecessary delay of the main body and to protect it against surprise and ground observation from the front. (See FM 100–5.)

b. Control.—The march order of the regimental or column commander prescribes the composition of the advance guard, the route or zone of advance, the objective of the march, the hour it will pass (or clear) the initial point, the distance at which the main body will follow, and any special instructions. Routine missions and instructions should be included in standing operating procedures. The regimental or column commander maintains close contact with the advance guard commander and supplies him with all pertinent in-

formation received during the course of the march. When contact becomes imminent he joins the advance guard commander in order to obtain first-hand information upon which to base the development of his command.

c. Strength and composition.—(1) The advance guard of a reinforced rifle regiment marching on foot in proximity to the enemy in daylight will usually consist of a battalion reinforced by a motorized reconnaissance detachment, part of the antitank company, and a detachment of engineers. Artillery support is usually furnished by units with the main body. In some situations artillery and tanks may be attached (see par. 92*e*). When the march is covered by security elements of higher echelons, the advance guard may be as small as a reinforced rifle company. In this situation the regimental commander usually retains direct control of the motorized reconnaissance detachment. Similarly, when contact is remote a reinforced rifle company may suffice.

(2) In retrograde movements the strength and composition of the advance guard will depend upon the likelihood of attack on the head of the column. If the threat is by mobile enemy troops the advance guard should consist of motorized infantry, antitank, and engineer detachments. The requirements for flank and rear guards in such a situation will usually limit the advance guard to a reinforced rifle company.

d. Formation.—From front to rear the advance guard is divided into a motorized detachment (unless retained under regimental control), a point, an advance party, a support, and a reserve (for details, see FM 100–5 and 7–5). In advance guards smaller than a rifle battalion, the reserve is usually omitted and the support takes over its functions. When contact is not imminent and the bulk of the advance guard is able to march in route column, its vehicles usually move by short bounds immediately in rear of the tail of the foot troops of the main body. As combat becomes imminent, weapon carriers of advance guard units are moved forward and released to companies. (See fig. 2.)

e. Operation of advance guard.—(1) The advance guard accomplishes its mission by reconnoitering the terrain to the front and on each side of the line of march, overcoming isolated hostile resistance, and reconnoitering and preparing, so far as practicable, the route of advance for the movement of troops (removal of obstacles, repair of bridges and roads, con-

struction of turn-outs for motor columns). It reconnoiters those points which afford extended observation of the dispositions of the main body or which provide concealment for hostile reconnoitering or harassing detachments. In proximity to the enemy, it seizes and holds important features of the terrain, particularly those that will cover the deployment of the main body and those that provide good observation and defilade for the employment of artillery. According to circumstances, it pushes back hostile covering detachments, or opposes an enemy advance in force long enough to permit the main body to make its dispositions.

(2) As soon as hostile resistance is encountered, the leading elements of the advance guard move on a broader front (see fig. 3). At the earliest indication of contact, the attached artillery begins to displace forward by echelon in order to be prepared at all times to support the action of the advance guard. One echelon occupies position and remains prepared for instant action. Antitank weapons are disposed to prevent infiltration of hostile mechanized elements seeking to attack the main body or rear subdivisions of the advance guard.

(3) The combat action of the advance guard is regulated by the contemplated maneuver of the main body. The mass of the advance guard is therefore put into action only for the purpose of gaining or retaining advantages which contribute to the tactical success or security of the main body.

(4) For conduct of advance guards during long halts, see paragraph 106*b*(3). For conduct during approach march, see paragraph 164.

■ 96. FLANK GUARDS.—*a. General.*—The regimental commander protects an exposed flank by means of a flank guard, and if his command is marching in more than one column he may echelon the columns to that flank to provide additional protection. Ordinarily a flank guard must travel farther and faster than the main body; therefore, whenever possible a flank guard should be motorized.

b. Mission.—The mission of a flank guard is to protect the marching column from ground observation and surprise from the flank, and in the event of an attack in force to provide the necessary time and space for the development of the main body.

c. Strength and composition.—The strength and composition of a flank guard depend upon the protection provided

by higher echelons and adjacent units, the situation, and the terrain. A flank guard for a reinforced regiment may vary from a three- or four-vehicle detachment with rifles and light automatic weapons to an infantry battalion reinforced by artillery, tanks, antitank guns, engineers, and chemical troops, depending upon the degree of danger. Flank guards are given special material such as antitank mines and chemicals and the means for constructing obstacles and executing demolitions. In some situations they are supported by combat aviation.

d. Operation.—(1) The operations of flank guards are conducted with special reference to the routes which favor attack against the flanks of the command. When the locality from which an attack can be expected is well defined, a flank guard occupies a position covering the routes of hostile approach until the command has passed. Infantry on foot assigned a mission of this kind must start its march in advance of the movement of the main body; upon the completion of its mission it rejoins the column as directed.

(2) When several dangerous flank localities must be passed during the progress of a march, echelons of the flank guard move by bounds from one position to another. Missions of this sort require motorized troops.

(3) When a route generally parallel to the line of march of the main body exists and flank protection is required throughout the march, the flank guard marches parallel to the main body, distributed in detachments over sufficient depth to be able to offer resistance to attack at various points on the flank of the main body and to deal with inroads of small hostile detachments.

■ 97. REAR GUARDS.—*a. General.*—A retiring force covers its retirement by a rear guard. A force advancing toward the enemy details a rear guard if attack or harassing action, especially by mechanized or other mobile forces, is possible.

b. Mission.—(1) The mission of the rear guard of a retiring force is to protect the main body from surprise, harassment, and attack.

(2) The mission of the rear guard of an advancing force is to protect the main body from surprise, harassment, and observation by hostile ground forces from the rear.

c. Strength and composition.—(1) The rear guard of a

retiring force must be strong enough to execute its mission without help from the main body. It should be strong in infantry heavy weapons in order to engage the enemy at the longer ranges and delay him by forcing his early and repeated deployment. Antitank weapons are attached. Artillery, engineers, chemical troops, and motor transport for foot elements are particularly valuable and should be attached when available. In the reinforced regiment a rear guard might, for instance, consist of the following: one rifle company, one heavy weapons company, one or two platoons of antitank guns, one battery of light artillery, an engineer detachment, a detachment of chemical troops, and the necessary signal communication and medical detachments. The rear guard commander organizes the necessary motorized detachments for reconnaissance and security missions. A rear guard, so composed, would be commanded by the commander of the battalion that furnishes the rifle and heavy weapons companies.

(2) The rear guard of an advancing regiment seldom exceeds a rifle platoon with a section of heavy machine guns and a section of antitank weapons attached. Where the regimental motor echelon moves by bounds in rear of the foot echelon, the rear guard following the motor echelon must be provided with motors.

d. Formation.—When the distance from the enemy permits, the rear guard moves in march formation in the reverse order of an advance guard. The successive elements starting farthest from the main body are: a motorized detachment; a rear point; a rear party; a support; and a reserve, if the rear guard is as large as a battalion. The strength and dispositions of the subdivisions of a rear guard correspond, in general, to those of an advance guard.

e. Operation.—(1) *With a retiring force.*—When in contact with the enemy, the rear guard distributes small groups over a wide front and opens long range fire with its infantry heavy weapons (and artillery, if attached) in order to force the enemy to deploy and thus delay him. Unless the security of the main body requires stubborn resistance, the rear guard avoids close combat and withdraws successively from position to position as the enemy approaches. When necessary for the security of the main body, the rear guard sacrifices itself in the execution of its mission. Engineers contribute to the

rear guard mission by executing demolitions, placing mines, and constructing obstacles. Chemical troops assist by executing appropriate smoke missions and contaminating obstacles and demolitions. Motorized detachments forestall attempts to pass the flanks of the rear guard.

(2) *With an advancing force.*—The rear guard of an advancing force operates, except for the execution of demolitions, generally as prescribed for the rear guard of a retiring force. It will usually advance by bounds in rear of the regimental motor echelon.

■ 98. ANTIMECHANIZED DEFENSE.—*a. General.*—(1) The commander of the antitank company is charged with the organization and coordination of the antimechanized defense of a marching regiment in accordance with instructions from the regimental commander. (See par. 92*d* and FM 7–35.)

(2) Advance, flank, and rear guards furnish antimechanized protection for the marching column as described in paragraphs 95, 96, and 97.

(3) Within the column, those units having suitable weapons are, in general, responsible for their own immediate defense. Those units not having such weapons are so disposed as to receive incidental protection from suitably armed units, or special provision is made for their defense.

b. Warning system.—An antimechanized warning system includes an intelligence system and a signal communication system, both carefully coordinated to insure early and continuing information of the presence and action of hostile mechanized and motorized forces. The regimental warning system embraces the reconnaissance and security detachments operating under control of the regiment and antitank lookouts (see FM 7–5) equipped with means for giving the alarm. Motorized patrols operating well to the front and flanks are particularly valuable adjuncts to the warning system. Higher commanders take the necessary steps to integrate the regimental warning system with the systems of adjacent units and with the reconnaissance and security elements of higher units. All observation and reconnaissance agencies, both ground and air, are required to make an immediate report of a mechanized threat. These reports are made to the nearest commander without regard to the chain of command. Timely warning requires quick, reliable, and positive means of

signal communication. The organization of the warning system can be covered in large measure in standing operating procedures.

c. Action against mechanized attack.—(1) Upon receipt of warning of a mechanized attack, troops and vehicles clear the road and take advantage of nearby natural obstacles. Antitank guns and artillery are placed in positions covering the terrain over which the attack is expected. All elements are dispersed and take advantage of cover and concealment. If time permits, troops dig in, barriers are erected, and mines are placed. Individuals and units that have weapons and equipment suitable for disabling armored vehicles prepare for action. As enemy vehicles come within the effective range of the various weapons designated for antimechanized defense, fire is directed at the parts most vulnerable to the weapon involved. Chemical troops assist in the defense by executing appropriate smoke missions.

(2) If mines have been placed, the commander who ordered their emplacement must make sure that they are protected by fire and that a traffic warning patrol is maintained to prevent damage by mines to friendly vehicles.

■ 99. ANTIAIRCRAFT SECURITY.—*a. General.*—Regardless of the effectiveness of the security measures taken by the higher command through the offensive action of combat aviation, all units must consider the probability of air attack and reconnaissance and provide appropriate security measures. Protective measures comprise warning, concealment, dispersion, and fire.

b. Antiaircraft warning system.—The first requirement of antiaircraft security is an efficient warning system. Air guards are posted in pairs to cover the front, flanks, and rear of the regiment. They give warning of the approach of any aircraft not known to be friendly. When necessary, observers are detailed to relay signals from the airguards. (See FM 7–5.)

c. March dispositions.—When the column marches on a road under threat of hostile air attack, foot troops march in column of twos, one file on each side of the road. All weapons are kept loaded, and mounted weapons are kept elevated. Vehicles carrying troops or mounted automatic weapons have truck covers removed. So far as the situation permits, ve-

hicles move by bounds from one covered area off the road to another. Full advantage is taken of the cross-country mobility of vehicles to avoid presenting conspicuous and profitable targets to hostile aircraft. Heavy machine-gun units, with first priority on roads, move by bounds to selected positions off the road. Some heavy machine-gun units are stationed to furnish antiaircraft protection for the column during the passage of defiles. Distances between individuals and between elements of the column are increased. When the hostile air threat is particularly serious the regiment may be assigned a zone of advance and be required to march across country; vehicles will then also move across country.

d. Action when attacked.—(1) When the air alarm is sounded, foot troops deploy off the road and seek cover. Unless prohibited by their immediate commander, they open fire as soon as the attacking planes are within range.

(2) All vehicles are driven to the side of the road and stopped, or if the terrain permits, they are driven off the road far enough to clear the probable impact area of the air attack. Previously designated crews man any weapons mounted on vehicles for antiaircraft fire. All other troops dismount from the vehicles, deploy, and seek cover away from vehicles. Unless prohibited by their immediate commander, they open fire as soon as the hostile planes are within range. All remain close enough to their vehicles to resume the movement when the attack has passed.

(3) In case of attack without warning, vehicles are stopped; personnel, other than those manning guns fixed on the vehicles, dismount and seek cover. Unless prohibited by the immediate commander, fire is opened by all mounted automatic weapons and others in a position to fire, as soon as the planes are within range.

(4) If time is not a vital factor in the march, and if warning of the impending attack permits, vehicles are driven into concealed locations.

■ 100. REGIMENT AS SECURITY FORCE.—*a.* The infantry regiment, reinforced, may be given security missions calling for protection of the front, the rear, or flanks of a larger force on a march. The regiment, in turn, provides itself with the necessary security elements to the front, flank, or rear. For example, an interior division marching on a single road may designate a reinforced regiment as advance guard. Under

such conditions there is no material change in the dispositions described in paragraph 95. The main body of the regiment (with its attachments) becomes the main body of the advance guard, and dispatches detachments as previously described, for its own security. Similar considerations apply to the regiment as a flank guard or a rear guard.

b. When acting as a security force for a larger unit, the regiment conducts itself in conformity with orders from higher authority which prescribe its mission, its objective, its route or zone of advance, and control measures.

■ 101. OBSTACLES AND DEFILES.—*a. General.*—Special precautions are taken to avoid congestion and delay during the passage of obstacles and defiles. If practicable, troops and vehicles are moved at increased speed and increased distances while in a defile and its approaches. When delay cannot be avoided, the column is halted, without closing up, and commanders of march units are notified of the probable length of the delay. In the passage of a defile, security forces should have possession of the exit and the flanks before the main body begins the passage. A march column avoids halting in a defile or astride an obstacle. Whenever practicable, obstacles are crossed on a broad front to expedite the passage.

b. Antiaircraft security.—Troops engaged in the passage of a defile are particularly vulnerable to air attack. The column commander makes early provision for protecting the passage of the troops at each defile. When available, antiaircraft artillery is used for this purpose. In its absence, heavy machine guns are set up to provide all-around protection.

c. Fordable streams.—Fordable streams are reconnoitered and additional crossings are prepared to expedite the passage. A simple plan is worked out in advance covering the actual crossing and the regaining of distances. Fords with treacherous bottoms and roads that lead through quicksand or swamps should have warnings posted at their dangerous places or have their limits clearly marked.

d. Bridges.—(1) Foot troops crossing bridges march without cadence. In crossing a ponton bridge, motor vehicles travel slowly, holding to the center of the bridge and maintaining the distance prescribed by the engineer officer. March unit commanders are responsible that vehicles which

exceed the maximum load capacity of the bridge are cut out of the column for crossing at some other bridge or ferry.

(2) In event of an air attack during a crossing, all commanders of units en route to the bridge halt their troops to prevent jamming at the bridge approaches. (See FM 100–5.)

e. Ferrying.—(1) *Personnel.*—When foot troops are to be ferried, they are brought to covered assembly areas near the embarkation point. Here they are organized into tactical groupings corresponding to the capacity of the means for ferrying; engineer equipment needed for the crossing is issued and instructions are given regarding embarking and disembarking and conduct during the crossing. At the proper time each tactical grouping is conducted by an engineer guide to the point of embarkation. Movement from the final assembly area to the river is under control of the engineer troops. Upon arrival at the embarkation point, troops enter the boat or raft in the manner directed by the engineer in charge, who is responsible for the arrangement of the loads and the handling of the boats. Individual equipment is loosened so that it may be removed easily.

(2) *Vehicles.*—Vehicles may be ferried on a standard ponton raft ferry or on an existing or improvised ferry. Small vehicles may be floated across by inclosing the chassis in a large paulin or truck cover. Vehicles awaiting passage are held under cover at a point where they will not block the approaches. Vehicles are loaded as directed by the engineer officer in charge. In unloading, the debarkation point is cleared promptly.

■ 102. CROSS-COUNTRY MARCHES.—The regiment will frequently be required to march across country during the approach march or for the purpose of diminishing its vulnerability to air attack. In cross-country movement it is usually assigned a zone of advance. To avoid overextension in depth it may march in two or more columns. The situation and the practicability of the terrain for motor movements determine the number of columns. If the regiment marches on an exposed flank, columns are echeloned to that flank. The regimental commander coordinates the progress of the several columns. He may do this by prescribing terrain (phase) lines to be reached at stated times, or by requiring periodic reports of progress from the column commanders

and making necessary adjustments by halting columns that are too advanced, or by lengthening their periodic halts.

■ 103. MARCHES UNDER SPECIAL CONDITIONS.—For procedure governing marches in mountainous terrain, deserts, jungles, and in extreme cold, see FM 100–5.

■ 104. SIGNAL COMMUNICATION.—*a.* Signal communication within the column should be regulated by standing operating procedure, supplemented as necessary by special instructions. Standing operating procedures of higher echelons ordinarily govern communication between the regiment and adjacent march columns and between the regiment and higher headquarters.

b. In the regiment, communication on the march is normally maintained by radio, motor messenger, visual signals, and connecting files. Wire lines are not established on the march, but full use is made of existing commercial signal communication systems. Security detachments are provided with radio equipment. The use of a prearranged message code in combination with the marking of maps (See Map Coordinate Code, FM 24–5) will often prevent the enemy from understanding radio messages and avoid the delay caused by the use of more formal codes. Radio messages may be transmitted in clear text at the discretion of the commander, subject to restrictions placed by higher headquarters.

c. A radio team, with radio truck from the division signal company, may be attached to the regiment for communication with higher and adjacent units.

d. For detailed operation of regimental signal communication, see FM 7–25.

■ 105. SUPPLY AND EVACUATION.—For details of regimental supply and evacuation, see FM 7–30.

■ 106. HALTS.—*a. General.*—(1) In tactical marches the time and place of halts are largely governed by tactical considerations. It may be necessary, for instance, to eliminate a periodic halt in order that the command may clear a dangerous defile, avoid straddling an obstacle, or gain terrain affording cover and concealment. Commanders of march units are promptly notified of the time and approximate length of any halts not provided for in the march order.

(2) Halts are divided into two general classes: periodic rest halts and long halts. Periodic halts are taken at regular intervals to rest men, to service vehicles, and to adjust equipment. Only grave tactical reasons justify the elimination of any of these regularly scheduled rest periods. Long halts may be made to avoid the excessive heat of midday, to effect a redistribution of troops, and to preserve secrecy. They also occur during forced marches.

b. Security.—(1) *General.*—A halted command protects itself by dispersion, the use of cover and concealment, and the establishment of march outposts.

(2) *Periodic rest halts.*—During periodic halts the column clears the road, avails itself of the cover and concealment at hand, and rests under the protection of the security elements provided for the march.

(3) *Long halts.*—When the command makes a long halt during a march, security elements (advance flank, and rear guards) become march outposts, modifying their dispositions as necessary. They occupy critical terrain features controlling the approaches to the column, establish outguards or lookouts at commanding points, and when necessary send out patrols. Areas for long halts are selected with a view to the security they afford. Cover, concealment, and natural obstacles to mechanized attack are features particularly sought. Areas for long halts should be near the route of march.

SECTION IV

NIGHT MARCHES

■ 107. GENERAL.—*a.* Night marches are extensively employed to maintain secrecy of troop movements. They are less exposed to hostile observation and to air and mechanized attack than day marches. They are more difficult to control and they are more trying on the troops.

b. Ordinarily a night march is not undertaken if there is any likelihood of a collision with important enemy forces during the hours of darkness.

■ 108. MARCH RATE.—On good roads the night march rate for foot troops approximates that of the day rate of march under the same conditions. On poor roads, on very dark nights, or in unfavorable weather the rate of march may be con-

siderably reduced. (See FM 7–55 and 101–10.) Motor elements travel at reduced speeds at night.

■ 109. CONTROL.—*a. General.*—Special measures must be taken to maintain direction and control at night. A loss of direction at night may split a column into several parts, interfere with adjacent columns, result in loss of secrecy or failure to reach the march objective prior to daylight, and ultimately occasion a failure of the command to accomplish its mission.

b. Reconnaissance.—Whenever practicable, a night march should be preceded by a detailed daylight reconnaissance of the route and the march objective. If circumstances prevent this, a map reconnaissance is made. In either event route sketches should be prepared for the use of those charged with the maintenance of direction in each march unit. These sketches should show the road, prominent landmarks near the road that can be easily recognized at night, road junctions and crossroads and any features that distinguish them, compass bearings for each important change of direction, and distances from the initial point to the more important features.

c. Route markers.—(1) When the situation permits prior reconnaissance, the route is carefully marked. Special precautions are taken at road junctions and crossroads to indicate the correct route. Guides, luminous markers, lime, tape, or paper strips are particularly useful.

(2) If it is not possible to mark the route prior to the march, guides accompany the leading elements for this purpose. Provision is made to pick up guides (and markers) when the column has cleared them.

(3) Regardless of the directional aids provided by the column commander, march unit commanders remain responsible for maintaining the direction.

d. March dispositions.—March dispositions at night are the same as those for day marches with the following exceptions:

(1) Distances between all elements of the command are reduced. (See FM 7–55.)

(2) Connecting files are closer together.

(3) All vehicles, except those necessary for command, control, reconnaissance, and security, march in the regimental motor echelon. It will often be possible for the motor eche-

lon to remain in bivouac until the foot echelon has reached the new bivouac and then make the move in a single bound.

e. Identification.—To facilitate control and communication, special means of identification are provided for unit commanders, security elements, messengers, patrols, and other personnel moving in or out of the column who must be quickly and positively identified. White arm bands, white hat bands, undershirts worn over outer clothing, countersigns, and similar devices are all useful.

f. Liaison.—A representative of each commander marches with the next higher commander.

g. Use of Staff.—Members of the staff are used to assist the commander in supervising the movement. They verify the route of march of the leading element at frequent intervals and especially when changes of direction are made. They see that close contact is maintained between march units. They see that guides are properly posted and properly instructed. They determine the cause of any unauthorized halt and assist in overcoming it.

■ 110. SECRECY.—*a. General.*—In a tactical night march, secrecy is a paramount consideration. Therefore, measures are taken to preserve secrecy in preparing for the march, during the march, and at the termination of the march. Failure at any stage invites hostile air attack and harassment. It may also serve to reveal the purpose for which the march is made and thereby nullify its effect. If a column is discovered while it is moving to a concealed bivouac, the location of the bivouac is usually discovered also.

b. Preparations.—If daylight reconnaissance is permitted, it must be conducted by single vehicles widely separated. If guides are posted prior to the march, they remain concealed during the hours of daylight and display no lights at night except as authorized for column control. Any activity that might be observed and interpreted as preparatory to a march is prohibited before dark. If the old bivouac is known to the enemy, normal activity is simulated during the night. A few men and vehicles may be left behind to continue the deception the following day.

c. During march.—Standard measures for preserving secrecy during a night march and in bivouac or assembly areas should be covered in standing operating procedures. Exceptions and

special measures are published in the march order. Standard measures may include the following:

(1) Smoking is prohibited.

(2) Fires and lights are prohibited except—

(*a*) Authorized night driving lights.

(*b*) Shielded flashlights (standing operating procedure should prescribe the method of shielding flashlights and list those who may use them or who may authorize their use).

(3) Radio is silenced or transmission restricted.

(4) Rifles (including those of security elements) are carried unloaded.

(5) If illuminated by flares from hostile aircraft, the column halts and remains motionless until the light dies out. Troops keep their heads down during the period of illumination.

(6) Hostile aircraft are not fired at unless the column is attacked.

(7) Security elements use the bayonet in dealing with any enemy encountered.

d. At termination of march.—The command is disposed in concealed bivouac or assembly areas prior to daylight. Arrangements must be made to receive the column in the new area prior to its arrival. If possible these arrangements are made prior to the march; if the situation prevents this, the necessary reconnaissance of the new area, its allotment to the several units of the command, the marking of routes in the area, and the posting of guides to meet the column must be undertaken during the march. Units of the command are conducted into the area as fast as they arrive. Careful planning is essential to avoid congestion or confusion at the termination of the march.

■ 111. SECURITY.—*a. General.*—The concealment afforded by darkness, the extreme difficulty of organizing a ground attack against a moving objective in the dark, and the fact that a night march is not undertaken if there is a probability of collision with a major enemy force, all combine to reduce materially those security measures necessary to a marching column in daylight. The major dangers to protect against are, therefore, hostile air observation and attack, harassment by small enemy forces, and prior seizure of the march objective by the enemy.

b. Advance guard.—(1) At night an advance guard usually consists of rifle units and engineers. Infantry supporting weapons cannot be used profitably under night march conditions and therefore are not included in the leading elements. The minimum rifle strength for the advance guard of a reinforced regiment in night route march is a rifle company; the maximum is a battalion. All members of the advance guard wear some easily recognized identifying device.

(2) The distances between elements of the advance guard and between the advance guard and the main body are reduced. (See FM 7–55.) The subdivisions of the advance guard, and the advance guard and the main body, are tightly linked by connecting files.

(3) If the leading elements of the advance guard collide with the enemy, the support deploys at once on both sides of the road and attacks with the bayonet. Fire under night march conditions is difficult to control and is usually prohibited.

(4) Only those motors essential for command and control move with an advance guard at night.

c. Other security detachments.—Approaches to exposed flanks or rear are covered by flank and rear guards as prescribed in day marches. Ordinarily these security elements are smaller than those necessary by day and, like the advance guard, consist only of rifle elements and engineers. If a mechanized threat exists, road blocks are established by flank detachments and protected by fire. Appropriate allotments of antitank weapons may be made to flank detachments.

d. Antiaircraft security.—When the column is illuminated by flares it halts and remains motionless until the flares have died out. The fact that the column has been illuminated is not conclusive in itself that it has been discovered. Repeated illumination usually indicates that the movement has been discovered. If the column is attacked by hostile aviation, only those weapons specifically designated for the purpose will fire on the attacking planes.

e. Prior seizure of march objective.—When the situation permits, a detachment, preferably motorized, is sent ahead to seize and hold the march objective until the arrival of the column. The detachment is not dispatched until nightfall. Its personnel wear some identifying device that can be readily recognized at night.

SECTION V

MOTOR MOVEMENTS

■ 112. REFERENCES.—For the details of operation, inspection, maintenance, and management of motor transport, and the training and duties of operating, maintenance, and traffic personnel, see FM 25–10. For general doctrines governing shuttling, see FM 100–5. For logistics of motor movements, see FM 101–10 and 7–55.

■ 113. GENERAL.—*a.* When the infantry regiment, rifle, moves by motor, additional vehicles must be obtained from sources outside the regiment, or it must shuttle with its own transportation.

b. Movements of troops or supplies in nonorganic transportation (convoys) are, in the absence of orders to the contrary, commanded by the senior line officer present. Individual vehicles are commanded by the senior in each vehicle. (For further details, see FM 25–10.)

c. The regimental commander ordinarily will be given the following information regarding additional vehicles for moving his foot elements:

(1) Number and type (or capacity) of vehicles to be made available.

(2) Points and times at which they will pass to and from his control.

■ 114. PLANNING.—After receipt of the information indicated in paragraph 113, the commander must make plans to insure the following:

a. Reception and distribution of the additional vehicles.

b. Loading of personnel and material as required.

c. Timely servicing, loading, and disposition of organic transportation.

d. Coordination of the movement from all entrucking points to insure the desired formation of the column.

■ 115. RECEPTION AND DISTRIBUTION OF VEHICLES.—*a.* A staff officer receives the vehicles at the designated point or points at which vehicles are made available to the regiment. If that point is suitable for use as a regulating point it may be so prescribed.

b. Distribution is made from the regulating point. This is a selected point from which the incoming motor vehicles are distributed to the units to be entrucked. It should be in or near the regimental area on the side from which the vehicles approach. It should be easily recognizable and so located that no unnecessary travel is required to reach any point at which troops are to be entrucked. When practicable, it should be a point concealed from air observation.

c. Activities at the regulating point are in charge of a regulating officer designated by the regimental commander. He is assisted by such personnel as is required.

d. Vehicles are distributed to the various entrucking groups in proportion to the number of troops and amount of material to be entrucked. Vehicles are dispatched to entrucking points in the order in which it is desired that they re-form in column after entrucking has been completed. For capacities of various types of vehicles, see FM 101–10 and 7–55.

e. (1) When feasible, guides are used to conduct trucks from the regulating point to the entrucking points. The column is halted upon the arrival of the first truck at the regulating point and a guide from the first entrucking point is placed upon the first truck. The column moves forward under his guidance until the number of trucks to be sent to the first entrucking point has passed, when the remainder of the column is again halted. A guide from the second entrucking point is placed upon the leading truck of the remainder of the column, and the process is continued until all trucks have been disposed of as planned. Spare trucks are sent to the last entrucking point in order that they may follow the tail of that group and be available to transport the loads of, or to tow, any vehicles that may be disabled en route.

(2) When the incoming trucks are so far apart that drivers cannot be sure of seeing the vehicle ahead, a system of road markers must be used to assure the arrival of trucks at their proper destination. This system must be carefully supervised by officers.

■ 116. ENTRUCKING.—*a.* An entrucking point (EP) should—

(1) Be an easily recognizable terrain feature.

(2) Be near the troops and supplies to be entrucked and near a locality where entrucking is facilitated.

(3) Be on a road which leads forward in the direction of the initial point (IP) after entrucking. (See par. 83.)

(4) Be in a locality affording concealment. Entrucking points are numbered in the order in which the groups entrucked are to pass the initial point.

b. Troops are prepared for entrucking by allotting specified groups to specified trucks. The entire unit may be lined up at the entrucking point and counted off in groups equal to the capacity of the vehicles, or vehicles may be assigned to each subordinate unit, attaching men from one unit to another for the purpose of making full use of the capacity of the vehicles. Each commander responsible for entrucking is given information which will permit him to determine the approximate location for the entrucking of his unit. This usually includes the location of the entrucking point, the number of vehicles ahead of those allotted to his unit, and the number of vehicles allotted to his unit. In all motor movements the tactical unity of battalions is preserved when practicable, but elements of two smaller units may be loaded on one truck.

c. When organic vehicles are to be introduced into the column at the entrucking points, each entrucking group commander is responsible that the vehicles are loaded and properly placed to begin their movement to the initial point at the prescribed time.

d. Movements to the initial point must be carefully planned and conducted to avoid a concentration of vehicles at this point or along any stretch of the road(s) leading to it.

e. For entrucking table and work sheet for its preparation, see FM 7–55 or FM 25–10.

■ 117. FORMATION OF MOTOR COLUMN.—*a.* The organization of a motor column depends primarily on the tactical and traffic conditions likely to affect its movement. The main part of the column may be organized into serials and march units to facilitate march control (see par. 82).

b. A staff officer usually is stationed at the initial point while the column is being formed to insure that groups leave the area in the prescribed order and to take such emergency action as may be necessary to correct serious miscalculations or mistakes. This duty may be performed by the trail officer.

c. For duties of reconnaissance, pioneer, traffic control, and

trail parties, see paragraph 80. For duties of quartering party, see paragraph 143. For tactical reconnaissance, see paragraph 125.

■ 118. TYPES OF MOTOR MOVEMENT.—*a. General.*—Motor movements by infantry regiments are divided into two general types—those by infiltration and those with march unit control. Under march unit control, vehicles are somewhat regularly spaced, either by means of prescribed maximum and minimum distances between vehicles, by prescribed time intervals, or by both. They may be closely spaced at minimum safe driving distances (close column) or widely spaced (open column). For detailed description and discussion of the types of motor movements, see FM 25–10.

b. Infiltration.—This type of movement is suitable for use when secrecy is important and observation from the air is to be expected. The desired formation is obtained by regulating the dispatch of vehicles and prescribing a maximum and average road speed. Density prescribed should be such as to result in normal traffic density on the route to be followed. Drivers may be authorized to pass en route to promote deception. Such authorization is important where the route to be used is forbidden to other traffic moving in the same direction as the column.

c. Close column.—(1) Close column may be used under the following conditions:

(*a*) For short movements at high speed from one concealed location to another.

(*b*) For night "blackout" movements, espcially over poorly marked routes.

(2) When close column is used the column should be divided into serials and march units with time intervals of from 1 to 3 minutes to reduce congestion and interference. When the column halts, vehicles in each march unit clear the center of the road. Distances between march units are maintained.

d. Open column.—Open column may be adopted to reduce the effect of hostile air attack, to reduce interference and congestion within the column, or for both of those purposes. Desired distances between vehicles and units may be obtained by prescribing a time interval, by prescribing a maximum and a minimum road distance, or by a combination of those two

methods. Open column is suitable for use in a daylight march when passive protection against air attack is necessary, and when the necessity for the movement is such as to make the element of secrecy subordinate.

■ 119. CONTROL DURING MOVEMENT.—*a.* Control during the movement is exercised principally by means of personnel in vehicles with the column and of personnel stationed at selected points along the route. These means are supplemented by radio when available and when the situation permits, and by visual signals transmitted from vehicle to vehicle. An airplane may be made available to the column commander for purposes of march control. Panels may be used to mark the command post of the column or the command post of serials and the head and tail of the column for the information of friendly air observers. The command posts of column and serial commanders are usually at the head of the main body of the column or serial concerned. For details, see FM 7–25, 25–10, and 24–5.

b. Commanders, including commanders of serials and march units, have no fixed posts in the column, but go where they can best observe the movement and exercise control. Usually each commander should move near the head of the element for which he is responsible in order to obtain early information of any emergency that may arise and to take suitable action.

c. A control officer moves at the head of each serial and march unit. He regulates the rate of march of his unit and insures maintenance of direction.

d. A trail officer in a fast-moving vehicle moves at the tail of the column. (For duties, see par. 80*f* and FM 25–10.)

■ 120. MAINTENANCE.—*a.* Nonorganic trucks sent to an infantry unit for transportation of its foot elements will usually be accompanied by adequate maintenance vehicles and personnel. The organic maintenance facilities of the unit should be disposed with regard to the other organic vehicles so as to insure early and adequate maintenance where required. For the infantry regiment, one mobile crew usually should follow the organic vehicles of each battalion, and the remainder of the maintenance section of the transportation platoon should follow at the tail of the last regimental unit.

b. A disabled vehicle is removed from the road if practicable. If it cannot be removed by the personnel at hand, the vehicle commander arranges for assistance; he is responsible for directing traffic around the disabled vehicle. He does this by posting personnel as traffic guards.

c. For further details, see FM 7–30 and 25–10.

■ 121. HALTS.—*a.* Where halts are to be made en route, selection of the points for such halts should be made in advance by the reconnaissance party and should be prescribed in orders for the movement.

b. Periodic halts should be made at points which permit all vehicles to get off the road. Where longer halts are necessary (as for the midday meal or for refueling vehicles), locations should be selected which permit clearing the road and which also permit the necessary operation of supply vehicles among the vehicles of the column. (See also par. 86c.)

■ 122. END OF MOVEMENT.—*a. Breaking up column.*—Upon arrival at the destination, the column is broken up into groups at a previously selected regulating point. Road markers or guides should conduct each unit from this point to its previously designated location, where guides should be stationed to facilitate movement into the area to be occupied.

b. Detrucking.—For safety reasons detrucking should be accomplished simultaneously on signal within each march unit after all vehicles are halted; this is particularly important at night.

c. Disposition of nonorganic trucks.—As soon as troops have detrucked and loads have been removed from nonorganic trucks, they are dispatched, according to a previously prepared schedule, to a selected initial point where they revert to control of their commander.

■ 123. SHUTTLING.—*a. General.*—(1) The movement of a unit in two or more trips using the same vehicles is called shuttling. The organic transportation of the rifle regiment is insufficient to move its foot troops at one time. Therefore, any motor movement of the entire regiment by its organic transportation involves shuttling. In order to move the regiment in two shuttles, additional motor vehicles must be obtained.

(2) In the infantry regiment all vehicles are considered as a pool of transportation to be used as required. Maintenance vehicles, prime movers, and weapon carriers of tactical units should not be diverted to use as personnel carriers.

(3) Infiltration, close, or open column may be used for shuttling. Infiltration is usually the best method of moving because vehicles may proceed individually to their destination and return without the delay involved in waiting for other vehicles to arrive, unload, and take their place in close or open column.

b. Plans and orders.—(1) In order to save as much time as possible, standing operating procedure of the regiment should cover such matters as composition of tactical groupings for each shuttle, assignment of trucks, method of loading, and control provisions for the several types of marches. Standing operating procedure is supplemented by such special instructions as may be necessary.

(2) In a shuttling movement, troops and supplies may be transported over the entire distance between the origin and the final destination, or troops may be required to march part of the way either at the beginning or at the end of the movement. The first method is easier on the troops and simpler to plan and execute than the second method. The second method is a little faster than the first and provides additional conditioning and training in marching.

(3) Dumping of normal loads may take place in the original location or in the new area. If they are dumped in the original location, they must be reloaded for transportation to the new area before the movement can be completed. If they are dumped in the new area, they can usually be reloaded at leisure after the movement is completed. Since it requires longer to load than to unload supplies, some timesaving usually will be accomplished by transporting the normal loads first.

(4) In moving the regiment by shuttling, either with organic vehicles only or with additional vehicles allotted from higher headquarters, the regimental commander maintains tactical groupings for the move.

■ 124. SECURITY.—*a.* The regiment will ordinarily not be ordered to move by motor through an area that is not already secured by friendly forces unless higher authority has provided suitable antitank protection for the route or unless the

situation clearly indicates that major interference in the area is impossible. This fact, however, does not relieve the regimental commander from responsibility for the security of his regiment during movement.

b. Security detachments for a motorized column may include advance reconnaissance detachments, an advance guard, flank guards, and a rear guard. Motor transport terminal areas are protected by an outpost. (See par. 144.)

c. In the regiment, security detachments may be assigned missions involving technical and tactical reconnaissance in addition to their security mission.

■ 125. ADVANCE RECONNAISSANCE DETACHMENTS.—*a.* Small motorized reconnaissance detachments (or patrols) provide advance reconnaissance in the direction of march. They operate 15 to 30 minutes ahead of the advance guard. They are charged with reconnoitering the route over which the column is moving and important intersecting routes. If contact is remote, one or two patrols may suffice. As contact becomes imminent the number of patrols is increased. Advance patrols operate under a detachment commander whose message center vehicle usually moves on the route followed by the column.

b. For composition, strength, and operation of motorized reconnaissance detachments, see paragraphs 94 and 95.

■ 126. ADVANCE GUARD.—*a. Composition and formation.*— The advance guard of a motor column may consist of a point, advance party, support, and reserve. The reserve is usually omitted in advance guards smaller than a rifle battalion and the support takes over its functions. In advance guards smaller than a rifle company the support may be omitted. If the regiment is moving by motor in one or more columns, the strength of the advance guard of each column may vary from a reinforced rifle platoon to a reinforced rifle company. In some situations a reinforced battalion may be used as advance guard of a regiment moving by motor in one column. The point consists of three or four vehicles, one of which is designated as the "get-away" vehicle and moves well to the rear. Scout cars are used if available. The strength of the point is held to the minimum necessary for observation. The advance party consists of three or more vehicles. An appropriate allotment of anti-

tank guns should be attached to the advance guard. Some trucks in the advance guard should mount automatic weapons for antiaircraft protection. The rear vehicle of each element of the advance guard is designated "get-away" vehicle.

b. Dispositions.—The rear subdivision of the advance guard marches 5 to 15 minutes ahead of the main body. The point precedes the advance party by 2 to 5 minutes. As contact becomes imminent, the point moves by bounds. The advance party usually follows the point in open column. The support follows several minutes behind the advance party.

c. Conduct.—(1) The principal function of the advance guard of a motorized column is to give warning of the presence of hostile resistance. It observes the route of march and intersecting roads for indications of hostile movement. It drives off small hostile elements by rapid and aggressive dismounted action, and develops and delays strong hostile forces. When strong forces are encountered, the column is halted, and when the situation demands, the action of the advance guard is supported by elements from the main body.

(2) Should the resistance encountered consist of mechanized forces, each element, successively from the front, immediately informs the next element in rear and takes such steps as time permits to delay the enemy. These include the preparation of temporary road blocks at favorable locations, such as laying antitank mines and blocking the road with vehicles. The unit laying the mines protects them with fire and maintains a traffic warning patrol to prevent damage by the mines to friendly vehicles.

■ 127. FLANK GUARDS.—*a. General.*—The flank guard of a motor column is composed of motorized detachments which secure the route of movement of the main body by offering resistance on avenues of probable hostile approach. All such detachments are placed under the command of the flank guard commander who is kept informed of the progress of the main body and of any hostile threats on the flank for which he is responsible. The distance between the flank guard and the main body will depend upon the terrain and the road net. It must be such as to prevent hostile ground observation of the route of march and, in case of serious attack, to permit the main body to prepare for action.

b. Composition.—Flank guards vary from reconnaissance patrols to detachments similar to advance guards in size and composition.

c. Operation.—(1) Flank guards usually must move out well in advance of the main body. For marches which do not include a long halt, it will seldom be practicable for a small detachment to furnish security at more than one point.

(2) Flank guards cannot expect reinforcement from the main body and must be made strong enough initially to accomplish all missions which can be reasonably foreseen.

■ 128. REAR GUARD.—The rear guard is similar in organization to the advance guard. It consists of a rear party followed by a rear point. The time-distance from the tail of the main body to the head of the rear party is 1 to 4 minutes. The time-distance from the tail of the rear party to the rear point is 1 to 2 minutes. The mission of the rear guard is to protect the rear of the main body from surprise attack by hostile forces which have faster marching rates than the column. It cannot expect reinforcement from the main body and therefore should be made strong enough initially to accomplish the mission expected of it. In retrograde movements the rear guard may be charged with executing demolitions prepared by the main body. When attacked, the rear guard makes dispositions similar to those of the advance guard, except that trucks remain closer to personnel to permit quick withdrawals.

■ 129. ANTIAIRCRAFT SECURITY.—*a. Warning system.*—The plan of antiaircraft defense includes a warning system. If an aircraft warning service exists in the area through which the column is moving, the regimental commander is directly connected with it by radio. Other measures may include the use of friendly airplanes, the antiaircraft artillery intelligence service (if present), and the use of air guards throughout the column, in terminal areas, and in security detachments to the front, rear, and flanks.

b. Passive defense.—(1) *General.*—Passive defense measures available to a motor column include concealment, dispersion, deception, and speed.

(2) *Concealment.*—Concealment is obtained in terminal areas by use of woods and camouflage. Concealment is ob-

tained on the march by taking advantage of darkness, fog, low clouds, and the use of smoke.

(3) *Dispersion.*—Dispersion is effected by taking full advantage of all parallel routes available to the command. Within the column or columns, dispersion is obtained by the use of infiltration or open column (see par. 118).

(4) *Deception.*—In movement by infiltration, deception is promoted by mixing different types of vehicles, by permitting passing within the column, and by avoidance of uniformity whether in motion or halted.

(5) *Speed.*—Short movement at high rates of speed materially reduce the likelihood of air attacks.

c. Active defense.—Plans for active defense against attack from the air are based upon the nature and location of such defensive means as are made available by higher authority. Antiaircraft artillery frequently will be stationed to provide protection at defiles and other critical points along the route of march. Where automatic weapons of antiaircraft artillery are attached, they will be so located in the column as to increase the protection afforded to its most important elements. Where no antiaircraft artillery weapons are at the disposal of the regimental commander, he will coordinate the disposition of his organic antiaircraft weapons (heavy machine guns and automatic weapons mounted on vehicles) so as to provide protection throughout the length of the column. As a rule organic weapons will be so disposed as to afford protection to the elements to which they pertain—heavy machine guns to the battalions to which they belong, and field artillery antiaircraft weapons to their batteries or battalions.

d. Critical locations.—Antiaircraft artillery of 37-mm and larger caliber, if available, take position at traffic bottlenecks and other critical points along the route of march prior to arrival of the main body.

e. Conduct when attacked.—See paragraph 99*d*.

■ 130. ANTIMECHANIZED DEFENSE. — *a. General.*—Antimechanized protection for a motor column includes a warning system and both active and passive defense measures. Reliance for protection against mechanized attack cannot be placed on terrain alone. Special measures are taken to block favorable approaches.

b. Warning system.—See paragraph 98*b*.

c. Passive defense.—Passive defense measures include concealment, natural and artificial obstacles and barriers, antitank mines, dispersion, and speed. (See FM 100–5 and 5–30.)

d. Active defense.—Antimechanized weapons are distributed throughout the column with the bulk in the advance and rear guards and with a flank guard operating on an exposed flank.

e. Conduct when attacked.—Upon making contact with hostile mechanized units, the column commander may try to use the speed of his column to elude or outdistance the enemy on the same or an alternate route while delaying the enemy with his antitank weapons; or he may undertake an active resistance with all of his appropriate means of defense (see par. 98*c*).

■ 131. NIGHT MOVEMENTS.—*a. General.*—Night motor movements are made to preserve secrecy and as a passive antiaircraft measure. They may also be made as part of a forced march or to avoid excessive heat. For details, see section IV and FM 100–5 and 25–10.

b. Special precautions.—Strict march discipline is necessary to keep units closed up, to prevent elements from becoming lost, to avoid accidents, and to eliminate the unauthorized use of lights (matches, cigarettes, flashlights, etc.). (See also par. 110.) Drivers should be relieved every 2 hours, should be provided with hot coffee, and required to dismount and exercise during halts in order to ward off drowsiness. Vehicle commanders (riding beside the driver) are required to insure, by conversation and other means, that the driver stays awake.

SECTION VI

RAIL MOVEMENTS

■ 132. REFERENCES.—For general procedure governing movements by rail, see FM 100–5. For technical and logistical data pertaining to rail movements, see FM 101–10 and 7–55. For check list for orders, and for entraining and detraining tables, see FM 101–5. For the general organization, operation, and control of rail transportation, see FM 100–10.

■ 133. GENERAL.—*a.* Orders directing the movement of an infantry regiment by rail usually indicate the station(s) at which the entrainment will take place, the number and types

of trains, the hours of departure, the detraining area or destination of the movement, and in some instances the detraining stations.

b. In many situations motor elements of the regiment march to the destination while foot elements move by rail.

■ 134. PREPARATORY MEASURES.—Upon notification of an impending move by rail, the regimental commander takes the following steps:

a. Issues a warning order.

b. Orders a reconnaissance made of the entraining area, the entraining points or stations, and the routes to the several stations.

c. Dispatches, when authorized, an advance reconnaissance detachment and quartering party to reconnoiter the detraining area and the new location of the regiment, and to make the necessary provisions for the arrival of the regiment. For details pertaining to quartering parties, see paragraph 143.

d. Provides for the necessary construction at entraining points of loading platforms and ramps and for the necessary material for securing vehicles and equipment.

e. Prepares an entraining table in conjunction with a representative of the railway transportation service.

f. Takes steps to insure the security of his command in the movement to the entraining area and during entrainment. When practicable, similar steps are taken for the detraining area.

g. Details an officer to take charge of each entraining station; charges him with the entrainment, police, and antiaircraft security at the station; and gives him the means to perform these tasks.

■ 135. PRIORITY OF ENTRAINMENT.—*a. General.*—In rail movements made in connection with the execution of a tactical mission, tactical considerations usually govern the priority in which the elements of the regiment are moved. In nontactical movements, the order of movement is chiefly influenced by considerations of administration and the convenience of the troops.

b. Troop groupings.—(1) In a tactical movement, an advance echelon of regimental headquarters, a small, balanced force of riflemen, heavy machine guns, antitank guns, engineers (if available), and signal communication and medical

personnel, together with the necessary vehicles, should be transported on the first train or the first two trains. A quartering party should be assigned to the first or second train if it is impracticable to send it to the new area in advance of the troop movement.

(2) If artillery is attached to the regiment, batteries may be entrained to alternate in arrival with infantry battalions or to arrive on successive trains after one or two battalions are in the area.

(3) Weapon carriers move with their companies. Battalion communication sections, medical and ammunition trains move with their battalions. Kitchen and baggage trains move with their companies.

(4) Usually, the regimental executive with one or two staff assistants and a small force of rifle elements, machine guns, antitank guns, communication and medical personnel, and the necessary vehicles, will be required in the old area for security and administrative purposes until the bulk of the regiment has been moved. This detachment moves out on the last train. Elements not specifically mentioned usually move on the last trains.

■ 136. TRANSPORTATION GROUPING.—A transportation grouping consists of the troops, equipment, and supplies transported on one train. The order of entrainment of the transportation groupings of the regiment at each entraining point is fixed in accordance with the priority of the arrival of the various elements of the regiment in the detraining area. Each transportation grouping includes medical personnel and cooking facilities. For duties of commanders of transportation groupings, see FM 100–5.

■ 137. CONTROL.—Neither the regimental commander nor the commanders of transportation groupings exercise any control over the operation or movement of trains. A representative of the railway transportation service accompanies each train and serves as the intermediary between the troop commander and the railway personnel. Troop commanders are responsible for the maintenance of order.

■ 138. SECURITY DURING RAIL MOVEMENT.—Higher authority usually provides the necessary antiaircraft security for rail movements. Such security may take the form of air escort, air control of the area through which the movement is being

made, antiaircraft artillery weapons mounted on each train, or combinations of these. The commander of each transportation grouping supplements the antiaircraft weapons on the train with weapons of his own troops.

■ 139. SUPPLY.—*a.* Normally, each transportation grouping carries with it the supplies necessary for the entire trip. On long rail movements it may be necessary to arrange for resupply or partial resupply en route. Meals are cooked en route.

b. When boxcars transport personnel, filled water cans are placed in each car; stops must be made to distribute food from the kitchens.

SECTION VII

BIVOUACS

■ 140. REFERENCES.—For general doctrines governing bivouacs and security of bivouacs, see FM 100–5. For administrative considerations (quartering), see FM 100–10. For technical and logistical data, see FM 101–10. For sanitation, see FM 8–40 and 21–10. For details of regimental train bivouacs, see FM 7–30.

■ 141. GENERAL.—A halt at the completion of a march should be considered in the nature of preparation for the following operation. The bivouac area is selected and the troops distributed in it to facilitate the succeeding operation. Halts during the march are discussed in section III.

■ 142. SELECTION.—*a.* Bivouac sites should be selected which afford cover and concealment against air observation and attack, natural obstacles for protection against mechanized attack, sufficient area to permit dispersion as a passive antiaircraft measure, an adequate water supply, and enough roads or trails to accommodate the regimental transportation or, in the absence of roads and trails, terrain that will permit cross-country movement by vehicles. The site should be close to the route of march. Insofar as tactical requirements permit, the comfort and convenience of the troops are considered in the selection.

b. The site is selected and announced as early as possible in order that the quartering party may complete all necessary arrangements prior to the arrival of the regiment.

■ 143. QUARTERING PARTY.—*a. Composition.*—A regimental quartering party consist of—

(1) A quartering officer, usually the headquarters commandant or S–1.

(2) A medical officer.

(3) A representative, preferably an officer, from each battalion and one representing the remaining units of the regiment.

(4) A guide, preferably a noncommissioned officer, from each company of the regiment.

b. Duties.—(1) *General.*—The general duties of the quartering party are—

(*a*) To select the bivouac site if this has not been definitely determined and to make the necessary arrangements for its occupancy.

(*b*) To apportion the area among the battalions and separate units of the command.

(*c*) To reserve facilities for the general service of administration, supply, and command (interior guards, headquarters, infirmaries, supply installations).

(*d*) To make the necessary sanitary inspections and preparations.

(*e*) To guide each unit to its assigned area without the necessity of halting.

(2) *Quartering officer.*—The quartering officer commands the quartering party. After reconnaissance he allots areas to battalions and separate units; he reserves locations for regimental headquarters, the aid station, and the interior guard; and he formulates a plan for the disposition of the guard. He announces the time and place the quartering party will assemble after inspecting and preparing their subareas. (The party assembles, shortly before the troops arrive, at the point where the command enters the area.) When the interior guard is detailed, the quartering officer sees that it is posted for the proper interior security and control of the area (sentries over water sources and at entrances into the area). He prepares a sketch of the area showing the location of subareas and installations for the information of the regimental commander.

(3) *Medical officer.*—The medical officer examines the sources of water supply and marks the places for obtaining water for drinking and cooking, for bathing, and for wash-

ing clothes. He makes such recommendations as are desirable concerning the location of kitchens and latrines.

(4) *Battalion representative.*—Battalion representatives suballot their assigned areas to companies and detachments, reserving a place for battalion headquarters.

(5) *Company representatives.*—Company representatives divide their area among the platoons and company headquarters. They reserve locations for the company command post, company transport (when necessary), kitchens, and latrines, They familiarize themselves with the routes to their areas. Upon arrival of their companies, they meet and guide them to their areas.

c. Arrival of troops.—Upon arrival of troops in the quartering area, the quartering officer reports immediately to the regimental commander. Battalions and companies, guided by their representatives, are marched to their respective areas.

■ 144. BIVOUAC OUTPOSTS.—*a. General.*—(1) A command in bivouac establishes an outpost to provide protection in all directions from which hostile forces may have access to the main body. The mission of the outpost is to protect the resting command against annoyance, surprise, and observation by hostile ground forces.

(2) The halt order of the higher commander either provides for an outpost under centralized control by naming the outpost commander and detailing the outpost troops, or it requires column commanders to organize outposts for their commands. For check list for halt order, see FM 101–5.

b. Strength and composition.—The strength of an outpost for an infantry regiment may vary from a reinforced company to a reinforced battalion. It should be no stronger than is necessary. Outposts smaller than a battalion are normally reinforced by heavy machine guns, mortars, and antitank weapons. A battalion on outpost ordinarily has antitank weapons attached. When artillery is available some may be attached to the outpost or disposed in support of it. Engineers prepare demolitions and block favorable avenues of approach as directed by the regimental or higher commander. Motorized detachments may be used for distant patrolling and for intercepting small hostile elements.

c. Organization and operation of outpost.—For organization and operation of outpost, see FM 100–5 and 7–5.

■ 145. SECURITY WITHIN BIVOUAC PROPER.—*a. Interior guard.*—The regimental commander establishes an interior guard to provide local security within the bivouoc area. This guard is charged with giving warning in the event of gas attack or the approach of aircraft or hostile ground troops, and with the enforcement of regulations governing such matters as traffic control, police, use of lights, and circulation of civilians.

b. Concealment and cover.—Vehicles are irregularly spaced, dispersed, and concealed or camouflaged. Shelter tents are not erected when disclosure of the bivouac to hostile air observation might result. Massing of troops or vehicles is prohibited. Restrictions on the use of lights are prescribed in orders. Hasty individual trenches usually are dug to provide cover in the event of air or mechanized attack.

c. Antimechanized and antiaircraft dispositions.—Antitank weapons not attached to the outpost are sited to cover approaches to the bivouac. Machine guns not attached to the outpost are sited for defense against air attack. Upon the approach of airplanes, the interior guard sounds the alarm. All standing antiaircraft defensive measures are then put into effect.

d. Alerts.—(1) One officer at each headquarters down to include the company, and one noncommissioned officer in each platoon, are constantly on duty to alert the command in event of attack.

(2) All units are instructed as to the action to be taken when alerted (see FM 100–5 and 7–5).

■ 146. SIGNAL COMMUNICATION.—In bivouac, command posts are located within the areas occupied by their units, and the next higher and subordinate commanders are notified of their location. Communication within the area is normally by messenger unless the units are widely separated, in which event battalions may be authorized to operate radio stations if secrecy requirements permit. Sound-powered telephones may be used to advantage. Battery-operated telephones are not installed unless the length of stay and the distance between command posts justify it. Any wire laid is recovered for later use. Signal communication between the regimental command post, the outpost, and detached posts is established by the regiment.

■ 147. CLEAN-UP PARTY.—A clean-up party is detailed to inspect bivouac areas and halt sites after they are vacated and to correct and report any deficiencies noted. On the march, this party follows the column and picks up any guides, guards, and markers not picked up by the trail party.

CHAPTER 5

THE OFFENSIVE

SECTION I

GENERAL CONSIDERATIONS

■ 148. REFERENCES.—For the fundamental doctrines of offensive combat, see FM 100–5. For the basic factors of infantry combat, infantry operations in the various phases of offensive action, and liaison with other arms, see FM 7–5.

■ 149. GENERAL.—*a. Offensive action.*—Through offensive action, a commander exercises his initiative, preserves his freedom of action, and imposes his will on the enemy.

b. Surprise.—Infantry obtains surprise by concealing the time and place of the attack, by screening its dispositions and movements, by rapid maneuver, by deception, and by avoiding stereotyped procedures. Speed of execution may be a determining factor in achieving surprise.

■ 150. INFANTRY MISSION.—In the attack, the primary mission of infantry is to close with the enemy and destroy or capture him.

■ 151. TACTICAL GROUPING.—The infantry regiment may be grouped with a battalion of light artillery and units of other arms in suitable proportion. Such tactical groupings are called *combat teams* and their composition may be prescribed in standing operating procedure.

■ 152. DISTRIBUTION OF TROOPS.—The general distribution of the infantry regiment in offensive action comprises a reconnaissance and security echelon, an attack echelon, a reserve echelon, and an administrative echelon. The security echelon may include reconnaissance detachments, an advance security

detachment (advance guard), flank and rear security detachments, connecting groups or contact patrols, and antiaircraft and antitank lookouts. The attack echelon may comprise one or more battalions with any attached units or weapons. The administrative echelon comprises the service company (less regimental headquarters personnel) and the medical detachment. The reserve echelon comprises the remainder of the regiment.

■ 153. RECONNAISSANCE.—*a.* Reconnaissance is a responsibility of all units. Reconnaissance is conducted with a view to gaining contact with the enemy and maintaining this contact when established.

b. Information obtained by reconnaissance is of little value unless it is rapidly transmitted to the superior commander.

c. For details of combat intelligence operations in the regiment, see FM 7–25.

■ 154. SECURITY.—*a.* Every commander is responsible for the security of his command. Security of attack forces is promoted by a timely search for information in all directions from which a hostile threat may come, and by a judicious use of security forces.

b. The regimental commander provides such additional security beyond that provided by the higher commander as his own local protection requires. The regiment always protects itself by—

(1) Antiaircraft, antimechanized, and antichemical warning systems.

(2) Antimechanized defense.

(3) Antiaircraft security.

(4) Reconnaissance and security detachments.

c. The provisions for security on the march are contained in paragraphs 93 to 102; for security in the approach march in paragraphs 163, 165, and 166; in attack, in paragraphs 178, 187, and 191.

■ 155. LIAISON AND CONTACT.—*a.* When the regiment develops for combat it usually dispatches a liaison officer to the next higher headquarters. Commanders of adjacent units may, by mutual arrangement or by order of higher authority, exchange liaison officers. Commanders of supporting units are responsible for establishing liaison with the supported units. For details governing liaison and the selection and duties of

liaison officers, see FM 101–5. For artillery liaison, see paragraph 177*a*(1) and FM 7–5.

b. All units maintain contact with adjacent units. This is usually accomplished by the detail of contact patrols.

c. Liaison is maintained between the regiment and its subordinate units by means of command and staff visits, signal communication agencies, and regimental intelligence personnel operating in the battalion zones of action. The continuous detail of liaison officers between the regiment and its subordinate units is seldom justified.

■ 156. METHOD OF ATTACK.—*a.* Infantry fights by combining fire, movement, and shock action. It utilizes the terrain to attain maximum fire effect, to conserve personnel, and to conceal movement.

b. It seeks to combine flanking action with frontal action. It concentrates the mass of its means of action in its main effort, which is directed through known or suspected weak points in the enemy dispositions to gain a decisive objective.

c. Attacking units do not ordinarily meet uniform resistance, nor do they have equal terrain advantages or disadvantages. Small units that find enemy weakness and succeed in penetrating his defense continue to advance to their objectives. They do not stop to engage enemy resistance on their flanks unless they are required to do so by the commander's plan of maneuver or to further their own advance. The infiltration of small units through enemy dispositions tends to open gaps for the action of larger formations. If necessary, battalion and regimental reserves are used to reduce areas of resistance remaining in rear of the attacking echelon. (See also sec. V.)

SECTION II

APPROACH MARCH

■ 157. GENERAL.—*a.* The approach march begins (initiation of the development) when the imminence of contact forces the regiment to change from route march formation to one made up of several roughly parallel columns, and ends when the attack echelon crosses the line of departure.

b. The purposes of the approach march are—

(1) To bring the regiment close to the enemy with minimum losses.

(2) To increase its readiness for action.

c. The approach march may be started for the purpose of increasing readiness for action, or to reduce vulnerability to threatened hostile fires. To increase readiness for action, the regiment ordinarily will be broken down successively into battalion, company, and smaller columns. When effective artillery fire is a threat, units should be so dispersed that not more than one platoon will be affected by the burst of a single shell.

d. Approach march formations vary with conditions such as the nature of the terrain and the presence or absence of friendly covering forces to the front.

e. Intensive reconnaissance is carried on during the approach march to verify information already at hand, and to gain additional information so that the commander can more effectively estimate the situation and plan his action.

f. Where practicable, assembly positions (areas) are designated for battalions. In these positions, units are prepared for performance of their assigned combat missions (see par. 168).

■ 158. DEVELOPMENT ORDER.—*a. By higher commander.*—For a regiment not in the leading echelon of the larger unit or not yet to be committed to action, the development order of the higher commander may prescribe a regimental assembly position, the route or zone of movement to this position, and the time by which it is to be reached. Orders to a regiment in the leading echelon, or to one that is to be committed to action, may prescribe the initial mission or successive march objectives and a zone of advance, and may limit the offensive action to be undertaken initially by the regiment.

b. By regimental commander.—If the regiment is merely ordered to an assembly position and its approach march is made behind other forces whose strength and dispositions afford protection against ground attack except by small elements and mechanized forces, the regimental development order may be very brief. If the regiment is in the leading echelon of the larger unit, or is assigned an initial offensive or defensive mission, more detailed instructions are necessary in the regimental development order. The development order will usually be issued in fragmentary form and will include the instructions necessary to insure coordi-

nation of the forward movement of battalions, proper security dispositions of all units, and timely reconnaissance by subordinate commanders of their zones of advance and successive objectives.

■ 159. APPROACH MARCH.—The planning and conduct of the approach march by day are considered in paragraphs 160 to 165, inclusive. For a discussion of a night approach march, see paragraph 166.

■ 160. DISPOSITIONS.—*a. General.*—Battalions may be disposed in—

(1) Column of battalions—either in trace or echeloned toward an exposed flank.

(2) Inverted wedge formation—two battalions leading.

(3) Wedge formation—one battalion leading, one echeloned to the right rear, and one to the left rear.

(4) Exceptionally, all battalions abreast.

b. Column.—A column formation, with battalions in trace or echeloned, permits the best use of the terrain and promotes flexibility. This formation is usually indicated when the zone of advance is relatively narrow; when adjacent units are in position to provide flank security; and when the situation is obscure or a long advance is probable. It is normal when only two battalions are available to the regimental commander. When the regiment is on an exposed flank, rear battalions should usually be echeloned toward that flank.

c. Inverted wedge.—An inverted wedge is a suitable formation when the situation indicates the probable initial use of two battalions abreast or when the regimental zone of advance is too wide to be reconnoitered and secured by one battalion. The remaining battalion should be echeloned toward the more dangerous flank.

d. Wedge.—A wedge formation may be indicated at times when enveloping action promises advantages to both flanks. It may at times promote security of the rear elements of the regiment when both flanks are insecure.

e. Line.—A formation with all battalions abreast is rare. An example of a situation which might justify its use is when the regiment has been assigned a mission involving action on a very broad front with a limited objective and when only a short approach march is necessary. When such a formation is required, a fraction of one or more battalions is held

in regimental reserve, or restricted by prescribing that they will be used only by regimental authority.

f. Antitank company.—The bulk of the antitank company is disposed to furnish antimechanized protection to the forward battalion(s) and those disposed to secure a threatened flank. (See FM 7–35.)

g. Motor transport.—Company transport, communication vehicles, and the ammunition and medical vehicles of the battalion train accompany battalions in the leading echelon. The remaining motor elements, less those employed for reconnaissance, security, and control, are grouped in either battalion or regimental motor echelons. The kitchen and baggage train and some maintenance vehicles are usually held in the old bivouac and moved forward during darkness to perform their mission (see par. 92*c* and FM 7–30).

h. Artillery.—Artillery attached to the regiment is moved well forward in order to support any action of the leading elements and to protect the occupation of assembly positions. The artillery is ordered to support covering forces on call. (See par. 164*b*.)

i. Engineers.—When engineers are attached to the regiment during an approach, small engineer reconnaissance elements are usually attached to the leading battalion(s). The bulk of the engineers is kept well forward in the formation under regimental control in order to be available for prompt employment on appropriate tasks as they develop.

j. Command group.—As far as practicable the regimental command group moves in motors in the interval between the leading battalion(s) and those in rear. The number of vehicles is held to a minimum; those not necessary for command purposes move at the head of the regimental motor echelon.

■ 161. CONTROL.—*a. General.*—Any or all of the following measures for control may be prescribed in the regimental development order:

(1) Battalion zones of advance.

(2) Phase lines (successive march objectives); hours for continuing the advance beyond these phase lines or conditions for such continuance.

(3) Periodic reports of progress.

(4) Assembly positions (see sec. III).

(5) Axis of advance of each battalion command post.

(6) Connecting groups (see par 163c).

b. Zones of advance.—Zones of advance are areas of responsibility. They are defined by designating their lateral boundaries. The points designating a boundary should be successive terrain features that extend in the direction of movement and are easy to identify on the ground. Zones of advance regulate the lateral limits of reconnaissance, movement, and action for the units to which assigned. To take advantage of favorable routes of approach, units or fractions of units may be authorized to move temporarily into adjacent zones. Such movements must not interfere with the action of adjacent units and should be made only after agreement by the commander of the unit whose zone is entered.

c. Phase lines.—(1) When phase lines are employed as a means of control, they serve as intermediate march objectives on which further action may be coordinated. They are especially useful for control in an obscure situation or in broken or wooded terrain. Phase lines are sought which favor friendly observation and action and act as a mask to hostile observation and action. To this end they should connect laterally those terrain features which afford observation and fields of fire for artillery and infantry heavy weapons; which afford natural obstacles to hostile mechanized forces; and which conceal the activities of friendly forces to the rear.

(2) Distances between phase lines for units of the regiment will depend upon the character of the terrain and the imminence of contact. When contact with strong enemy forces is not expected, phase lines may be several miles apart. In situations where contact is expected momentarily, battalions should be able to cover with their supporting weapons the advance of their security elements to the next phase line; in open country the distance between phase lines may be from 1,000 to 2,000 yards; in close country phase lines should be closer. Halts for rest during the approach march are usually made only on phase lines. However phase lines must not be considered as lines upon which a unit halts for further orders unless such action is specifically directed.

d. Periodic reports.—When terrain phase lines are not designated, control may be exercised by requiring reports of progress from battalions at stated times or time intervals.

e. Actions of commander.—The regimental commander modifies or amplifies the original development order as necessary during the approach march to conform to the changing situation and insure the ready availability of all units for performance of such missions as may be assigned. He usually moves with the commander of one of the leading battalions in order to obtain early first-hand knowledge of contact with hostile forces, to influence the resultant action, and to make plans for further development of the regiment. He is accompanied by radio personnel, with their equipment, and by messengers to enable him to communicate with the regimental command post.

f. Signal communication.—Signal communication measures in effect during route march are continued during the approach march. Messengers are used extensively until assembly areas are reached. Seldom are wire lines laid until initial command posts for the attack are selected.

■ 162. RECONNAISSANCE.—*a. By higher unit.*—Reconnaissance units of higher echelons usually operate in advance of the leading elements of the regiment. Liaison to supplement normal means of communication with these units is provided for by detailing a liaison officer with suitable personnel, transportation, and communication equipment to accompany them, or by providing for periodic patrols to contact them for the purpose of obtaining information. Provision for such liaison may be prescribed by higher authority. When the approach march becomes necessary, these forward units usually will be close to the leading elements of the regiment.

b. Regimental reconnaissance detachment.—(1) When appropriate, a regimental motorized reconnaissance detachment operates ahead of the leading foot elements of the regiment, either under regimental control or as an element of the advance guard. So far as practicable, its activities are coordinated and supervised by the regimental S–2.

(2) As the reconnaissance forces of higher units are forced closer to the regiment, the regimental reconnaissance detachment maintains close touch with them to gain all possible information. It intensifies detailed reconnaissance within its assigned limits and transmits all information to the regimental (or advance guard) command post by the most rapid means of communication available.

(3) Instructions to the commander of the motorized reconnaissance detachment should include—

(*a*) Route or zone of regimental advance and approximate hour the leading elements will reach each successive objective or phase line.

(*b*) Vital areas and key terrain features to be reconnoitered by the detachment (e. g., ridge lines, defiles, stream crossings), and the essential items of information to be sought.

(*c*) Arrangements for liaison with friendly units operating to the front in the regimental zone.

(*d*) Times and places for periodic contacts with regimental (or advance guard) command post; any special instructions regarding reporting.

c. By commander.—Under the protection of the leading elements, the regimental commander conducts his personal reconnaissance for information of the terrain and tactical situation (see par. 171).

■ **163. SECURITY.**—*a. General.*—The general considerations and provisions governing security during marches are covered in paragraphs 93 to 102, inclusive.

b. Frontal security.—(1) The regimental commander may provide for the frontal security of the regimental approach march by—

(*a*) Detailing an advance guard under regimental control to advance on a broad front covering the regimental zone.

(*b*) Dividing the regimental zone among leading battalions and charging them with security in their zones.

(2) The first method is indicated—

(*a*) When battalions are in column or wedge formation.

(*b*) When the zone of advance is relatively narrow.

(*c*) When the situation is obscure.

(3) The second method is indicated when battalions are abreast or in inverted wedge formation.

(4) Usually one reinforced battalion is a suitable advance guard and the leading battalion is so designated if battalions are in column.

c. Flank security.—(1) When the regiment is on an exposed flank, a flank guard is provided (see par. 96). This may require from a company to a reinforced battalion. Additional flank security is provided by echeloning the reserve toward the exposed flank. The flank guard is usually taken from the reserve.

(2) When the regiment is an interior unit its flanks are relatively secure. Flank detachments or patrols from the leading battalion(s) may serve as connecting groups and provide a measure of security for the regiment. Their limited size and field of action, however, make it impossible for them to secure the flanks of the regiment throughout its depth. The regimental commander, therefore, details connecting groups, usually from the rear battalion(s) to operate under regimental control. Each connecting group may consist of a half squad, squad, or an entire platoon, depending on the enemy threat, the distances between units, and the character of the terrain. When units are widely separated, a connecting group should be provided with motor transport for part or all of its personnel. Connecting groups constantly keep contact with both units; they must be able to tell the commander of either unit where the other's flank is. A connecting group reports the extension of a gap and tries to reestablish contact whenever it is lost.

d. Antimechanized defense.—The bulk of the regimental antitank weapons will usually operate with regimental security detachments during the approach march. They may be attached to those detachments or retained under regimental control. Some of the regimental antitank guns are held mobile under regimental control. Battalion antitank weapons remain under battalion control. All antitank units, except those which are held mobile, usually displace forward by echelon to successive selected positions from which dangerous approaches are covered until the regiment has cleared. (See FM 7–35.)

e. Antiaircraft security.—Subordinate units are made responsible for their own protection against air attack. Protective measures comprise warning, concealment, dispersion, and fire (see par. 99).

■ 164. CONDUCT OF APPROACH MARCH.—*a. Advance guard.*—(1) During the approach march the regimental advance guard, or the advance guards of battalions charged with security in their zones, advance on a broad front (see fig. 3). They seize successive terrain lines and cover the approach of elements in rear.

(2) When hostile resistance forces forward reconnaissance detachments to halt or withdraw to the flanks, the regi-

mental commander requires aggressive action by the advance guard to develop the situation. Should the hostile resistance indicate the necessity of employing the entire advance guard,

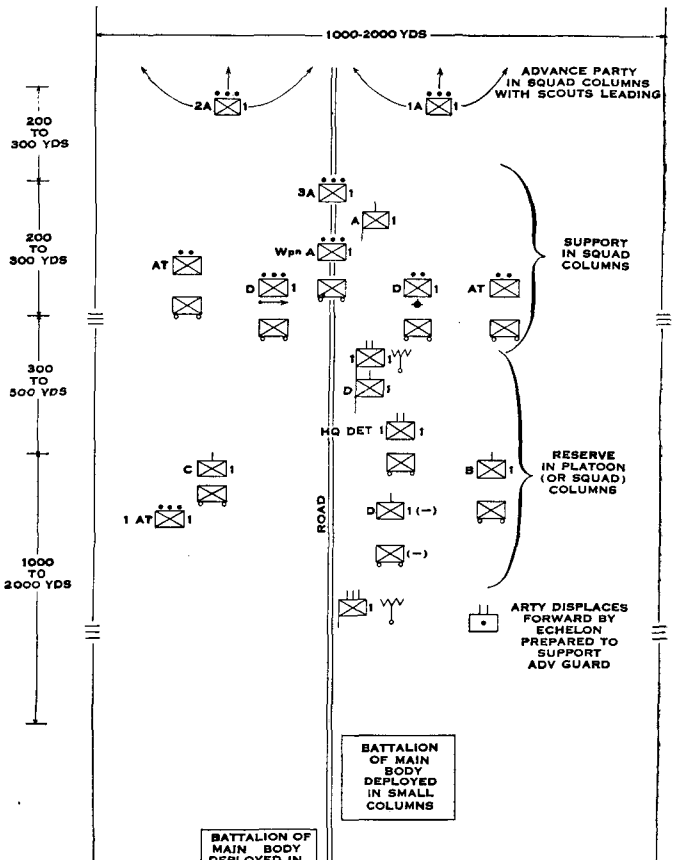


FIGURE 3.—Advance guard battalion moving on broad front during approach march (formations and distances intended only as guides).

he does not hesitate to do so unless his mission or restrictions imposed by higher authority prohibit such action. Should his action be so limited, he directs the advance guard com-

mander to seize and hold a suitable position to cover the preparation of the regiment for further action.

b. Artillery.—The artillery usually displaces forward by echelon in order to be prepared at all times to furnish close support to the leading elements. One echelon occupies position and remains prepared for instant action. The attached artillery is given a high priority on a favorable route within the zone of advance. Artillery liaison details accompany the leading battalion(s), and forward observers are sent out to insure prompt support of any action taken during the course of the approach march or the occupation of assembly areas.

■ 165. VARIATIONS IN APPROACH MARCH.—*a. General.*—When the regiment makes an approach march by day behind forces sufficiently strong to protect it against ground attack except by small elements and mechanized forces, concealment from air observation is generally of more importance than readiness for action against ground forces. Security detachments may be smaller but must be provided. Covered routes are used and either routes or zones of advance are assigned to subordinate units.

b. Formations.—The regiment may be disposed in any of the formations listed in paragraph 160*a*. The formation adopted should be one which facilitates the probable future action of the regiment.

c. Reconnaissance.—(1) Contact is maintained with covering forces (see par. 162*a*).

(2) The regimental commander and commanders of leading battalions with their parties usually precede their units in order to reconnoiter to obtain early information of the enemy and to plan the operations of their units.

(3) A route reconnaissance party and a quartering party are sent forward to prospective assembly areas.

■ 166. NIGHT APPROACH MARCH.—*a. General.*—Approach marches made at night aid in maintaining secrecy and in reducing exposure to hostile observation and to air and mechanized attack. A night approach march must be protected by security forces or by other units which occupy positions covering the assembly position to be occupied. The procedure then is generally as prescribed in paragraphs 108 to 111, inclusive, for night marches.

b. Reconnaissance.—The regimental commander will usually receive the development order or warning order of the higher commander in time to permit him to make a daylight reconnaissance. He assigns battalion assembly areas as soon as practicable so that reconnaissances may be made by subordinates and preparations made for the movement (see par. 80). If time does not permit such daylight reconnaissances, routes and areas are selected from recent maps or photomaps.

c. Direction and control.—A night approach differs from a day approach principally in the greater difficulty of maintaining direction and control. Detailed plans are made to reduce these difficulties. Routes are carefully marked. Column formations are adopted and distances and intervals are reduced. Successive bounds when used are shorter. (For other control measures to be taken, see par. 109.)

d. Secrecy.—The secrecy measures taken before, during, and at the end of a night march are covered in paragraph 110. An approach to terminate in an attack at daybreak should be so timed that troops reach their assembly positions or the line of departure shortly before the attack is to be made.

e. Security.—Contact is established before dark, if practicable, with the security force covering the assembly or departure position, and its dispositions are made known to the command. If practicable a motorized detachment is sent ahead of the regiment to outpost the assembly position. For security measures in a night march, see paragraph 111.

f. Motor elements.—Company transport not required for command purposes is usually held in a concealed area and started so as to reach the assembly position shortly after the foot troops. Necessary elements of the regimental train are moved forward similarly; other elements remain in the regimental train bivouac.

SECTION III

ASSEMBLY POSITIONS (AREAS)

■ 167. GENERAL.—*a.* When practicable the regiment occupies assembly positions (areas) preliminary to deployment for attack. In them the attack is organized and coordinated; equipment not essential to combat is disposed of and extra ammunition is issued. Units are disposed for their subse-

quent action but are kept sufficiently dispersed so they do not present concentrated targets to air attack or artillery fire. Reconnaissances are made and orders issued before departure from the assembly positions.

b. The regimental assembly position is usually designated by the higher commander; otherwise it is selected by the regimental commander.

c. The regimental commander subdivides the regimental assembly position into battalion positions, or he may assign more advanced battalion assembly positions as knowledge of the situation and plans becomes available.

d. Battalions are sometimes halted in rear assembly positions (areas), located some distance from the line of departure, and are conducted under cover of darkness to final assembly positions near the line of departure. Preparations for attack are completed as far as is possible in these rear assembly positions.

■ 168. SELECTION OF BATTALION ASSEMBLY POSITIONS.—*a. Reconnaissance.*—(1) The regimental commander designates battalion assembly positions after a ground reconnaissance, if practicable; otherwise he designates them from a map or photomap.

(2) Where the situation permits, guides are assembled from companies of the rear battalion(s) and sent ahead under a battalion or regimental staff officer to reconnoiter the position and to meet and conduct their units to assigned locations.

b. Characteristics.—Insofar as practicable, assembly positions for attack should have concealment from hostile air and ground observation and cover from small-arms fire. They should be convenient to favorable routes of advance to lines of departure for the attack. Terrain is desirable which provides turn-arounds for motor vehicles and natural protection against mechanized attack. Positions should be large enough to permit dispersion as an antiaircraft measure. Rear assembly positions should be out of range of hostile light artillery. Final assembly positions for attacking battalions should be the most forward covered and concealed localities in rear of the line of departure. They should be near a good observation point.

■ 169. SECURITY.—*a.* The higher commander may provide a covering force to protect the assembly position or the regiment may have to provide its own outpost. The regimental commander always causes local security detachments to be posted. Ordinarily each battalion is charged with providing local security for its assembly position. Security measures taken by battalions are coordinated by the regimental commander.

b. When a regimental advance guard has been covering the approach march it is often directed to outpost the assembly position (see par. 144).

c. Artillery attached to or in direct support of the regiment occupies positions from which it can protect the occupation of the assembly position.

d. The antimechanized protection of the assembly position is coordinated by the antitank company commander. He considers the location of battalion antitank weapons, assigns position areas to his platoons, and provides for observation and warning.

e. The provisions of paragraph 145 for the interior security of a bivouac also govern in assembly positions. Although units must be disposed for their subsequent action, they should be so dispersed that they do not present concentrated targets to hostile air attack or artillery fire. When assembly positions are to be occupied long enough to warrant, troops should be directed to dig hasty individual trenches as cover from air, mechanized, or artillery action. Vehicles must be dispersed and concealed or camouflaged.

SECTION IV

RECONNAISSANCE, PLANS, AND ORDERS

■ 170. GENERAL.—*a.* The orders of the higher commander assign the regiment a mission (usually the capture of a physical objective), designate its zone of action, indicate the units that are attached to or that will support the regiment, prescribe a general line of departure, and ordinarily fix the time of attack. Upon the basis of these orders and his reconnaissance the regimental commander formulates his plan.

b. If the regimental objective is not assigned by higher authority it is selected by the regimental commander.

c. All parts of the commander's plan should contribute

to the attainment of the objective. The final plan should not be decided upon until all possible information of the enemy situation and of the terrain has been obtained. *However, plans must often be completed with only partial knowledge of the enemy situation.*

d. Plans are put into effect by means of orders. After issue, orders should not be changed, so far as they affect subordinate units, except for compelling reasons.

e. In offensive action, time is usually all-important. Warning or fragmentary orders announcing plans as they are developed should be communicated to those subordinates whom they affect. This must be done so that subordinates will have the maximum time for reconnaissance and other preparations.

■ 171. RECONNAISSANCE.—*a. General.*— (1) Reconnaissance and planning for probable action are continuous from the beginning of movement toward the enemy. Reconnaissance patrolling is progressively intensified during the approach march and occupation of assembly positions.

(2) Following receipt of the warning or attack order from higher headquarters, the regimental commander makes a map reconnaissance in order to plan his terrain reconnaissance.

(3) He determines and announces the essential elements of information and directs S–2 to coordinate the efforts of all regimental units and intelligence agencies toward obtaining the desired information, and to call upon higher headquarters for such items as are not obtainable by the regiment.

(4) From his map reconnaissance the regimental commander determines the areas to be reconnoitered, their important terrain features, and the itinerary. He will usually be able to make a tentative plan, and decide how, when, and where he will issue his attack order. If the situation permits the assembling of subordinates to receive his order, he directs, before departing, that they be informed of the hour and place of assembly. If he can determine his general plan he also directs that its principal points be transmitted at once to subordinate commanders.

b. Reconnaissance party.—The regimental commander designates certain staff officers to assist him in his reconnaissance. A stenographer, draftsman, motor messengers, and radio operators with portable radiotelephones are usually included in the party. A small motorized security detachment accompanies and protects the party.

c. Conduct of commander's reconnaissance.—(1) The regimental commander conducts his reconnaissance generally as planned, using his officers and commanders of supporting arms to assist him.

(2) The commander seeks to obtain by reconnaissance the following information:

(*a*) The location of critical points and areas held by the enemy.

(*b*) Areas swept by hostile fires.

(*c*) The location of gassed areas and the location, extent, and type of obstacles.

(*d*) The location, nature, and extent of favorable approaches to the enemy position.

(*e*) Lines of departure and zones of action.

(*f*) Locations for the reserve, supporting weapons, supply and evacuation facilities, and command posts.

d. Planning during reconnaissance.—(1) During his reconnaissance the commander keeps constantly in mind such tentative decisions and plans as he has formed and modifies or changes them as necessary. If time is pressing he directs that changes or new decisions that directly affect the immediate action of subordinate units be communicated without delay to their commanders.

(2) The reconnaissance should result in crystallization of the commander's plan and the preparation and transmission of orders to subordinates for its execution.

■ 172. PLAN.—*a. Main components.*—The plan of the regimental commander consists of a plan of maneuver and plan of supporting fires that will attain the objective. It includes the following principal decisions:

(1) Main and secondary efforts of the regiment.

(2) Battalion objectives.

(3) Battalion zones of action.

(4) Formation.

(5) Time of attack.

(6) Composition, initial location, and initial mission of regimental reserve.

(7) Initial missions of supporting arms.

b. Additional components.—Other matters included in the regimental plan which may require the commander's decisions but whose details can often be determined by his staff are—

(1) More detailed delineation of the line of departure.

(2) Details of coordinating the efforts of all subordinate and supporting units.

(3) Security, including security of command post and regimental train bivouac.

(4) Supply and evacuation, including disposition of train.

(5) Command posts and signal communication.

c. Use of staff.—See paragraphs 54, 56, and 57.

■ 173. PLAN OF MANEUVER.—*a. General.*—(1) The plan of maneuver is the commander's plan for employing subordinate units to accomplish his mission. It includes where, when, and in what direction the main attack and secondary attack are to be made, the objectives, the frontages or zones of action, and the formation or disposition of the command. It prescribes missions and movements for subordinate units.

(2) In determining the plan of maneuver the regimental commander analyzes the terrain, including approaches to the enemy position, to determine how he can best use it (see FM 101–5).

(3) The plan of fire support provides for effective cooperation between the troops in the attack echelon, the heavy weapons, the artillery, chemical weapons, and any supporting aviation to assure the accomplishment of the mission.

(4) The mission assigned to a battalion to carry out its part of the regimental plan of maneuver must be specific. Instructions as to methods, however, should be sufficiently general to permit the battalion commander to develop and execute his own plan of maneuver in his own way.

b. Main attack.—(1) Generally the main attack of the regiment will be made initially by a reinforced battalion. The bulk of the supporting fires are made available to it. Reserves ordinarily are so located that they can give impetus to the main attack.

(2) The main attack of the regiment is aimed at attaining the regimental objective.

(3) Plans are made to direct the main effort of the main attack through the weakest part of the hostile dispositions. Weak points lie in terrain where the defender cannot use his weapons to advantage, where covered approaches permit an advance close to his position, or where defensive works are exposed to observation by the attacker's artillery.

(4) As the attack progresses, the main effort is shifted in

accordance with conditions and to exploit weak points discovered in the hostile dispositions. This shifting is accomplished in part by shifting the bulk of the supporting fires to another area. It may also be accomplished by employing reserves to exploit a weakness in the hostile dispositions. A commander must not hesitate to shift the direction or zone of his main effort when developments disclose enemy weakness or advantageous approaches into and through the enemy position.

c. Secondary attack.—(1) The secondary attack is designed to hold the enemy in position, deceive him as to where the main attack is being made, to force him to commit his reserves prematurely and at an indecisive location, and to prevent him from reinforcing the front of the main attack.

(2) The secondary attack of the regiment should be made with as small a fraction of the regiment and its supporting arms as will accomplish the mission. This fraction will seldom exceed one battalion and frequently will be only a part of a battalion. In a regiment having only two battalions available, the regimental reserve is taken from the battalion making the secondary attack.

(3) The objectives of the secondary attack are such as to facilitate the advance of the main attack.

(4) The secondary attack is conducted boldly and vigorously. Should pronounced hostile weakness develop in its front it is advanced without hesitation and in some situations may become the decisive attack of the regiment.

d. Objectives.—(1) The attack order of the higher commander assigns the regiment a physical objective for its attack, such as a body of troops, dominating terrain, a road or rail center, or other vital area in the hostile rear.

(2) The regimental order assigns an objective to each attacking battalion. Each may be assigned a part of the regimental objective.

(3) Intermediate objectives are often assigned. If the regiment designates only one objective, battalions may designate intermediate objectives. Terrain lines or terrain features that afford observation and favor the delivery of supporting fires for subsequent advance are suitable intermediate objectives. Objectives with terrain features favoring defense against mechanized units are also desirable.

(4) Objectives should—

(*a*) Be easy to see and identify.

(*b*) Be such that their attainment will promote accomplishment of the mission of the next higher unit and facilitate probable future action.

(*c*) Afford good observation and suitable terrain for fire support of a further advance.

(*d*) Produce a convergence of effort by subordinate units.

(5) If practicable, each successive objective of a unit should be within range of its supporting weapons located on the last previous objective.

(6) No pauses are made on the initial and intermediate objectives except when they are imperative for reorganization.

e. Frontages and zones of action.—(1) Zones of action regulate the lateral limits for battle reconnaissance and combat of the unit. The zone of action or frontage assigned to the regiment varies with its mission, the depth to which the attack is to be carried, the terrain, the amount of fire support available, and the probable hostile resistance. These same factors govern the frontage or zone of action which the regimental commander assigns to each attacking battalion. An infantry regiment at full strength and in a main attack with its flanks covered by other troops, may be assigned a frontage of from 1,000 to 2,000 yards. Under the same conditions a battalion seldom is assigned a frontage of less than 500 yards or more than 1,000 yards, measured on the front of the hostile position.

(2) A relatively narrow frontage is assigned to a battalion required to make a long advance or to make the main attack of the regiment. This permits disposition in depth. A greater frontage is assigned to a battalion that is required to make only a slight advance or to make the secondary attack.

(3) Zones of action are defined by designating their lateral boundaries or by assigning a front of deployment and the lateral limits of the unit's objective. An assigned frontage is not necessarily entirely occupied by the deployed unit. Boundaries between battalions should, when practicable, coincide generally with the boundaries of terrain corridors but should be placed so that key terrain features like hills are, if practicable, entirely within the zone of one battalion. (For discussion of terrain corridors, see FM 101–5.) The points designating the boundary should be terrain features

easy to identify on the ground and should be named as inclusive or exclusive to one unit or the other.

(4) The zone of action of a regiment in the main attack of a larger force will usually extend through the depth of the hostile position at least as far as the location of the hostile artillery. Battalion zones are assigned no farther than the regimental objective. Boundaries are prescribed far enough to the rear of the line of departure to include all combat elements of the attack units; they may extend back to battalion assembly positions. During the progress of the attack and especially when reserves are committed to action, appropriate changes in zones of action are made.

(5) Ordinarily no boundary is assigned on an open flank.

(6) To take advantage of favorable routes of approach, units or fractions of units may be authorized to move temporarily into adjacent zones. Reserves are frequently moved into adjacent zones to obtain advantageous departure positions for flanking attack. Such movement must not interfere with the action of adjacent units and should be made only after agreement by the commander of the unit whose zone is entered.

f. Formation.—(1) The regimental commander may dispose his command for attack in—

(*a*) Column of battalions in trace or echeloned.

(*b*) Inverted wedge formation.

(*c*) Wedge formation.

(*d*) Exceptionally, all battalions abreast with a fraction of one or more in reserve (or with battalions restricted as to the proportion of their strength that may be committed).

(2) A formation in column is particularly suited to an attack in a narrow zone; when the situation is still obscure; or when the assigned objective requires an advance through the hostile position for a considerable distance. It also is usually adopted when the regiment is on an exposed flank. The inverted wedge formation is indicated where the width of the zone and known hostile dispositions indicate the initial employment of two attack battalions. Formation with battalions abreast will usually be used only when the assigned frontage is extremely wide for the number of battalions available, when hostile resistance along virtually the entire front is to be expected, and the mission requires only a limited advance. The use of a wedge formation is exceptional.

■ 174. LINE OF DEPARTURE.—*a.* A general line of departure is usually designated by higher headquarters for the purpose of coordinating the advance of the attack units and the fires in support of these units. The regimental commander may prescribe the line in more detail after he has made a ground reconnaissance.

b. The line of departure is ordinarily located on or behind the last available terrain mask which can be reached without exposure to hostile observation and small-arms fire. It should be as nearly perpendicular to the axis of attack as practicable for each battalion in order to facilitate maintenance of direction. It should be easy to recognize on the ground. Roads and small stream lines are examples of suitable lines of departure.

■ 175. TIME OF ATTACK.—*a.* The time of attack is the hour at which the line of departure is to be crossed by the leading elements of the attacking echelon.

b. The hour is usually designated by the higher commander, who sometimes calls on the regimental commander for his estimate of the earliest hour at which his unit can be ready to attack. The time of attack may be announced to subordinate units by a prescribed signal, such as a pyrotechnic flare, or by a tactical action such as artillery bombardment, air attack on enemy positions, or debouchment of a designated echelon of tanks.

c. The hour of attack should be so fixed as to permit successive commanders to make the necessary reconnaissance and preparations, issue orders, and move their units to attack positions.

d. When the higher commander announces an hour of attack, the regimental commander apportions the time available so that subordinate commanders will have the maximum possible share for their preparations.

■ 176. RESERVE.—*a.* The reserve is the commander's principal means of influencing the action after the attack has begun.

b. When the situation is relatively clear and enemy capabilities are limited, the reserve may consist of one battalion disposed to favor the maneuver. When the situation is obscure, the reserve may consist initially of two battalions disposed in depth. When the regiment is making the secondary attack of a larger force with its battalions disposed abreast,

the regimental reserve may be no larger than a company. In this situation restrictions are often put on the commitment of battalion reserves.

c. The reserve is located initially where it is afforded maximum protection against hostile observation and air and mechanized attack, where it can furnish flank security, and where it will be able to move rapidly to points of possible employment. It is kept within supporting distance of the attack echelon. The reserve is located generally in rear of the main attack of the regiment to facilitate its employment, to exploit success, or to add impetus to the action. If the regiment is making an envelopment the reserve is usually disposed so it can be used to exploit or extend the enveloping action. When the regiment has an exposed flank, part or all of the reserve is disposed so that it can move to meet any hostile threat that may develop.

d. The missions that may be assigned the reserve initially are—

(1) To protect the flank(s).

(2) To maintain contact with adjacent units.

(3) To protect the rear of the regiment.

e. The reserve commander makes the necessary reconnaissances and prepares tentative plans—

(1) To exploit any hostile weakness developed by the attacking echelon.

(2) To protect an exposed flank.

(3) To extend the outerflank of an enveloping attack (when the regiment is the enveloping force of a larger unit or is the outer unit of the enveloping force).

(4) To pass through or by a depleted attacking battalion and continue the attack.

(5) To meet counterattacks.

■ 177. SUPPORTING UNITS.—*a Field artillery.*—(1) An artillery battalion is usually attached to or placed in direct support of the infantry regiment. The supporting artillery is responsible for maintaining liaison and communication with the supported infantry unit. The artillery command post is located to facilitate control of the artillery batteries; when practicable it is located close to the infantry regimental command post. The artillery unit also sends a liaison detachment to each attacking battalion. In addition to this liaison con-

tact, artillery forward observers establish contact with infantry company commanders and with observers for the 81-mm mortar platoons. Artillery observers conduct the artillery fire; they are authorized to fire missions on request.

(2) The infantry regimental commander and the artillery commander prepare the general plan of artillery fire support. The infantry commander explains the situation, his plan of attack, and the artillery support desired. The artillery commander states the location of his batteries and observation posts, observation posts desired during the advance, the terrain he commands with observation and fire, and how he can most effectively support the attack. Based on this exchange of information, the associated commanders arrange the general plan of artillery fire support.

(3) The commander of the attacking infantry battalion informs the artillery liaison officer of the detailed artillery fire support desired. The artillery battalion commander, in compliance with the priorities established by the infantry regimental commander, prepares his detailed plan of close supporting fire. The plan of artillery fires is then transmitted though the liaison officer to the battalion commander(s) concerned. The plan of fire of infantry heavy weapons and other supporting weapons is coordinated with the plan of artillery fires. The fires of infantry heavy weapons supplement and reinforce the artillery fires; mortars engage targets too close to the attacking echelon to be engaged by the artillery.

(4) The supporting artillery must know at all times the location of the leading elements of the attacking echelon and be kept informed of the plans of the supported infantry unit.

(5) For further details of infantry-artillery liaison, see FM 7–5.

b. Combat aviation.—(1) When combat aviation supports the infantry attack its action against battlefield objectives must be closely coordinated with the plan and maneuver of the ground troops. Infantry commanders inform the supporting aviation of the location of targets to be attacked from the air, the location of leading friendly troops, and of plans of maneuver and fire. Means of identifying leading infantry elements are carefully prearranged and executed to prevent casualties from air attack initiated by friendly aviation.

(2) The following measures will aid in securing coordination of the action of infantry and combat aviation:

(*a*) Liaison officers are used whenever possible.

(*b*) Prepared maps marked with a simple lettered grid system of the regimental area, and in the hands of both ground and air troops, will aid in the quick designation of targets.

(*c*) Panels afford a means of indicating direction, distances, and dispositions. Very lights fired in the direction of the target which it is desired to attack have proved effective, the signal being answered by any aircraft in the vicinity.

(*d*) Radio is used in accordance with such restrictions as may be imposed. It should be borne in mind that radio is the most effective means of influencing the attack of support aviation once it is in flight. However, the attack must be well planned before aviation leaves the ground and radio utilized only as a means of directing the attack on targets of opportunity.

(*e*) All infantry units are informed of the combat aviation support to reduce the danger of firing on friendly planes.

(3) For further details of air support of infantry, see FM 1–5, 7–5, and Training Circular No. 52, War Department, 1941.

c. Chemical units.—(1) Chemical troops attached to the regiment will usually consist of one company. The regimental commander consults the commander of the chemical unit as to its capabilities under existing conditions and then makes plans for its use.

(2) During the attack the principal initial mission of the chemical supporting unit is to screen the advance of attacking units over exposed ground. For this purpose smoke is placed by chemical mortars directly upon hostile forward positions. These fires are closely coordinated with the advance and often may be most effective if used immediately after the artillery lifts its close support fires. As the attack progresses the chemical platoons follow the attack battalions by bounds prepared to fire smoke on call. A chemical platoon may be attached to each attacking battalion during this phase. Chemical operations should be restricted so far as necessary to avoid interference by gas or smoke with the operations of other friendly troops. The chemical company, less its platoons, is retained under regimental control for the

supply of ammunition to the platoons. (For the capabilities and employment of chemical troops in support of infantry, see FM 7–5.)

d. Tanks.—(1) One or more battalions of tanks may be attached to an infantry regiment for an attack. Ordinarily they are employed as a unit under the direct control of the regimental commander. Their objectives coincide in general with those of the regiment.

(2) Tank units support foot troops by—

(*a*) Neutralizing or destroying hostile automatic weapons likely to hold up the advance of foot troops.

(*b*) Making passages through wire or other obstacles for use of foot troops.

(*c*) Maintaining neutralization of hostile resistance by attack in depth until arrival of foot troops on the objective.

(*d*) Neutralizing or destroying hostile reserve and artillery formations in the battle area.

(*e*) Destroying or disorganizing hostile command, communications, and supply installations in the battle area.

(*f*) Breaking up hostile counterattacks.

(3) The regimental commander acquaints the tank unit commander with the situation and plan, and receives the tank officer's recommendations after this officer has made a reconnaissance. The regimental attack order prescribes objectives for the tanks and necessary details for coordination and cooperation between the infantry and tanks and any other attached supporting arms. The orders should provide for close support of the tanks by attached artillery. They should also provide for action by infantry heavy weapons against hostile antitank guns.

■ 178. SECURITY.—*a. Flank.*—(1) If a regiment is on an exposed flank, the regimental commander may provide for the security of that flank by—

(*a*) Disposing his reserve on that flank (when such disposition is otherwise suitable for the execution of the plan of maneuver) and making it responsible for flank security.

(*b*) Assigning flank security as a mission of the battalion on that flank.

(*c*) Detailing a flank security detachment.

(2) Protection of an interior flank is partially provided by the presence of the adjacent unit. However, the regi-

mental commander is responsible for his own flank security and must make provision for that security. He may direct the reserve to provide security patrols and connecting groups to maintain contact with adjacent units. Attacking battalions make similar provision for their own flank security.

b. Antimechanized.—(1) Regimental antitank weapons are used to protect attacking battalions and any exposed flank. Usually at least one platoon is held mobile under regimental control. It is ordinarily so located as to facilitate protection of the command post.

(2) Antitank weapons protecting forward and flank units may be attached to them when centralized control is impracticable. If guns are retained under regimental control, the antitank officer coordinates their action with the action of battalion antitank weapons.

(3) For discussion of warning system, see paragraph 98, FM 7–5 and 7–35.

c. Antiaircraft.—(1) The regimental commander may prescribe active measures for antiaircraft security to be taken by subordinates. Ordinarily such measures will be left to their discretion.

(2) If antiaircraft weapons are attached to the regiment they are disposed to protect the area which needs protection the most in the particular circumstances; this may be the area occupied by the regimental reserve.

(3) For discussion of warning system, see paragraph 99 and FM 7–5.

d. Regimental train bivouac.—Security of the regimental train bivouac, unless provided by higher units, is charged to the service company commander. He provides a warning system of antiaircraft and antitank lookouts and a small interior guard. He also prescribes an alert system for assembling the bivouac personnel at designated positions. When necessary he requests additional troops and weapons, which may be detailed from the reserve. Passive defense of this bivouac is sought by locating it where it is afforded concealment and the protection of natural obstacles, and by dispersing activities within it (see also FM 7–30).

■ 179. SUPPLY AND EVACUATION.—*a.* After receiving the recommendations of his S–4 the commander decides the location of the regimental train bivouac, disposition of trains, initial location of the ammunition distributing point, route of ammuni-

tion advance, hour(s) and method of feeding the troops, traffic restrictions, and the initial location of the regimental aid station.

b. Appropriate instructions are incorporated in the attack order; other instructions are issued in fragmentary orders prepared by S–4 (see FM 7–30 for details of supply and evacuation operations).

■ 180. SIGNAL COMMUNICATION.—If not prescribed by higher headquarters, the initial location of the command post and its axis of advance (axis of signal communication) are determined by the regimental commander. Similarly, when practicable and appropriate, he designates the initial locations and axes of advance of the battalion command posts (see FM 7–25). The initial command posts should be as far forward as practicable. (See pars. 72 to 76, incl.)

■ 181. ORDERS.—*a.* In offensive situations, time for the issuance of orders for a daylight attack will almost invariably be at a premium. This is caused by the fact that information essential to the making of plans will be available only after close contact with the enemy has been gained and by the further fact that, once close contact has been gained, the attack must usually be launched with a minimum of delay to obtain the maximum benefits of surprise. It is essential that warning orders and fragmentary orders be used freely in offensive situations to inform all unit commanders, without delay, of plans for the employment of their units.

b. When the attack is to be made at or near dawn, it is particularly important that the essential elements of a plan for the attack reach subordinate commanders in time to permit them to make daylight reconnaissances the preceding afternoon and evening.

c. For discussion of regimental field orders, see section XX, chapter 3. For form of order and check list, see FM 101–5 and 7–55.

SECTION V

CONDUCT OF ATTACK

■ 182. GENERAL.—*a. Scope.*—This section deals primarily with the attack of an organized position, in which both attacker and defender have had time to complete their preparations. Variations are discussed in the paragraph dealing

with meeting engagements (par. 194) and in sections VII, VIII, and IX dealing with other special conditions.

b. Flexibility in conduct.—An attack seldom progresses exactly as planned. The commander should carry out his plan vigorously but not adhere to it blindly. He must be constantly alert to exploit favorable developments and overcome unforeseen obstacles. He must give his main attack all the assistance at his command so long as it has a chance of success, but if enemy resistance blocks all efforts to advance, he must be prepared to shift his main effort to another part of his front where hostile weakness has been discovered. It is difficult to change the plan of maneuver of leading elements once the attack is launched; however, reserves can be effectively employed to give impetus to a main effort in a new direction. Attack dispositions of the leading elements can best be rearranged on intermediate objectives.

■ 183. INITIAL ADVANCE.—*a. Without tank support.*—(1) The attack begins when the leading elements of the attack echelon cross the line of departure. Movement from assembly positions is timed and coordinated by the battalion commanders so that leading elements cross the line of departure at the prescribed time without delays en route to or on this line, and so that supporting weapons occupy their initial positions by that time.

(2) Supporting weapons under regimental control release their fires in accordance with the regimental scheme of fire. This frequently will provide for the delivery of fires on call of the attack battalions. All attack units after crossing the line of departure continue to advance in deployed or partially deployed formations until forced to return the hostile fire.

(3) When fire superiority is gained over the enemy, small groups press forward. Supporting fires are reorganized on successive terrain features. Every advantage is taken of covered approaches and weak points disclosed in the hostile dispositions.

b. With tank support.—(1) When tanks lead the advance of an infantry regiment, light and heavy machine guns are assigned missions of supporting the tank advance by firing on hostile antitank weapons which disclose their positions.

(2) Tanks will usually attack in two or more echelons.

Both echelons are effective in neutralizing enemy resistance and in making gaps in enemy wire and through other obstacles. The first echelon supported by artillery, and combat aviation when available, has the mission of seeking out and destroying antitank weapons. The fires of artillery and infantry supporting weapons should be planned to furnish support especially to this echelon. The first tank echelon then moves on to disorganize and destroy in hostile rear areas. The last tank echelon overruns the hostile forward areas, destroys remaining automatic weapons, and is available to break up hostile counterattacks.

(3) It is essential that the infantry take full advantage of the tank action by following closely the final tank echelon. To permit this, prior plans are made to insure identification of the final tank echelon by commanders of infantry attack units.

(4) If successive objectives have been assigned, the movement forward from each must be coordinated. Prior plans should be made to insure that the commanders of both the infantry and tank units are informed as early as practicable when the other is ready to move. Supporting fires must be arranged for each successive advance. (See also FM 100–5.)

■ 184. CONTROL.—*a. General.*—In order to exercise intelligent control of the attack, the regimental commander must keep himself fully informed of the situation, estimate its probabilities throughout all stages, and prepare tentative plans to meet those probabilities.

b. Information.—The regimental commander keeps himself informed by personal observation and reconnaissance and by information received from subordinate elements of the regiment and from higher headquarters, all of which is evaluated, summarized, and presented to him by members of his staff.

c. Location of commander.—The regimental commander will usually spend much of his time during the attack at successive observation posts or with battalions which are conducting critical action. When absent from the command post it is essential that he be able to communicate promptly with the regimental command post, with the reserve, and with supporting and attached units.

d. Command and staff visits.—Frequent visits to subordinate units by the commander and members of his staff pro-

mote teamwork and coordination of effort. On such visits, full information of the situation is exchanged.

e. Action by commander.—(1) The commander leaves the detailed conduct of attacking units to the local commanders. He intervenes when necessary to insure teamwork between subordinate units and between them and supporting units, and to prevent the commission of serious errors. He may also intervene to restore order in a disorganized unit. The presence of the regimental commander is often an effective stimulus.

(2) The regimental commander can influence the action by shifting the fires of supporting weapons; by arranging for assistance and cooperative action between his battalions, and between them and adjacent units; and by the employment of his reserve.

■ 185. SUPPORTING WEAPONS.—*a. Organic.*—The heavy weapons of the reserve must be available to their own unit when it is committed to action. This necessity will usually limit their employment to missions which will permit their quick withdrawal. Such missions include the delivery of fires to support the initial stages of an attack; the occupation of positions near the reserve for protection of a flank; and the delivery of flanking fires from positions near the reserve to assist the advance of an adjacent unit.

b. Artillery.—(1) Initial support of the attack by artillery is in accordance with the prearranged plan worked out by the regimental commander and the commander of the supporting artillery. Such support may include a preparation delivered against forward hostile weapons and dispositions. Smoke to blind probable hostile observation posts will usually be included in preparation fires. When the advance makes necessary the lifting of these fires, the artillery is informed either through artillery liaison personnel or by prearranged signal. If tanks lead the infantry attack, the artillery will be given special missions of destroying hostile antitank weapons.

(2) As the attack progresses the regimental commander obtains distribution of artillery fire support in accordance with his desires by announcing or changing priorities. Ordinarily priority will be given to the battalion making the main attack. The supporting artillery displaces forward by echelon in order to permit continuity of fire support.

(3) The great flexibility of artillery fire permits it to be shifted rapidly between widely separated areas within the regimental zone. It is, therefore, a highly effective weapon against targets of opportunity; however, it should be used against such targets only when infantry weapons are unsuitable or incapable of dealing with them.

(4) When the regiment is making the main effort of a larger force, one or more additional artillery battalions may be made available for its direct support. The fires of all artillery units supporting a single infantry regiment will be controlled by a single artillery unit commander. The use of these fires by the infantry regimental commander conforms in general to the use of the fires of a single battalion outlined in (1) and (2) above.

c. Chemical troops.—Chemical units may be retained initially under regimental control and assigned initial missions of blinding hostile observation. As the attack units progress, it will usually be impracticable to support them effectively by chemical units retained under regimental control. If the regiment has a chemical company attached, its two platoons will usually be attached to the attack battalions and will occupy successive positions from which to support the advance.

■ 186. COOPERATIVE ACTION.—When necessary and practicable, the regimental commander directs a favorably situated attack battalion to assist by fire or maneuver an adjacent battalion which is held up by strong hostile resistance. He may direct one of his battalions to assist elements of an adjacent regiment when this assistance has been requested. He does not hesitate to ask for assistance from an adjacent regiment which is in a favorable position to render it.

■ 187. EMPLOYMENT OF RESERVE.—*a.* The reserve is kept within supporting distance of the attack echelon. The regimental commander regulates its advance by prescribing successive positions to be occupied. These should afford cover and concealment for the entire unit in approach formation. The reserve commander reconnoiters routes to successive positions and provides for guides to assist subordinate commanders in moving their units to the new areas. When the attacking echelon approaches assaulting distance, the reserve is usually advanced to a covered position near the

battalion making the main attack. A position is sought from which it can exploit the success of the advancing unit or meet a counterattack.

b. Until committed to action, the reserve is usually charged with providing flank protection and furnishing connecting groups to maintain contact with adjacent units.

c. As far as practicable a reserve battalion should be used as a maneuvering body and committed as a complete unit. When the reserve is committed, a new reserve is constituted as soon as possible.

d. The reserve is engaged to further success at points where resistance of the enemy is weakening rather than to redeem failure where he is offering stubborn resistance. A fresh unit should not be committed at the same place where an equivalent unit has failed.

e. The proper time for committing the reserve is often the regimental commander's most difficult and important decision. The natural desire to retain control of his most effective means for influencing the action must not be permitted to obscure the importance of maintaining the momentum of the advance. When the situation favors use of the reserve, it should be committed without hesitation. The area from which it will attack and the objective are designated by the regimental commander. When the reserve is committed, the higher commander is notified at once.

f. The reserve may be used—

(1) To exploit the success of the attacking echelon.

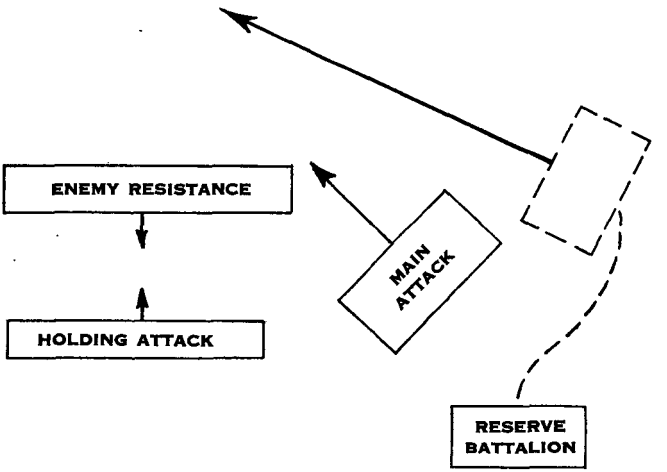
(2) To envelop or outflank resistance that is holding up the leading echelon.

(3) To continue the action of the attacking echelon when it becomes disorganized, depleted, or exhausted (this may require a passage of lines but preferably is executed by movement to the flank of the unit relieved).

(4) To meet counterattacks.

(5) To assist attacking battalion(s) by the fire of its heavy weapons.

g. Figures 4 to 9, inclusive, illustrate schematically various ways in which the regimental commander may influence the action by employment of his reserve battalion. (For the initial strength, composition, and location of the reserve, see par. 176.)



RESERVE USED TO EXPLOIT SUCCESS OF MAIN ATTACK BY FURTHER FLANKING ACTION AND TOWARD OBJECTIVE IN REAR OF THE HOSTILE MAIN POSITION.

FIGURE 4.

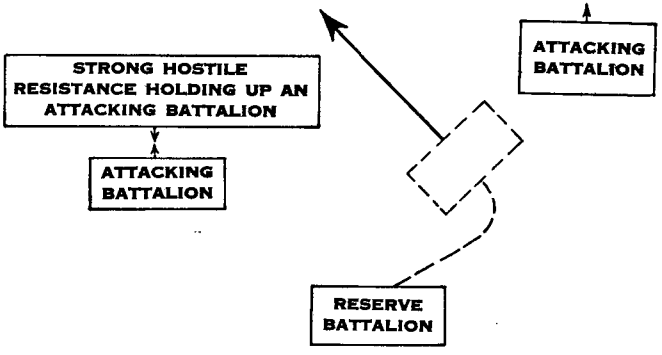
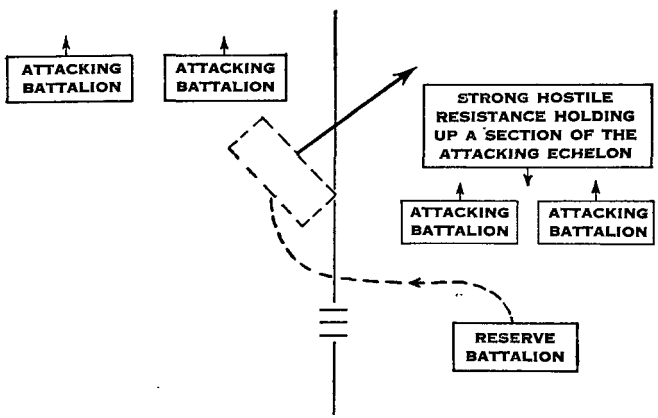
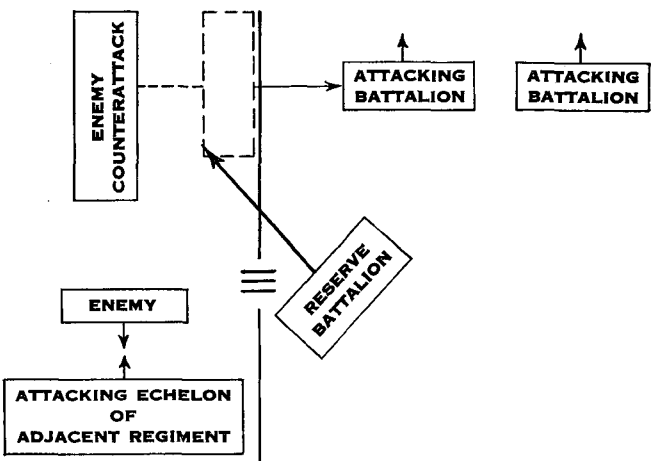

STRONG HOSTILE RESISTANCE HOLDING UP AN ATTACKING BATTALION
ATTACKING BATTALION
ATTACKING BATTALION
RESERVE BATTALION
THE RESERVE BATTALION ENVELOPS RESISTANCE THAT IS HOLDING UP A PART OF THE ATTACKING ECHELON. IT IS ORDERED TO ATTACK A DESIGNATED OBJECTIVE OR IN A DESIGNATED DIRECTION FROM A POSITION IN REAR OF THE RIGHT BATTALION WHICH HAS MADE FAVORABLE PROGRESS.

FIGURE 5.



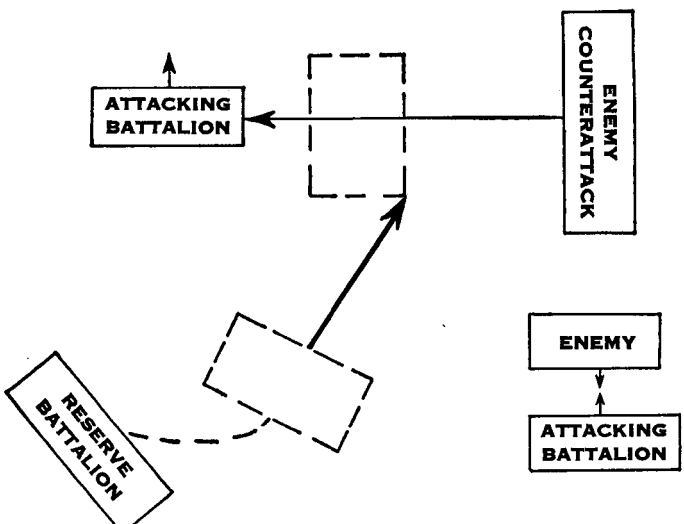
THE RESERVE BATTALION ENVELOPS RESISTANCE HOLDING UP THE ENTIRE ATTACKING ECHELON OF THE REGIMENT. IT IS DIRECTED TO ATTACK A DESIGNATED OBJECTIVE OR IN A DESIGNATED DIRECTION FROM A DEPARTURE POSITION IN THE ZONE OF THE ADJACENT REGIMENT WHICH HAS MADE GOOD PROGRESS. NECESSARY ARRANGEMENTS FOR THIS MANEUVER ARE MADE BETWEEN THE REGIMENTAL COMMANDERS CONCERNED.

FIGURE 6.



THE RESERVE BATTALION IS EMPLOYED TO STRIKE A HOSTILE FORCE COUNTERATTACKING THE ATTACKING ECHELON FROM THE ZONE OF THE ADJACENT REGIMENT, WHICH HAS BEEN HELD UP.

FIGURE 7.



THE RESERVE BATTALION ATTACKS THE FLANK OF THE ENEMY COUNTERATTACK WHILE IT IS IN PROGRESS. IN THIS SITUATION THE RIGHT ATTACKING BATTALION HAS BEEN HELD UP WHILE THE LEFT BATTALION HAS PROGRESSED AND THEREBY EXPOSED ITS FLANK TO THE ENEMY.

FIGURE 8.

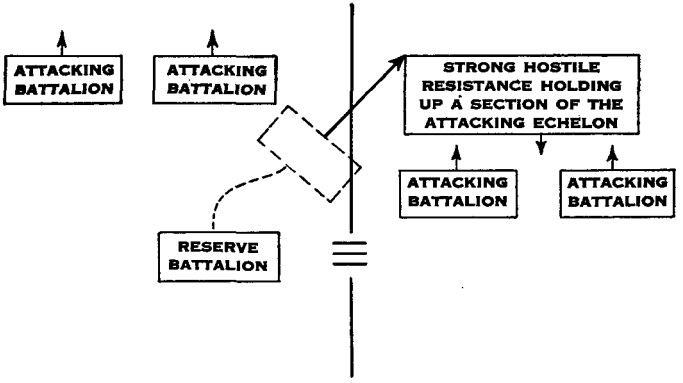

ATTACKING BATTALION
ATTACKING BATTALION
STRONG HOSTILE RESISTANCE HOLDING UP A SECTION OF THE ATTACKING ECHELON
ATTACKING BATTALION
ATTACKING BATTALION
RESERVE BATTALION
THE RESERVE BATTALION IS COMMITTED TO ATTACK THE FLANK OF RESISTANCE TO THE ADVANCE OF THE ADJACENT REGIMENT. THIS ASSISTANCE WILL USUALLY BE DIRECTED BY THE DIVISION (OR BRIGADE) COMMANDER OR BY ARRANGEMENT BETWEEN THE REGIMENTAL COMMANDERS CONCERNED.

FIGURE 9.

■ 188. ASSAULT.—*a.* The assault is the final advance of infantry to hand-to-hand combat. The manner of its delivery will be determined largely by the nature of the fires which have gained fire superiority permitting the infantry to approach to assaulting distance of the hostile front line.

b. Fires which have kept down the hostile resistance must be lifted before the troops can enter the enemy's forward defense areas. Careful coordination is required between their lifting and the launching of the assault. The assault under these conditions will usually be delivered by units no smaller than a rifle company. It will frequently be advisable to supplant the artillery fires upon the enemy's forward defense areas by the fires of infantry mortars shortly before the assault is delivered, because of the greater readiness with which the mortar fires can be lifted. The units about to assault are warned shortly before the fires are to be lifted. As the supporting fires cease, the assaulting echelon begins the assault. Sufficient alinement is maintained to prevent masking friendly fires. Shoulder weapons may be fired during the advance to prevent the defenders from again manning their defenses and opening effective fire. As the assaulting echelon approaches the hostile position, grenades are thrown and the final rush is made.

c. If the infantry advance has been made principally under cover of the fires of its own weapons, the assault may be initiated by a small unit, which finds the fire opposing it ineffective. The assault of one small element will usually have the effect of causing other small elements to begin their rushes until the entire assault echelon moves to close with the enemy.

d. Since the final rush will usually be made at a hard run, it should seldom be started more than 50 to 75 yards from the hostile position. Otherwise the assaulting troops will be so exhausted as to be at a disadvantage in close combat. (See FM 7–5.)

■ 189. ADVANCE THROUGH HOSTILE POSITION.—*a.* When the assault is successful or the enemy withdraws before the assault is delivered, attacking units occupy the captured terrain and pursue the retreating enemy with fire. Units may then continue the attack without halting; they may pause temporarily for reorganization; or they may defend the position they have captured. They do not halt on initial or intermediate

objectives except when the mission, or the enemy reaction, or the necessity for reorganization or displacement of supporting weapons, makes halting imperative. Leaders take advantage of any momentary pauses on captured terrain to determine losses and effect the minimum necessary reorganization of their units; to replenish and redistribute ammunition; and to reestablish fire support.

b. Artillery and infantry heavy weapons are displaced forward by echelon to maintain continuity of fire support. Artillery and other supporting weapons are kept informed of the progress of the attack echelon and successively lift their fires to more distant targets. The lifting of fires is effected by prearranged signal, through liaison personnel, or on time schedule. In the early stages of the attack, fires may be lifted on a prearranged time schedule, based upon the probable rate of advance of the attack units, or upon the desired duration of fire upon each successive target.

c. The importance of quick decisions and speed of action to take immediate advantage of local opportunities will usually require that control during the advance through the hostile position be decentralized to subordinate commanders. These should be encouraged to an aggressive exercise of their initiative in furtherance of the mission of the entire unit.

■ 190. ACTION UPON SEIZURE OF FINAL OBJECTIVE.—The action of the regiment upon attainment of its final objective will usually be prescribed by higher authority. In any event, steps are taken to consolidate the position, to reorganize, and to be prepared for such further operations as may be in prospect. The degree of consolidation and reorganization to be executed will depend upon the contemplated further operations (continuation of attack or assumption of defense) and the enemy reaction.

■ 191. CONSOLIDATION OF POSITION.—Immediately upon attainment of the final objective, steps are taken to defend it against counterattack. A general defensive line is selected and a combat outpost established. Machine guns are emplaced and their fires coordinated. Artillery and other supporting weapons are prepared to fire defensively. Patrols are sent to the front and flanks to maintain contact with the enemy and to reestablish contact with adjacent units, if necessary. Detachments are given the mission of seizing critical

terrain features which the enemy has given up, such as bridges, fords, hills, and road centers.

■ 192. REORGANIZATION OF UNITS.—*a.* When a halt for reorganization must be made, either on the final objective or before it is reached, measures for security, defense, and the reestablishment of contact are taken generally as outlined in paragraph 191.

b. The regimental commander will usually prescribe the following:

(1) General area for the reorganization and its suballotment to battalions.

(2) Measures for security, either by means of a combat outpost under regimental control, or by suballotting sectors of responsibility to battalions.

(3) General location of the temporary line of resistance and the responsibility for its defense by battalions.

(4) Defensive fires of attached supporting weapons.

(5) Composition, initial location, and mission of a new reserve, if required.

(6) Movement forward of ammunition vehicles to permit replenishment of supplies; other administrative details, such as the assembling and disposition of stragglers and prisoners of war.

(7) Location of command posts.

c. During the process of reorganization by subordinate units, the commander, assisted by his staff, visits each area if the situation permits to ascertain the relative strength and readiness for combat of subordinate units. He may make such transfers of officers and men between units as are necessary to obtain the desired strength in each and the presence with all units of suitable leaders.

d. If, because of hostile interference, it is impracticable to take methodical measures for reorganization and consolidation of the ground, troops dig in where they find themselves. The regimental commander subsequently fixes a main line of resistance to conform to the orders of the higher commander and to utilize the terrain held within his zone of action, and assigns areas to the battalions. He arranges for artillery support and coordinates the fires of the heavy weapons companies.

■ 193. CONTINUING ATTACK.—*a.* When the attack is to be continued from the final objective or an intermediate objective on which the regiment has halted temporarily to reorganize, new zones, new boundaries, new attack directions, and new objectives are assigned as required. The hour for continuing the attack is prescribed and the action is coordinated as in the initial attack.

b. The reserve may be directed to relieve a battalion of the attack echelon, and a new reserve made of the relieved unit.

c. If the attack is to be renewed on the following day, patrolling must be active during the night to keep contact with the enemy and detect any attempt he may make to disengage his forces during darkness.

■ 194. MEETING ENGAGEMENT.—*a.* A meeting engagement is a collision between two opposing forces neither of which is fully prepared for combat. The time element is usually decisive in a meeting engagement. The force which attacks first in a decisive direction will gain a tremendous advantage.

b. In a meeting engagement between large forces, the action of the infantry regiment will be governed by the mission and decision of the higher commander. Unless the regiment is a leading element of the larger force, its conduct will be similar to that in any other action of the type decided upon by the higher commander.

c. If the regiment is a leading element of the larger force, when the prospect of an engagement becomes apparent the regimental commander takes immediate steps to start the development of his regiment and its preparation for combat. He directs the movement forward of his artillery to support the action of the leading elements. He moves well forward in order to insure the development of the action in accordance with his desires. Reconnaissance is limited to major essentials. The estimate is rapid and the decision quickly made. If no orders have been received from the higher commander, the regimental commander must unhesitatingly act upon his own initiative in conformity with the mission of the larger force. Once the decision is made, subordinate commanders are informed without delay of the general plan and of areas to which they are to move their units and routes to be used. Further orders may be delivered to subordinate leaders as they arrive at the front for reconnaissance, or may be trans-

mitted through staff officers. Ordinarily the attack should be coordinated if coordination will entail only a brief delay. In some situations, however, the advantages of an immediate attack may be so great as to outweigh the disadvantages of lack of complete coordination.

■ 195. ATTACK OF FORTIFIED LOCALITY.—The attack of a fortified locality is a special operation involving special equipment, powerful means, and detailed preparations. The general procedure is covered in FM 100–5 and FM 7–5. After a break-through has been made, subsequent infantry operations are conducted generally as in other offensive action.

■ 196. TERMINATION OF OFFENSIVE ACTION.—*a.* An offensive action once begun is halted only by hostile reaction or by other elements in the situation which demand it. If it becomes necessary to pass to the defensive, the leading elements intrench themselves on the ground then held. Forces are redistributed to organize the defense in depth and to take advantage of the favorable terrain. Major adjustments may have to be delayed until darkness in order to avoid heavy casualties. (For the defense, see ch. 6.)

b. If, during the course of an attack, it becomes necessary to break off the action and withdraw, the attacking elements first pass to the defensive. (For withdrawals and delaying action see ch. 7.)

SECTION VI

PURSUIT

■ 197. GENERAL.—*a.* The plan of the higher commander for an organized pursuit usually provides for immediate direct pressure by troops in contact and for encircling maneuver by reserve units against the hostile lines of retreat. The forces engaged in each maneuver may be assigned directions, zones of action, and objectives.

b. Effective pursuit requires the highest degree of leadership and initiative. Calculated risks are taken.

c. In pursuit, extensive reliance is placed on radio communication. Field wire lines usually are not installed except by the direct pressure force; commercial wire lines are used when practicable. Radio silence seldom is imposed; it should not be imposed within an encircling force. Prearranged

messages should be used in order to facilitate radio transmission (see par. 104*b*).

■ 198. REGIMENT IN DIRECT PRESSURE.—*a.* When the regiment reaches its final attack objective, the continuation of the advance as a pursuit of the defeated enemy will ordinarily be undertaken only on orders from higher headquarters. When there are indications of enemy dissolution, the regimental commander must inform higher headquarters of these indications. If pursuit is not ordered, the regimental commander should recommend the continuation of strong pressure (beyond the initially assigned final objective) against the hostile force. Under all conditions, contact must be maintained with the enemy as indicated in paragraph 191.

b. When the pursuit by direct pressure is ordered, leading battalions advance in deployed formation. Control is decentralized to battalion commanders; supporting weapons will frequently be attached to subordinate units. The regimental commander gives mission type orders to battalions, assigning them directions, zones of action, and objectives.

c. Reserves are committed more boldly than in the attack. They are used unhesitatingly to overcome resistance that threatens to reduce the pressure and permit the enemy to make a stand.

d. Artillery will usually be attached to a regiment engaged in a pursuit. Such artillery must be prepared to displace rapidly, and its observers and reconnaissance details must remain well forward with the pursuing infantry. In addition to rendering support to the infantry, the artillery should be used to fire on defiles, bridges, and on hostile elements attempting to re-form in rear of the enemy's covering troops.

e. Pursuit is pushed to the limit of endurance. No opportunity is given the enemy to reorganize his forces and reconstitute his defense, even at night.

f. If the regiment has advanced without serious opposition, its march is continued during the night. All units make prompt report of arrival at objectives in order that higher headquarters may coordinate the operation and exploit every advantage, and also to prevent supporting artillery from firing on friendly troops.

■ 199. REGIMENT IN ENCIRCLING MANEUVER.—*a.* The infantry regiment, reinforced, may be designated as the encircling

force or a part of the encircling force. The purpose of the encircling maneuver is to get in rear of the defeated enemy and halt his retreat so that he may be destroyed between the direct pressure and encircling forces. Objectives of pursuing forces will usually be road centers, defiles, bridges, and other localities where the enemy can be cut off. Prompt report is made when objectives are reached.

b. When the encircling force cannot reach the hostile rear, it seeks to engage the enemy's main forces in flank.

c. Additional motors for the transport of foot troops should be made available to the encircling force by higher headquarters. Artillery and engineers are usually attached; tanks and mechanized reconnaissance units may also be attached. Support by combat aviation is highly desirable.

d. Lacking mechanized reconnaissance elements, the regimental commander organizes a motorized detachment and gives it the mission of reconnoitering the route, covering the advance, and seizing important terrain features on the route of the encircling force.

SECTION VII

ATTACK OF RIVER LINE

■ 200. GENERAL.—*a.* The immediate object of the attack of a river line is to establish a bridgehead which will protect the crossing of the remainder of the command.

b. A large force engaged in establishing a bridgehead will usually have three successive objectives on the enemy side of the river:

(1) *First objective.*—A position the capture of which will eliminate effective direct, small-arms fire from the crossing front.

(2) *Second objective.*—A position the capture of which will protect the selected ponton bridge site(s) from ground-observed artillery fire and which can be supported by light artillery on the attacker's side of the river. The regimental objective will usually consist of all or a portion of this position.

(3) *Third objective.*—A position the capture of which will protect the bridge site(s) from all artillery fire, and will provide the necessary maneuver space for the entire command on the enemy side of the river.

c. A detailed knowledge of the stream, its banks, and approaches on both sides is essential. The regimental commander should by personal reconnaissance supplement any information received from maps, photographs, or terrain reports from higher headquarters. Reconnaissance is continuous.

d. The actual crossing operation may be made under any of the following circumstances:

(1) When the enemy is not actively holding the river line.

(2) When enemy forces holding the line of the river are weak and no defensive organization has been accomplished.

(3) Where mobile ground forces or parachute units precede the regiment in an effort to secure the far bank, and the regiment's effort consists of a prompt reinforcement of such forces.

(4) Where strong hostile forces, organized for defense, hold the far bank.

■ 201. CROSSING NOT HELD.—*a.* In order to seize a crossing or crossings not held by hostile forces the regimental commander organizes and dispatches one or more motorized detachments. These detachments are made strong enough to hold the crossings against known enemy forces capable of intervening before the arrival of the regiment. Engineers, if available, are attached; otherwise infantry pioneer detachments are attached. Antitank weapons and ample means of communication (radio and motorized messengers) are provided. Artillery may be included.

b. Instructions to the commanders of motorized detachments should include the extent of bridgeheads to be seized, reinforcements or support (if any) to be expected, probable time of arrival of the regiment, and defensive action to be taken if attacked by overwhelming hostile forces.

c. The commander of a motorized detachment is given complete freedom of action. Upon arrival of the detachment at the river bank its supporting weapons are initially emplaced on the near bank to support the crossing of rifle troops. If there is no bridge, or if engineer river crossing means have not been provided, riflemen cross by wading, swimming, and improvised rafts (see FM 7–5), while engineers or pioneers construct rafts and repair boats for the crossing of heavy weapons. Antitank guns are usually the first heavy weapons moved across the river.

d. The remainder of the regiment is brought forward as rapidly as possible.

■ 202. CROSSING HELD BUT NOT ORGANIZED.—*a.* When the regiment must cross a stream against the opposition of weak hostile forces, only partly organized for defense, the crossing should be boldly and rapidly executed, based on thorough prior reconnaissance.

b. Plans should provide for the arrival of leading elements at the river bank on a broad front and so disposed as to permit rapid building up of small, balanced combat units at points where hostile weakness is most pronounced. Plans should also provide for retention of a reserve under regimental control, in order that it may be rushed to points at which successful crossings have been made. A regimental objective is selected, the capture of which will protect prospective crossing points from ground-observed artillery fire. Plans for the use of supporting weapons provide for the delivery of initial fires as called for by the leading elements, followed by a shifting of the bulk of the fires to support the advance of those elements which have the greatest success in crossing.

c. Control is decentralized to subordinate commanders. Leading elements attempt crossings by assault boats, footbridges, swimming, or improvised means at a number of favorable locations. When crossings are effected, the troops which have crossed rapidly establish local bridgeheads, and adjacent units cross under cover of these bridgeheads. Supporting fires are shifted to assist successful units in extending the bridgeheads seized. As bridgeheads are extended, additional weapons and troops are crossed by engineer river crossing equipment or by improvised means.

d. Communication with leading elements is particularly important in early stages, in order that the regimental commander may be informed of local successes and support them as soon as possible. Staff officers with radio equipment and accompanied by a number of messengers may accompany the leading battalions to insure rapid transmittal to the regimental commander of important information.

■ 203. REGIMENT IN SUPPORT OF MOBILE FORCES.—The regiment may be given the mission of reinforcing a mobile force which has succeeded in establishing itself on the enemy side of the river. The regiment crosses under the protection of

the mobile force by such means as are available. Liaison is established with the commander of the mobile force and the action of both forces is coordinated. If the mobile force has not succeeded in gaining a position to secure the crossing of the regiment from small-arms fire, the action is generally similar to that outlined in paragraph 202.

■ 204. CROSSING AGAINST STRONG, ORGANIZED OPPOSITION.—When the enemy is already in possession of a river line and has organized it for defense, the regiment will usually effect a forced crossing as part of a larger force. The instructions from the higher commander will usually include—

a. The mission of the regiment, including its objective or objectives, its zone of action, and the time of crossing.

b. Plans for support by artillery and combat aviation.

c. All available information obtained from reconnaissance of the river line including the location of the most suitable crossing points.

d. Engineer troops and material attached to the regiment, and when and where they will be made available.

■ 205. PREPARATION FOR CROSSING AGAINST STRONG OPPOSITION.—*a. General.*—A forced crossing of a river line against strong opposition requires extensive prior reconnaissance and the preparation of careful and detailed plans and orders.

b. Reconnaissance.—(1) The actual crossing against strong hostile forces, organized for defense, takes place only after thorough reconnaissance and the complete coordination of all elements of the attacking force. During this period the infantry regimental commander reconnoiters his probable area of crossing. Based on warning orders for the crossing he and his staff and subordinate commanders make detailed reconnaissances.

(2) Reconnaissance will also be made by reconnaissance patrols. Some patrols are sent to the hostile shore under cover of darkness.

(3) Reconnaissance must be conducted with the greatest secrecy; parties reconnoitering the shore line in daylight keep themselves concealed.

(4) The regimental reconnaissance is designed to obtain all possible information on the following points:

(*a*) The composition and distribution of hostile forces and the location of hostile weapons and defensive works.

(*b*) The most favorable hostile observation points on and adjacent to the regimental front.

(*c*) Well-defined terrain features, suitable as battalion and regimental objectives.

(*d*) Favorable corridors for advance through the hostile position after crossing.

(*e*) Dominating terrain features on the near side of the river for use as observation points and weapon emplacements.

(*f*) A rear assembly area and routes from it to the final assembly areas.

(*g*) Final assembly areas for units to make the initial crossing. These should possess the characteristics required for assembly positions in any attack (see par. 168) and should possess the following additional characteristics: be easily accessible to heavy trucks; be easily identified at night; provide direct and concealed routes to selected crossing points.

c. Plans.—The regimental objective and the time of crossing usually will be prescribed by higher authority. If not, they must be included in the plan of the regimental commander. The crossing may be made by day or by night. It will frequently be at an hour which will permit the landing of the leading echelon on the enemy bank to be made at or just before dawn, thereby obtaining the advantage of darkness for the actual crossing. Other elements of the regimental commander's plan include—

(1) Number of battalions to take part in the initial crossing.

(2) Points at which crossings will be made.

(3) Location of final assembly areas.

(4) Zones and objectives of battalions.

(5) Allocation of assault boats and other engineer means to battalions.

(6) Attachments of antitank weapons.

(7) Position areas and initial missions of supporting arms.

(8) Designation and initial location of reserve, and use of supporting weapons of reserve units.

(9) Antiaircraft security.

(10) Initial supply of the leading units.

(11) Evacuation.

(12) Crossing of trucks, supporting weapons, ammunition, and other supplies, to support the initial crossing, by ponton raft ferries or other engineer means.

(13) Special measures to facilitate signal communication with units that make the initial crossing.

d. Orders.—Careful and detailed preparation of orders and their issuance in time to permit all subordinates to make detailed reconnaissance and planning are essential in attack against a strongly organized defense. Warning and fragmentary orders should be issued as soon as decisions are made affecting the missions of subordinate units.

■ 206. MOVEMENT TO RIVER.—*a.* Shortly preceding the crossing, the regiment (if not already in the area) first moves to a concealed bivouac (rear assembly area) out of hostile artillery range but within easy night marching distance of the crossing points. In this area all plans and coordination are completed and general instructions are issued relative to the technique of the crossing in assault boats and by footbridge. Only covering forces and the necessary reconnaissance parties are permitted to approach the river. Supporting artillery may be permitted to occupy concealed positions with a minimum number of guns and fire for registration. Routes to the final assembly areas near the river bank and from these assembly areas to the river itself are marked.

b. On the night of or preceding the crossing, the regiment moves to its final assembly areas where it is met by engineer troops with assault boats, footbridge equipment, or other crossing means. In the final assembly areas the engineers issue final technical instructions regarding the crossing.

c. During this phase, noise, confusion, and crowding of routes near the river are especially to be avoided.

■ 207. CROSSING.—*a.* The leading waves, led by engineer guides, carry their assault boats from the final assembly area to the water edge and launch them on a broad front. Lateral movement and massing of troops at the river bank are avoided. The movement from the final assembly areas to the crossing points and the embarkation and crossing are under control of the engineer troops. When troops disembark on the hostile bank they overcome any enemy resistance near the bank and advance upon the first objective. As a rule attacking troops do not fire during darkness. Normally there is no firing from boats when the crossing is made under cover of darkness.

b. The engineer crews return the assault boats to the near shore for succeeding waves. Alternate crossing points are designated for use by succeeding waves if required.

c. Ponton raft ferries or other means are provided to transport vehicles and antitank weapons which will be needed before it is practicable to build a bridge. Tactical and supply vehicles are assigned priority for crossing in accordance with their required or contemplated use.

■ 208. SUPPORT OF INITIAL CROSSING.—*a.* Artillery and combat aviation support is usually arranged by the higher commander. The supporting infantry weapons (including antitank guns) under regimental control are emplaced initially to engage hostile forces on the river bank. They open fire only when the crossing has been discovered. Their targets are usually hostile infantry and infantry weapons.

b. The artillery is so emplaced as to permit support of the advancing infantry as far as the second objective. A portion of the artillery normally is crossed by raft or light bridge to the far bank in order to maintain this support. Artillery observer and liaison groups with necessary means of communication accompany the infantry attack units during the crossing.

■ 209. CONTINUATION OF ATTACK.—*a.* When the first objective (see par. 200*b*) has been taken and the supporting infantry units have been brought up behind the initial wave, the attack against the next position is commenced without delay. The most determined resistance may normally be expected during the advance from the initial to the second objective. This is due partly to the fact that capture of the second objective, will usually deprive the enemy of his observation of the crossing front, and partly to the fact that he will, by the time the first objective is captured have had time to effect concentrations to resist the advance of the troops which made the main crossing. The advance from the first objective, therefore, should be well protected by antitank weapons and provisions should be made for obtaining adequate and immediate artillery support.

b. The second objective having been taken or the hostile light artillery neutralized, the higher commander usually directs the construction of the ponton bridge (or bridges). A coordinated attack to seize the third objective is launched

from the second objective as soon as the availability of supporting weapons, ammunition, vehicles, infantry weapons, and artillery will permit.

■ 210. SECURITY.—*a. General.*—After the crossing is made, patrolling is vigorously pushed to gain information of hostile dispositions and movements, with particular attention to indications of counterattack.

b. Antiaircraft security.—Antiaircraft weapons usually remain silent until the crossing is discovered by the enemy. Thereafter all hostile aviation is engaged when within range of infantry weapons. Higher authority usually will provide both aviation and antiaircraft artillery protection against hostile aircraft.

c. Antimechanized defense.—Troops are prepared to meet a counterattack, particularly by tanks, soon after their crossing. Antitank weapons are sent across as soon as the leading wave has cleared the far bank. Regimental antitank weapons may be attached to attack battalions.

■ 211. SUPPLY AND EVACUATION.—*a. General.*—Supply and evacuation during a river crossing operation differ materially from supply and evacuation in attacks under other conditions only during that period which intervenes between the initial crossing and the crossing of vehicles.

b. Supply.—(1) Individuals composing elements of the regiment which take part in the initial crossing should be provided with one or more individual reserve rations.

(2) A limited supply of ammunition can be taken over in assault boats and by hand across footbridges. Until vehicles have crossed, hand carrying parties continue to operate. An abnormal amount of handcarrying is characteristic of this phase of the operations, and special steps frequently will be required to provide the necessary labor.

c. Evacuation.—Medical personnel accompany their units in the crossing, carrying by hand selected equipment and supplies. They render such medical service as conditions permit and evacuate casualties to aid stations. Evacuation in rear of aid stations, until vehicles can cross, is limited to those casualties which can be transported back in returning assault boats, and is accomplished by collecting personnel sent across from the medical units of higher echelons.

■ 212. SIGNAL COMMUNICATION.—*a. General.*—To provide adequate signal communication during an attack of a river line, plans should include the initial signal system to provide communication prior to the crossing, means of providing communication across the river, and the extension of the signal system to the objective.

b. Command posts.—The command post of the regiment should be located to facilitate communication with the main effort. Battalion command posts cross with their battalions. The regimental command post crosses as soon as the first objective has been secured.

c. Agencies.—The establishment of an advance message center on the far bank of the river and near the intended crossing of the wire lines will improve the communication system. A detail of messengers is sent to the advance message center. In the interest of secrecy, radio is silenced until the time of attack. Once the crossing has been initiated, radio usually is relied upon for communicating within the regiment until wire lines are established. The wire system on the near side of the river will closely resemble the wire system for other attacks. The difficult problem will be in the extension of the wire lines across the river. After the initial crossing, the division signal company lays special cables across the river at previously selected points and installs switchboards. The regiment connects with these switchboards. Pigeons may be used as an additional means of communication. Visual signals are used if conditions permit.

■ 213. COOPERATION WITH PARACHUTE TROOPS.—Parachute troops may be used to assist in the attack of a river line. Their assistance in many situations will be of greatest value if they are dropped at about the time the main crossing is to be attempted, and in such a location that they can hinder or prevent the movement of reserves to assist the hostile troops on the river bank. The greatest aid that troops on the friendly bank usually will be able to give the parachutists is by effecting a rapid crossing and a junction with the parachute forces at the earliest practicable time. The higher commander coordinates the efforts of the parachutists and the ground troops in advance. The measures taken will usually include furnishing the commander of the ground infantry with full information as to the strength, mission, and landing point of

the parachute troops; the exact time they will land and their initial objective. Plans should include provisions for radio communication between the parachutists and friendly ground troops as soon as they have landed.

■ 214. FEINTS.—*a.* Feints are made in connection with the attack of a river line for the purpose of deceiving the enemy and drawing his forces away from the main crossing front.

b. (1) If the regiment is given the mission of making a feint, its conduct should be, in general, such as to give the appearance of making all the preparations for a main crossing, as described in paragraphs 205 and 207. The various activities should be so conducted, however, that some of them are observed by the enemy, despite an appearance of attempting to keep them secret.

(2) An actual crossing should be attempted. If it does not provoke a strong hostile reaction the higher commander should be notified without delay, in order that he may, if the situation warrants, change his plans to make a main or secondary crossing on the front originally selected for the feint.

SECTION VIII

ATTACK IN WOODS

■ 215. GENERAL.—*a. References.*—The general considerations governing the conduct of an attack in woods are contained in FM 100–5 and 7–5.

b. Scope.—When the terrain permits forcing the enemy out of a position in woods by means of maneuver, this course of action is adopted. This section considers situations where that is not practicable and the hostile position must be reduced by action within the woods.

■ 216. RECONNAISSANCE.—*a. General.*—Reconnaissance is directed toward locating the hostile positions and dispositions; and toward obtaining accurate information regarding the roads, trails, natural landmarks, and obstacles within the woods.

b. Air.—Much of the desired information can be most readily obtained by air reconnaissance, and facilities should be requested for this purpose. Observation aviation, by visual and photographic reconnaissance, will be able to furnish much

information regarding natural features and lines of communication within the woods which would not otherwise be obtainable.

c. Ground.—(1) If the situation requires that ground reconnaissance be carried out entirely in daylight, patrols are made strong. When strong patrols succeed in entering the woods, they send small groups to work their way to positions from which they may obtain information of hostile dispositions and activities. If the hostile resistance in front of the woods cannot be pierced by strong patrols, an attack must be made with sufficient strength to disclose the location of the main position.

(2) When the situation permits night patrolling, small patrols work their way through the hostile covering forces. More than one patrol should be dispatched by different routes to each general area from which information is desired, in order to assure that desired information will be obtained.

■ 217. PLANS.—*a.* Plans for an attack in woods usually must consider three distinct phases:

(1) The advance to and capture of the edge of the woods.

(2) The advance through the woods.

(3) Exit from the woods.

b. Plans for the advance to and capture of the edge of the woods will usually conform to plans for any other attack. Salients of the woods may be assigned as initial objectives, since these offer natural approaches into the hostile position and can readily be neutralized by supporting fires. The advance to the edge of the woods may be made under cover of darkness or of smoke.

c. Plans for the advance through the woods include a large measure of decentralization of control. Frequent periodic reports are required. Reports are also required of subordinate units upon their arrival at previously determined phase lines or upon their capture of specified objectives. Frontages and magnetic azimuths of advance are assigned to leading battalions. Lack of visibility will often make it impracticable to use terrain features as direction points or boundaries.

■ 218. CONDUCT.—*a. Advance to woods.*—Troops advance to the near edge of the woods as in any other attack. As lead-

ing units gain footholds in the edge of the woods, they extend their penetration to the front and flanks by the use of local supports and reserves in order to force the enemy back to positions from which his observation of the foreground will be limited or prevented. A short halt will frequently be necessary, after the edge of the woods has been occupied, to permit reorganization.

b. Advance through woods.—(1) Formations adopted for the advance through the woods will ordinarily be in small columns with reduced distances and intervals. Patrols and scouts precede the leading elements. Reserves follow the attack units more closely than in attack in terrain affording more visibility.

(2) Gassed areas, obstacles, natural or cut lanes in the woods, and roads or trails which must be crossed are carefully reconnoitered before the crossing is attempted, since they all offer opportunities for effective use of hostile automatic weapons.

c. Exit from woods.—The regiment is rapidly reorganized short of the far edge of the woods. Terrain to the front is reconnoitered and patrols are sent forward to determine hostile dispositions. Objectives are selected; if possible they should mask the edge of the woods from hostile ground observation and small-arms fire. Plans for supporting fires are readjusted in accordance with the information obtained. The continuance of the attack from the edge of the woods is conducted generally as an attack in any other open terrain. If the edge of the woods is used as a line of departure, measures must be taken to prevent massing of troops near that line, since it is an excellent target for hostile artillery.

■ 219. SUPPORTING WEAPONS.—*a. Artillery.*—In the advance to and capture of the near edge of the woods, artillery support is rendered as in other attack situations. In thick woods the use of artillery is greatly restricted. This disadvantage may be partially offset by locating the artillery in the vicinity of the near edge of the woods and controlling its fire by observation aviation. Its displacement is so regulated as to make it available to support the exit from the woods.

b. Chemical.—Chemical troops are used principally to screen by smoke the approach to the near edge and exit from the far edge of the woods.

■ 220. SECURITY.—*a.* All units are required to provide for security against ambush and surprise attacks during the advance through the woods. They do this by the use of patrols and lines of scouts to the front, and by maintaining close contact with adjacent units through the use of connecting groups. The regimental reserve provides security for the flanks and rear of the regiment.

b. The necessity for security against attacks by mechanized forces will vary with the nature of the woods. In fairly open woods, regimental antitank weapons will frequently be attached to leading battalions. Some regimental weapons are retained under regimental control for the antimechanized protection of rear elements. In an advance through thick woods, antitank units may be advanced by bounds to cover successive possible avenues of approach for mechanized vehicles which have been indicated by aerial reconnaissance and photography.

c. Antiaircraft security will usually be provided in some measure by the concealment afforded by the woods. Under such conditions, the number of automatic weapons designated to fire antiaircraft missions may be reduced.

d. Wooded areas are favorable to the use of persistent gases, and an increase of the gas warning service may be necessary.

e. Security measures during the approach to the near edge and exit from the far edge of the woods are similar to those prescribed for any other attack.

■ 221. SUPPLY AND EVACUATION.—The problems of supply and evacuation during an attack in woods will usually be made more difficult by the scarcity of roads and trails. This will result in the necessity for hand carrying of ammunition and long litter carrying by collecting personnel. Constant reconnaissance is conducted to permit the advance of ammunition distributing points and aid stations. Reduced observation will permit these installations to be moved closer to the forward units than is possible in more open terrain.

■ 222. SIGNAL COMMUNICATION.—Signal communication is more difficult in operations in woods because of the difficulty of laying wire lines and the reduced effective ranges of radio sets. Increased reliance upon messengers is usually necessary.

SECTION IX

NIGHT ATTACK

223. GENERAL.—*a.* For characteristics, purposes, and other general considerations regarding night attacks, see FM 100–5 and 7–5.

b. Difficulty of maintaining direction and control makes it essential that a night attack be preceded by daylight reconnaissance and detailed plans and orders, especially by subordinate commanders. The same difficulties tend to increase with the size of the forces employed to make the attack.

c. Night attacks will usually have a single limited objective. The objective usually will be specified by the higher commander who orders the attack.

224. RECONNAISSANCE.—*a.* As soon as the objective for a night attack is known, the regimental commander reconnoiters to determine—

The most suitable approaches.

The strength and composition of forces necessary to attain the objective.

The location and missions of supporting weapons.

His reconnaissance may also include such of the items listed in *b* below as are applicable in the situation. The strength of the force to make the night attack usually will be determined by the nature of the objective. The success of the attack is dependent upon the success of the assault. In the assault the attackers deploy at close intervals, usually not over 2 yards. The width of the objective, therefore, will usually determine the necessary strength of the assaulting echelon. The depth of the attacking force will be dependent upon knowledge of the hostile dispositions in rear of and close to the hostile front line.

b. As soon as the regimental commander has decided which units are to participate, he gives the commanders sufficient instruction to enable them to make daylight reconnaissances. During these reconnaissances subordinate commanders obtain detailed information of the terrain to be crossed, including the location and nature of obstacles; select and mark routes, forward assembly areas, and lines of departure; and deter-

mine magnetic azimuths for the attack. Reconnaissance should include observation of the terrain at dusk so that both the day and night aspects may be studied. Forward assembly areas are so selected as to be under the protection of friendly forces. They should permit each unit to take up the exact formation in which it is to cross the line of departure, and should permit a direct advance to the line of departure in that formation. The ideal situation is for the forward edge of the forward assembly area to constitute the line of departure.

c. Since secrecy is indispensable to the success of a night attack, all reconnaissance must be so conducted as to avoid disclosing the purpose.

■ 225. PLANS.—*a.* Simplicity in plans is essential to the success of a night attack. Attacks are usually frontal. Assembly positions and lines of departure must be easily recognizable in the dark. Lines of departure perpendicular to the axis of attack are selected. Changes of direction during the advance are avoided. Guides from each unit are familiarized with routes. Initial formations should permit deployment for combat by means of a single simple maneuver. Line of small columns will usually be most suitable.

b. The time of attack usually will be prescribed by higher authority. Where the purpose of the night attack is to capture and hold a locality, plans usually are made to attack early in the night to afford time for consolidation before dawn. If the objective is to be seized with a view to a further advance from it at dawn, plans will usually be made to seize the objective just before dawn, thereby giving the attacking forces the benefit of darkness to promote surprise and secrecy and to organize for the further advance at daylight. The time prescribed or decided upon for the attack and the rate of advance will determine the time that units (if they are not forward troops) must start from their rear assembly areas. The rate of advance to the forward assembly areas will depend upon whether the movement is across country or on roads. From forward assembly areas to the line of departure the movement will almost invariably be across country and a rate of not more than 1 mile per hour may be expected. Forward of the line of departure, the rate of advance is prescribed. The most difficult terrain to be crossed

will determine the rate of advance to be prescribed for all units. The prescribed rate will usually be 100 yards in 6 to 10 minutes.

c. Weapons designated to support the attack are selected from those which have registered their fires during daylight in the areas to be covered. The particular circumstances attending each situation usually indicate whether the attack should be prepared by artillery fire. Where artillery support is indicated, a short but violent preparation generally will suffice. The preparation is lifted on a time schedule. Plans usually provide for the release of supporting fires only when the enemy has discovered the attack or when the objective has been gained. Plans for supporting fires usually must be made for two purposes: first, to prevent hostile counterattack if the objective is attained; and, second, to cover the withdrawal of the attacking units if the attack is discovered and repulsed before the objective is reached.

d. The reserve is so located that it can protect the flanks of the attack units and cover their withdrawal if necessary. Plans also provide for the reserve to move forward as soon as the objective is reached. Antitank weapons are included in the reserve.

e. Plans also must be made for identification of friendly troops. An example of such a means of identification is a white cloth worn on the back.

f. Patrolling during the attack must be planned in detail in daylight. Patrol leaders are selected and their missions carefully explained to them from locations affording the most complete observation possible of the areas in which they are to operate.

g. Plans must also provide for all means to assure secrecy and eliminate every element which might contribute to failure. Secrecy is promoted by requiring silence in the movement to initial positions and in the advance, by requiring that rifles be left unloaded, by prohibiting smoking and the use of lights, and by providing for the maintenance of normal fires and other activities prior to the attack. Personnel who speak the enemy language and are familiar with his military language are attached to units which are to lead the attack.

■ 226. CONDUCT.—*a.* Bayonets are fixed and troops inspected before the attack echelon leaves its forward assembly area.

b. The leading unit of each column acts as a covering detachment. An officer moves ahead of the covering detachment, preceded at the limit of visibility by scouts. The officer is followed closely by a selected group, including men who speak the language of the enemy. The advance is made by short bounds. At each halt the scouts, followed closely by the security elements, reconnoiter for the next advance. If the advance is challenged, a reply is made in the enemy's language. Scouts and security elements close in with the bayonet and other troops lie down. As the advance approaches the hostile position and the probability of discovery by the enemy increases, the distance between the line of scouts and security elements and the assault echelon is decreased. This is done to increase the probability that assault elements will be inside the hostile protective fires laid down when the attack is discovered.

c. Officers with compasses constantly check the direction of the advance. An officer or noncommissioned officer marches at the tail of each column to prevent straggling and enforce silence.

d. Units which lose contact with adjacent units continue to move toward their own objectives at the prescribed rate of advance.

e. The final movement to the hostile position is made at a run. It will usually result from hostile discovery of the attack. If the attack gets close to the hostile position without being discovered, the signal for the assault is given by leaders previously designated to do so—usually company commanders.

f. When the objective is seized, a prearranged signal is given. Immediate measures for defense of the position are taken. A line of resistance is designated and subdivided to subordinate units; automatic weapons which have been brought forward by hand are emplaced; hostile defenses are adapted for use; supporting fires are planned; a position is selected for the reserve; and provisions are made for flank security. All defensive measures are checked and readjusted as necessary at daylight. The signal announcing capture of the objective may also serve as the signal calling for supporting fires upon hostile approaches to the objective and for the movement forward of rear elements of the attacking units. These rear elements usually will include the reserves and,

where practicable, weapon carriers of attacking units with weapons which have not been brought forward by hand, and with ammunition for all weapons. As soon as the rear elements arrive at the objective, weapons (including antitank weapons) are placed in previously selected positions, and the reserve is guided to its position and assigned tentative missions.

g. If a withdrawal becomes necessary before the objective is reached, a prearranged signal is given. Sole authority to give this signal usually is retained by the commander of the attacking force. All units withdraw straight to the rear. When the signal for withdrawal is given, supporting weapons and units of the reserve deliver fires to support the withdrawal of the attack units according to a prearranged plan.

SECTION X

REGIMENT IN RESERVE

■ 227. GENERAL.—*a.* An infantry regiment may be designated as the reserve of a higher unit in an attack. Motor transportation usually will be made available to transport the foot elements of the regiment in such a situation.

b. Missions for a reserve regiment may include—

(1) Extending an envelopment.
(2) Exploiting a penetration.
(3) Protecting the flanks and rear of the larger unit.
(4) Repelling counterattacks.
(5) Taking over the missions of exhausted or depleted units.
(6) Participating in the pursuit.

■ 228. RECONNAISSANCE.—The commander of a reserve regiment or an officer representative (staff or liaison officer) ordinarily remains at the command post of the higher commander. The regimental commander keeps fully informed of the situation by means of information obtained from the higher headquarters, by personal observation and reconnaissance, and by means of information obtained by intelligence personnel and patrols of his regiment. The commander reconnoiters areas of probable employment of his regiment.

■ 229. PLANS.—The regimental commander makes plans to carry out tentative missions assigned him by the higher commander. He also plans for the employment of his regiment

upon other missions which may be indicated by developments. Subordinate commanders are informed of such plans.

■ 230. SECURITY.—The reserve regiment is disposed in its assembly areas so as to have all-around security and be able to move without delay in probable directions of advance or employment. Special attention is given to camouflage and concealment. *Hasty trenches are dug to provide individual protection against air and mechanized attack and artillery fire.* Battalions habitually assign antiaircraft missions to heavy machine guns. An outpost, reinforced with antitank guns, is detailed for the close defense of the assembly area. Security provisions within the assembly area approximate those described in paragraph 145. A motorized detachment is constituted and kept available for rapid movement to any area threatened by hostile parachute troops and air landing troops.

■ 231. RELIEF TO CONTINUE ATTACK.—*a. General.*—A reserve regiment may be ordered to relieve an engaged unit and continue the attack. When the relief is executed in daylight, the unit relieved or passed through remains in position and supports the relieving unit by fire until its fires are masked and until the attack has progressed far enough for the relieved unit to be assembled and reorganized as a reserve. When the relief is executed in darkness, the unit relieved withdraws promptly to a designated assembly position, after the relieving unit has taken over the area. The higher commander will prescribe the area in which the relief is to be effected. Where practicable, this area should afford covered routes of approach from the rear. The higher commander also will usually provide for coordination of the plans of both units for guides, use of roads and other approaches, and the hour at which or conditions under which responsibility passes to the commander of the relieving unit.

b. Secrecy.—To prevent hostile discovery, reliefs are carried out at night, or under cover of woods, fog, or smoke.

c. Preparations.—(1) Warning orders are issued to as few officers as possible. The orders include: hour the movement is to begin, zones of action, reconnaissance measures, and restrictions on reconnaissance. *Warning orders for a night* relief should be issued in time to permit daylight reconnaissances by subordinate commanders so that every commander

will obtain a thorough knowledge of the area to be occupied by his unit, hostile dispositions in front of it, as known, and routes into the area.

(2) When practicable, guides from the unit being relieved meet the relieving unit and conduct it to its position. Battalion, company and, if possible, platoon guides are provided for a night relief.

d. For other details of a relief, see FM 100–5.

SECTION XI

ATTACK UNDER SPECIAL CONDITIONS

■ 232. REFERENCES.—The conduct of the attack may be affected by special conditions which are not considered in this manual. For attack in towns, jungles, mountains, and deserts, see FM 100–5. For jungle operations, see also FM 31–20. For operations in snow and extreme cold, see FM 31–15.

CHAPTER 6

THE DEFENSE

SECTION I

GENERAL

■ 233. REFERENCES.—For the fundamental doctrines covering defensive combat, see FM 100–5. For general doctrines governing defensive combat of infantry, see FM 7–5. For data pertaining to field fortifications, see FM 5–15. For data pertaining to engineer antimechanized measures, see FM 5–30. For details of regimental antimechanized defense, see FM 7–35. For signal communication and combat intelligence in the regiment, see FM 7–25. For supply and evacuation in the regiment, see FM 7–30. For check lists of orders, see FM 101–5 and 7–55.

■ 234. DEFENSIVE DOCTRINE AND INFANTRY MISSION.—*a.* Defensive doctrine contemplates the organization of a *battle position* to be held at all costs and the use of covering forces to delay and disorganize the advance of the enemy and to deceive him as to the true location of the battle position (FM 100–5).

b. The infantry mission in defense is, with the support of the other arms, to stop the enemy by fire in front of the battle position, to repel his assault by close combat if he reaches it, and to eject him by counterattack if he succeeds in entering it. (See fig. 10.)

■ 235. ALLOTMENT OF SECTORS.—Regimental sectors are assigned by the next higher authority. The width of the sector is fixed by establishing boundaries between adjacent units (see par. 237).

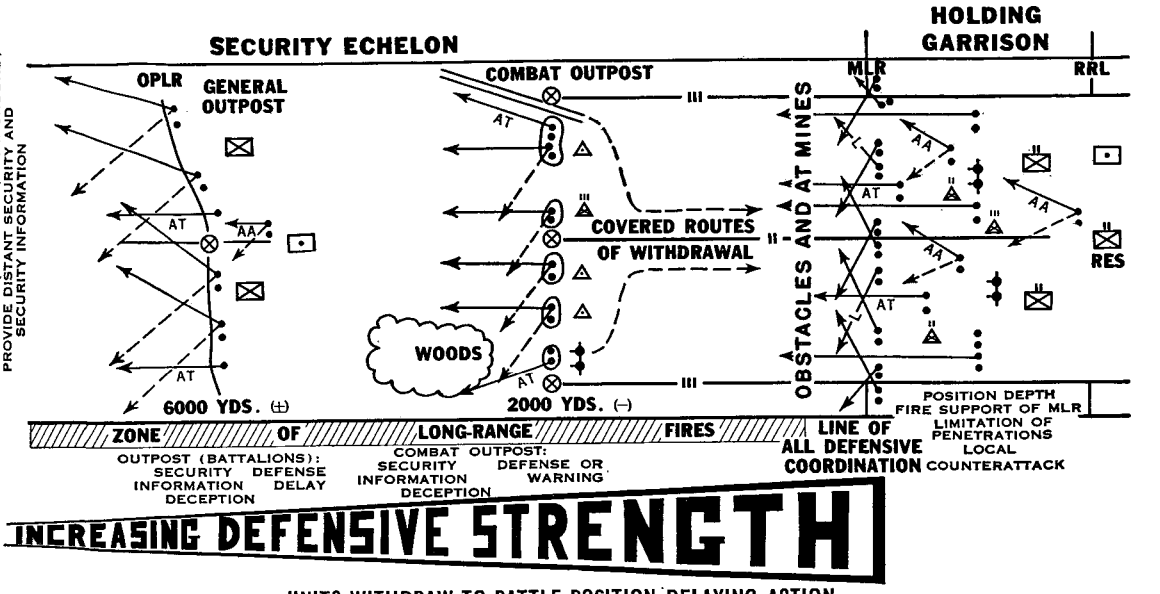


FIGURE 10.—Defensive doctrine (units withdraw to battle position, delaying action).

SECTION II

TACTICAL ORGANIZATION

■ 236. DISTRIBUTION OF TROOPS.—In defense the combat elements of the regiment are distributed in three echelons—security forces, holding garrisons, and a reserve. The security forces include those elements charged with delaying and disorganizing the enemy before he reaches the battle position, and with helping to deceive him as to its location. The holding garrisons include those elements charged with the immediate defense of the main line of resistance (see par. 237*e*). The reserve includes those elements held in readiness to counterattack or to occupy positions from which to block a penetration of the battle position or to meet a hostile threat from the flank (see par. 237*f*).

■ 237. BATTLE POSITION.—*a. General.*—(1) The battle position is the position of principal resistance in defense. It comprises a zone of resistance consisting of a number of mutually supporting defense areas disposed in width and depth, each organized for all-around defense with trenches, obstacles, and emplacements. Tactical unity is maintained in each defense area. The battle position of an infantry regiment that is part of a larger force consists of a sector of the battle position of the larger force; it is delimited to the front by the main line of resistance, to the rear by the rear edge of the rearmost defense areas along the regimental reserve line, and to the flanks by the regimental boundaries.

(2) The regimental battle position is defended by occupying and holding in strength those defense areas (tactical localities) whose loss would threaten the integrity of the position. The intervals between these defense areas are defended by fire. (See fig. 11.)

b. Main line of resistance.—(1) A line joining the forward edge of the most advanced organized defense areas in the battle position is called the main line of resistance (MLR). Points at which the main line of resistance intersect the unit boundaries are designated by the next higher unit commander and are termed limiting points. These points fix the localities where commanders of adjacent units coordinate their defense.

(2) Within his sector the regimental commander locates his main line of resistance so as best to use the existing terrain advantages; he may indicate its general location by designating limiting points. Its location must permit coordination with the defenses of adjacent units at or near the limiting points on the regimental boundaries prescribed by higher authority.

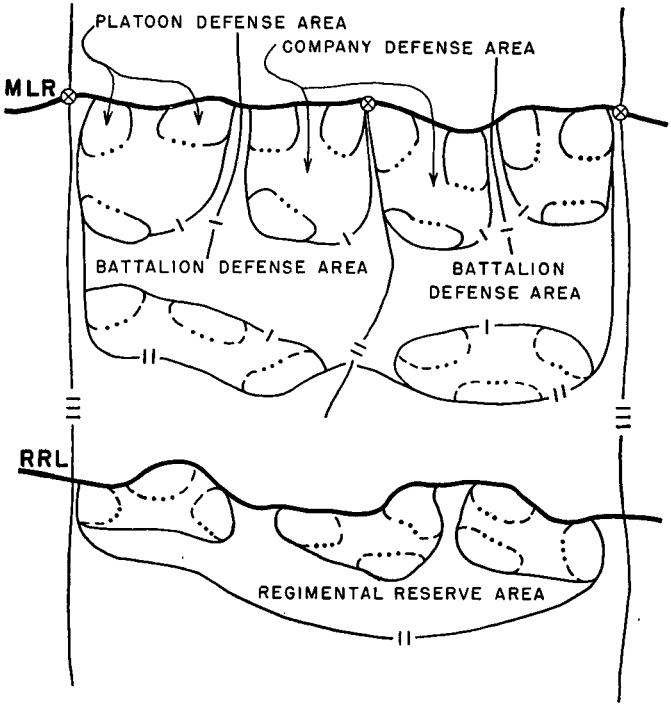


FIGURE 11.—Organization of regimental battle position.

(3) The detailed trace of the main line of resistance is ultimately determined by battalion and company commanders. This trace should be irregular in order to promote the most effective use of flanking fires, but the formation of large salients and reentrants should be avoided.

(4) The bulk of the supporting weapons are sited to permit concentration of their fires in defense of the main line of resistance. The fires of the supporting weapons are coordinated along this line.

(5) The location of the main line of resistance should provide as many as practicable of the following advantages:

(*a*) Retention of essential observation to the front and flanks.

(*b*) Good fields for grazing and flanking fire of automatic weapons.

(*c*) Best possible use of natural obstacles, particularly antitank obstacles.

(*d*) Concealment of the defensive works from air and ground observation.

(*e*) Facilities for communication, supply, and covered movements within the position.

c. Regimental reserve line.—A line designated by higher authority to coordinate the locations and actions of the regimental reserves in the battle position is called the regimental reserve line (RRL). When necessary, limiting points may be used to indicate the location of the regimental reserve line.

d. Distribution of troops on battle position.—The infantry units occupying a regimental sector (defense area) of the battle position are deployed in two echelons—a holding garrison and a reserve. If the regiment has three battalions available the holding garrison usually consists of two battalions and the reserve of one.

e. Holding garrison.—The holding garrison organizes and defends the mutually supporting defense areas into which the regimental defense area (battle position) is subdivided. The subdivision of the regimental defense area conforms to the subdivision of the regiment into tactical units. The regimental commander assigns battalion defense areas to his forward battalions (holding garrison) by designating their boundaries, the general trace of the main line of resistance (or its limiting points), and the rear limits of battalion areas. Battalions in turn assign company defense areas, and companies assign platoon defense areas. Usually platoon defense areas are the smallest closed defensive areas but in some situations these may be subdivided into squad or two-squad defense areas. Battalions and smaller units locate the de-

fense areas of their subordinate elements in both width and depth. Thus each company defense area consists of a group of mutually supporting platoon defense areas; a battalion defense area is composed of a group of mutually supporting company defense areas; and a regimental defense area (battle position) is composed of the defense areas of battalions (and companies) of the holding garrison and the defense areas and positions prepared by the regimental reserve. (See fig. 11.)

f. Regimental reserve.—(1) The regimental reserve is usually disposed in a defense area generally along the regimental reserve line. When practicable the reserve initially reconnoiters and prepares defensive positions and defense areas on or near the regimental reserve line. The first positions prepared are those from which the reserve can best protect the rear and flanks of the defense areas occupied by the holding garrison and from which it can block the most probable penetrations of the battle position. In organizing defensive positions in the reserve area a high priority is given to preparing emplacements and fields of fire for heavy weapons and individual shelter for all personnel. Additional positions to block penetrations from the flanks and to deepen the defense are organized by the reserve as time permits.

(2) Heavy weapons of the reserve are emplaced for the execution of planned defensive fires; these weapons are manned by skeleton crews and protected by small rifle detachments. That part of the reserve which is not providing these skeleton garrisons, or which is not being used for other missions, is assembled, if practicable, in a concealed defiladed area within the area of the reserve. It is there held ready either to occupy its prepared positions or to move to any of the reconnoitered areas from which to counterattack. A reserve assembly area should be so located and organized that it has as many as possible of the following characteristics:

Defilade and concealment.
Accessibility to defense positions.
Accessibility to areas from which to counterattack.
Sufficient size to permit necessary dispersion of troops.
Hasty entrenchments for individual cover from air and mechanized attack and artillery fire.
Natural or prepared obstacles to antimechanized defense.

g. Frontage and depth.—(1) The frontage of the sector assigned to an infantry regiment depends primarily upon the number of battalions which the regiment has available to garrison the battle position and the nature of the terrain to be defended. The frontage of an interior infantry regiment, having two battalions available to garrison its battle position and one to use as reserve, may be as little as 2,000 yards in broken, heavily wooded terrain, and as much as 5,000 yards in flat, open terrain. In partially open, rolling terrain the regiment is usually assigned a frontage of from 3,000 to 4,000 yards. The depth of the battle position of an interior regiment usually varies from 1,500 to 2,000 yards.

(2) The regimental commander assigns frontages to his forward battalions in accordance with the natural defensive strength and relative importance of their defense area. Battalions on exposed flanks are assigned narrower frontages than interior battalions. Where a battalion occupies a vital area having poor observation and poor fields of fire, such as in heavily wooded, broken terrain, the frontage of its area should not exceed 1,000 yards. Where the area is more open and affords longer fields of fire a frontage of 1,500 to 2,000 yards may be assigned. On flat, open terrain as much as 2,500 yards may be assigned. Exceptionally, where obstacles in front of the position, such as swamps or streams, preclude the possibility of strong attack against the area, a frontage of not to exceed 3,500 yards may be assigned. The depth of the defense area assigned a battalion usually varies from 800 to 1,400 yards. The defense areas of battalions and smaller units usually include all installations and elements of the unit except administrative installations.

(3) The distance from front to rear between the garrisons in successive platoon or company defense areas should not exceed the effective range of rifle fire. It should be great enough to insure that no garrison is in the zone of dispersion of artillery fire directed at the next garrison to the front or rear; the minimum is 150 yards. This distribution in depth diminishes the effect of hostile fire and provides for continuity in defensive fires and movement against the enemy, even though he succeeds in penetrating into the battle position. (See fig. 12.)

h. Boundaries.—Insofar as practicable, boundaries pass through features that are easily identified on the ground.

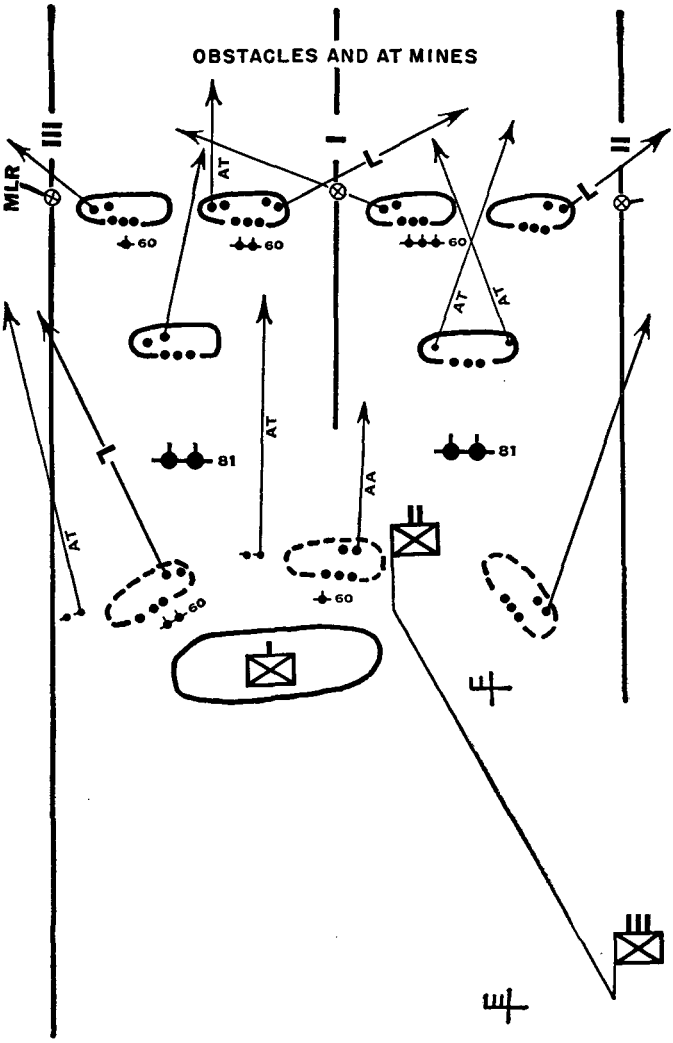


FIGURE 12. Organization of battalion defense area in depth.

In addition, boundaries are so designated as to avoid dividing responsibility for the defense of key terrain or critical avenues of approach. Boundaries are extended forward of the main line of resistance to the limit of the range of the battalion weapons. They may be extended to the outpost line to fix responsibility for its defense. Battalion boundaries are extended to the rear at least as far as the rear limits of their defense areas.

i. Observation.—Companies, battalions, and the regiment establish observation posts. (For details, see FM 7–25 and 30–10.)

j. Measures to strengthen position.—All defensive positions have certain inherent weaknesses which may be strengthened by the defender. If a position has restricted fields of fire, it may be strengthened by clearing the fields of fire, by decreasing the frontages of local garrisons, by providing dense flanking fires and heavy mortar and artillery concentrations, and by the use of contaminations and obstacles. If a position is exposed to hostile observation it may be strengthened by distributing its garrison in depth, by constructing dummy works and masks, and by camouflaging. If the position has exposed flanks, if may be strengthened by the use of obstacles, contaminations, demolitions, and mines, all of which must be covered by fire.

■ 238. COVERING FORCES.—*a. General.*—The battle position is usually protected initially by the forces listed in *b*, *c*, and *d* below.

b. Covering force.—A mobile advanced covering force, under the orders of a higher commander, operates well to the front. Its mission is to inflict the maximum delay on the enemy, to permit the defender to utilize advanced artillery observation, to permit the laying of mines, demolitions, and obstacles, and to deceive the enemy as to the actual location of the battle position.

c. General outpost.—A general outpost secures the immediate front of the battle position. This may be established and controlled by higher authority or may be furnished from front-line regiments and its action coordinated by higher authority. (See par. 246.)

d. Combat outposts.—The action of the general outpost is usually supported and supplemented by combat outposts, fur-

nished and controlled by units occupying areas on the main line of resistance. (See par. 247.)

■ 239. DISPOSITIONS IN REDUCED VISIBILITY.—*a. General.*— When visibility is seriously impaired, listening posts must supplant observation posts to give warning of hostile approach. Weapons are laid to fire on final protective lines. Front lines may be held in greater density by placing troops in gaps ordinarily defended by fire.

b. At night.—Preparations are made for illumination by flares. These may be sent up at irregular intervals.

c. In smoke or fog.—Since the duration of smoke or fog is uncertain, local commanders must decide immediately upon the extent to which they will modify their dispositions. Plans previously made for such contingencies are put into effect if appropriate.

SECTION III

PREPARATORY MEASURES

■ 240. GENERAL.—*a.* The preparatory measures essential to the defense of a position include reconnaissance, occupation of the position, planning the defense, and issuing the orders. The order in which, and thoroughness with which, each of these steps can be carried out will depend principally upon the time available, and whether or not contact with the enemy has been made.

b. Quick decisions and rapid and efficient staff action are necessary to make the execution of these steps, insofar as practicable, concurrent.

■ 241. RECONNAISSANCE.—*a. General.*—Following receipt of the defense order from higher authority, the regimental commander makes a terrain reconnaissance, determines his plan of defense, and issues his orders. Reconnaissance of the position is as detailed as the situation permits. If contact with the enemy has not been made, the commander ordinarily is free to make a detailed reconnaissance. He may then follow a procedure similar to that indicated below. In the hasty assumption of the defensive from a march formation or from offensive action, reconnaissance must be curtailed.

b. Planning reconnaissance.—(1) Prior to starting his terrain reconnaissance, the regimental commander makes a brief

map reconnaissance of his sector, formulates a tentative plan of defense, determines the localities to be visited, and selects the route. He then decides how, when, and where he will issue his order.

(2) He has essential elements of his tentative plan transmitted to commanders of subordinate units so they can begin their reconnaissance and make other preparations for employing their units. If the situation will permit their assembly to receive the order, he has them notified when and where it will be issued. He also provides for resumption or continuance of the movement of the regiment toward its sector.

c. Reconnaissance party.—The regimental commander has certain staff officers assist him in his reconnaissance. When it is practicable to do so he may have his reconnaissance party include the regimental S–2, S–3, communication officer, antitank officer, and the commander of the supporting artillery or his representative. The party may also include messengers, a stenographer, a draftsman, and radio personnel with suitable equipment. A small motorized security detachment should accompany the party. Such a reconnaissance party usually breaks up into small groups for detailed reconnaissance as directed by the commander.

d. Making reconnaissance.—The reconnaissance should be made according to the previously prepared reconnaissance plan. The regimental commander studies the terrain with a view to determining the following:

(1) Most probable avenues of hostile approach for foot troops and for mechanized elements.

(2) Terrain in front of the sector most suitable for hostile observation.

(3) Probable hostile assembly positions.

(4) Areas most advantageous for hostile attack and key points within the regimental area.

e. Decision.—Based upon his determination of the matters listed in *d* above, the regimental commander makes decisions regarding the following:

(1) General course of the main line of resistance.

(2) Strength and location of security detachments.

(3) Distribution and missions of battalions and infantry supporting weapons; supporting artillery fires desired; defense areas; boundaries; reserve location.

(4) Intrenchments, obstacles, and other field works to be constructed.

(5) Supply and evacuation installations.

(6) Location of observation and command posts.

f. Staff.—The staff is used to assist in the reconnaissance and to make recommendations regarding appropriate matters listed in *d* and *e* above.

■ 242. PLANS.—*a. General.*—The essential elements of a defense plan include tactical organization, a security plan, fire plan, ground organization plan, counterattack plans, and plans for administration and signal communication. All must be carefully coordinated.

b. Preparation.—During the reconnaissance, the regimental commander modifies his tentative plan as necessary, and indicates its essential features to his assistants. He receives their recommendations, approves or modifies them, and prepares notes for the regimental order or directs that the necessary fragmentary orders be issued.

c. References.—For security, see section IV. For organization of fires, see section V. For organization of ground, see section VI. For counterattack plans, see section VII.

d. Administrative plans.—(1) In the defense, supply plans are made with a view to eliminating the necessity of replenishing supplies except under cover of darkness. When the ammunition is available, additional amounts are transported forward by truck until a sufficient supply is on the position to last through the following day. After an ample supply has been placed upon the position, the vehicles are again refilled and held (usually at the regimental train bivouac) as a mobile reserve.

(2) Aid stations are usually located farther to the rear in the defense than in the attack. Routes of evacuation (litter routes) to aid stations are reconnoitered and marked when time permits. Evacuation from aid stations to the rear is accomplished by collecting facilities of the division.

e. Signal communication plans.—In a defensive situation, locations for command posts and routes for wire lines are selected for all units, including reserves. Alternate command post locations are selected. Advance signal communication plans are made for each of the probable missions of the reserve. The regiment usually installs two wire lines to the command post of each battalion occupying a defense area. If

flank positions are prepared for possible occupancy by reserves, at least one wire line is laid to each. The antitank company is often included in the regimental wire net; its vehicular radio set may be included in the antimechanized or antiaircraft warning net of the next higher unit. Lateral wire lines are installed for communication between adjacent battalions and for use as alternative channels. Both wire and radio communication are established with the outpost.

■ 243. ORDERS.—*a.* If contact with the enemy has not been made, the regimental commander ordinarily makes a detailed reconnaissance and issues a complete defense order. In the hasty assumption of the defensive, reconnaissance is necessarily curtailed and fragmentary orders are issued.

b. Under all conditions the regimental commander requires that important information and instructions be transmitted to subordinates with the minimum of delay in order to afford them the maximum time to prepare their units for action.

c. For the form for a defense order, see FM 101–5 and 7–55.

■ 244. OCCUPATION OF POSITION.—All commanders take steps to use the minimum time to place their units in the areas which they are to occupy or defend in order to afford the maximum time for the construction of defensive works. As soon as defense areas (sectors) are designated, each unit commander provides for the resumption or continuation of the movement of his unit toward the designated area before he begins his reconnaissance. He must make the necessary decisions so that subordinate elements may move directly to their assigned areas without a halt and begin the work of organization.

SECTION IV

SECURITY

■ 245. GENERAL.—*a.* Advanced covering forces of higher units usually provide distant security and security information for the regiment in a defensive situation.

b. Security measures taken by the regiment, in addition to reconnaissance patrols, may include some or all of the following: establishment of all or a part of the general outpost; combat outposts; flank security detachments; and

measures to prevent surprise by hostile aircraft or mechanized forces.

c. The regiment secures its own movement to its sector by appropriate security detachments.

■ 246. GENERAL OUTPOST.—*a. General.*—The location of the outpost line for the defensive position is prescribed by higher authority. It should not parallel the battle position. Where practicable, its location should be such as to prevent the placing of observed fire on the battle position by hostile light artillery, but to permit the support of the outpost by light artillery of the battle position. These seemingly conflicting characteristics may be made possible by the superior observation afforded the defender.

b. Composition.—The outpost should include a large proportion of automatic and antitank weapons.

c. Security.—The outpost secures its own movement into position, relieving any other security detachments as they are passed through. It posts local security detachments (outguards) on natural terrain features to the front and flanks to delay and give warning of the approach of the enemy.

d. Mission.—The mission of the outpost is to provide time for the main force to prepare itself for combat, to delay and disorganize the enemy and deceive him as to the location of the battle position, and to provide a deeper view within the terrain over which the attacker will advance.

e. Plans.—(1) Plans are based upon the mission and the reconnaissance of the outpost commander, who, when practicable, precedes the outpost to the position. The plans include security measures; the disposition and frontages of troops upon the position and upon advantageous delaying positions in rear; the placing of fires; organization of the ground both on the outpost line and between that line and the main line of resistance; means for deception and disorganization of the enemy throughout the action; and plans for movement to the rear from successive positions.

(2) Dispositions and frontages of troops conform in general to those in delaying action (see ch. 7). Successive positions to the rear are so located that the units which occupy them can cover the withdrawal of units to the front.

(3) Positions for long-range infantry weapons should permit the development of their fires as far to the front as

possible. Short-range fields of fire for automatic weapons usually are relatively unimportant. If the outpost line is too far to the front for effective observed fire support by artillery of the battle position, some artillery is ordinarily attached. Its fires are placed upon critical areas and upon areas which cannot be fired upon by other supporting weapons. When artillery is attached to the outpost, long-range interdiction fires are planned.

(4) Organization of the ground is as complete as time permits, and includes some measures intended for deception. The main defensive works ordinarily are obstacles and mine fields in defiles or located to canalize the movement of hostile mechanized forces.

(5) Means for deceiving and disorganizing the enemy are designed principally to cause his premature deployment. This is accomplished by the construction of dummy works to simulate a highly organized position, by occupation of the maximum front practicable, by long-range fire at high rates by all weapons, and by the selection of positions which may cause hostile deployment in improper directions.

(6) Plans for the withdrawal of the outpost are based upon a careful reconnaissance of available routes and their location with respect to successive delaying positions. Plans are carefully coordinated both between forward and rear elements of the outpost and between the outpost and the battle position. Routes must be so selected that they will not interfere with fire from the battle position.

■ 247. COMBAT OUTPOSTS.—*a.* Combat outposts, detailed from each battalion holding a sector of the battle position, cover the foreground of the battle position when the general outpost is at a considerable distance from the main line of resistance, or when the enemy situation prevents the establishment of a general outpost, and when battle is interrupted by nightfall.

b. The mission of combat outposts is to provide local security or, when there are no friendly troops to their front, to perform those duties of the general outpost which their strength and location permit.

c. The regimental commander may prescribe the approximate strength of the combat outposts and their general location.

d. As long as the general outpost remains in position, the combat outposts are relatively weak, consisting of small outguards that hold the foreground under observation. If there is no general outpost, the combat outposts may consist of one or more rifle platoons from each front-line battalion, reinforced by automatic weapons. Heavy weapons are suitably employed with the combat outposts for long-range fire when good fields of fire and covered routes of withdrawal are available. When the main line of resistance is located on a reverse slope, the combat outposts should be particularly strong in machine guns to hold the attacker under fire during his approach to the position.

e. The general line selected for the combat outposts should afford long-range observation. It must be far enough forward to deny the enemy close observation of the battle position.

f. If delaying action between the combat outpost line and the main line of resistance is practicable, positions are reconnoitered and plans for this action are formulated.

g. The actions of the combat outposts are coordinated by the regimental commander and by the commanders of adjacent battalions.

h. Support of the combat outposts is included in the artillery fire plan. This fire is conducted by the battery observers who are stationed with the combat outposts.

■ 248. FLANK SECURITY.—*a.* Constant information of the situation in adjacent sectors is necessary for flank security. This information is obtained by means of liaison personnel and by means of observers who keep the flanks under constant observation. Lateral wire communication may be established between regiments. The responsibility for its installation is prescribed by higher authority. If observation to the flanks is poor from the regimental or battalion observation posts, specially placed observers or patrols maintain contact and supply prompt information.

b. Exposed flanks are secured by detached posts located to block the principal approaches. The observation of these detachments may be extended by patrols. Use is made of demolitions, obstacles, and contaminations. The regimental reserve is located toward the exposed flank.

■ 249. ANTIMECHANIZED DEFENSE.—*a. General.*—In a defensive situation antimechanized measures can usually be or-

ganized more fully than in offensive phases of combat. The regimental warning system and the active and passive means of defense are coordinated by the antitank officer under supervision of the regimental commander.

b. Warning system.—(1) The antimechanized warning system makes use of the regimental system of signal communication, and of all observation facilities within the regiment and any attached or supporting units. All reconnaissance and security elements are included in the warning system and it is coordinated with the systems of higher and adjacent units. All elements in the system make immediate report of mechanized threats by the most expeditious means of communication available.

(2) Insofar as practicable, signal communication is established by wire, radio, and visual means between elements of the warning system and antitank units. All warning messages are classified as urgent and take precedence over other urgent messages. All elements of the warning system are instructed to this effect.

c. Passive security measures.—(1) Positions and installations are located to take advantage of concealment, cover, and natural obstacles to mechanized vehicles. Artificial obstacles are sited to strengthen and fill gaps between natural ones. They are disposed in depth in front of and within the battle position in order to delay the enemy and permit more effective employment of antimechanized fires. (For the description and use of passive means, see FM 5–30.)

(2) Antitank mine fields are usually the most quickly prepared and most effective artificial obstacles.

(3) Obstacles are protected by fires designed to prevent the enemy from removing or neutralizing them and to destroy mechanized vehicles stopped or slowed down by them.

(4) The placement of close-in obstacles is usually accomplished by the troops they are intended to defend. Attached engineers may assist in this work.

(5) The unit responsible for protecting a mine field with fire is also responsible for maintaining a traffic warning patrol to prevent damage by mines to friendly vehicles.

d. Active means.—See paragraphs 252*c*(2) and 269*g*.

■ 250. ANTIAIRCRAFT SECURITY.—*a.* Security against aircraft is obtained by the protective measures of *warning, concealment, dispersion,* and *fire.*

b. The regimental warning system is fully organized in a defensive situation and is coordinated with any aircraft warning service organized by higher headquarters.

c. Measures taken for concealment aim to defeat both visual reconnaissance and air photography. Field fortifications are carefully sited to utilize the concealment afforded by nearby buildings, brush, hedges, banks, ditches, and cuts. For the camouflage of field works, see FM 5–20.

■ 251. REGIMENT AS OUTPOST FOR LARGER FORCE.—When the regiment is the outpost of a larger force it is disposed on the prescribed position and prepares plans for accomplishing its mission as indicated in paragraph 246.

SECTION V

ORGANIZATION OF FIRE

■ 252. FIRE PLANS.—*a. General.*—(1) Fire plans are prepared by all units down to the smallest.

(2) Each fire plan should be based upon a consultation and agreement between commanders of adjacent similar units.

(3) Each plan is submitted to and reviewed by the next higher commander. His review includes careful scrutiny of coordination at unit boundaries and of requests for supporting fires of weapons not controlled by the subordinate commander.

(4) All plans provide for such of the following as may be accomplished with the weapons available:

(*a*) Support of the outpost in its initial position and in its delaying action before the battle position.

(*b*) Maximum use of grazing and flanking fires of automatic weapons, particularly just in front of the main line of resistance, and covering tactical obstacles.

(*c*) Use of infantry high trajectory weapons to cover areas which cannot be covered by automatic weapons and to supplement artillery fire or be placed where artillery fires are not placed.

(*d*) The delivery of such supporting artillery and heavy weapons fires as may be required within the battle position.

(*e*) Maximum practicable use of defilade from hostile fires.

b. Regiment.—The regimental fire plan is a part of the order for the defense and prescribes—

(1) Long range machine-gun and mortar missions.

(2) Allotment of fires of supporting artillery and of any attached weapons.

(3) Initial missions for heavy weapons of the reserve.

(4) Initial disposition and missions of the antitank company.

(5) Appropriate instructions and prearranged signals to insure prompt and proper delivery of planned fires (e. g., pyrotechnics).

c. Subordinate plans.—(1) The regimental commander reviews battalion fire plans paying particular attention to the coordination of fires at boundaries and to requests for artillery concentrations. He also assures himself that machine guns are distributed in width and depth in each battalion defense area, and that some machine guns are sited to take in flank any hostile penetrations aimed at critical points in the regimental sector. He assures himself that the planned artillery and mortar fires cover critical localities and ground dead to, or out of range of, other supporting weapons.

(2) The fire plan of the antitank company commander is submitted as a part of the plan for the antimechanized defense of the regimental sector. It is reviewed and modified as necessary by the regimental commander to insure—

(*a*) That the fires of regimental and battalion antitank weapons are coordinated primarily for defense of the forward portion of the battle position.

(*b*) That provision is made to meet mechanized threats from the flanks with the fires of some of these weapons.

(*c*) That the fires of all regimental antitank weapons are coordinated with the location of natural and artificial antitank obstacles and mine fields, and with the fires of antitank weapons of adjacent units and of higher units to the rear.

■ 253. ARTILLERY FIRES.—The plan of fires of supporting artillery is prepared by the artillery commander so as best to support the regimental commander's plan of defense. It is usually based in large part upon the requests for fires from battalions occupying defense areas and includes the following:

a. Standing barrages for the close defense of the main line of resistance.

b. Fires covering avenues of approach.

c. Other fires beyond the main line of resistance, such as fires in support of the action of the outpost.

d. Counterpreparation fires, to include concentrations on probable hostile assembly areas.

e. Fires within the battle position, to include those in support of counterattacks.

■ 254. FIRES OF ATTACHED UNITS.—Fire plans for attached units are usually prepared by their commanders under direction of the regimental commander. Chemical troops, from positions well forward, supplement the fires of artillery and other supporting weapons. (For use of chemicals in the defense, see FM 100–5 and 7–5.)

SECTION VI

ORGANIZATION OF GROUND

■ 255. GENERAL.—*a.* Organization of the ground is the strengthening of a defensive position by clearing fields of fire, constructing field fortifications, and camouflaging. The order in which these are to be executed is expressed in orders in the form of priorities. The assignment of priorities does not prevent simultaneous work on several tasks. After the location of combat emplacements has been fixed, the normal priority is—

(1) Clearing fields of fire and removal of objects masking observation.

(2) Laying of antitank mine fields and execution of important demolitions such as bridges.

(3) Providing for adequate signal communication and observation systems.

(4) Preparing individual shelter and emplacement of weapons.

(5) Preparing obstacles (other than mine fields) and other demolitions.

(6) Preparing routes for movement of reserves and for supply and evacuation.

b. Camouflaging and other provisions for concealment precede or are concurrent with other work. Construction of dummy works is concurrent with other work.

■ 256. PLANNING AND SUPERVISION.—*a. Planning.*—The regimental commander's plan for organization of the ground includes, in addition to the assignment of areas of responsibility to subordinate units, the following:

(1) Allotment of tools and materials.

(2) Special priorities of construction.

(3) Assignment of construction missions outside the defense areas of subordinate units.

(4) Construction missions for the regimental reserve.

(5) Missions for attached engineers.

b. Supervision.—The regimental commander and his staff supervise the work of organization to insure that fortifications are so located as to make best use of the terrain and of planned fires; that the defense areas of small units avoid exposed localities, when practicable, in favor of defiladed terrain; that camouflage precedes or is carried on simultaneously with construction; and that necessary deceptive (dummy) works are suitably located and present the appearance of having been camouflaged. The position should be examined from the air, or by means of air photographs, or preferably both.

■ 257. ALLOTMENT OF TOOLS AND MATERIALS.—Construction tools and materials within the regiment will usually be supplemented by an additional supply made available by higher authority. Tools and materials are allotted in accordance with the amount and urgency of the work to be done by the various subordinate units. Most of them are usually allotted to units on the main line of resistance.

■ 258. SPECIAL CONSTRUCTION MISSIONS AND PRIORITIES.—The normal priority of work (listed in par. 255) is usually applicable both to a hasty and a deliberate organization of a position. However, under any circumstances the priority in which the tasks are to be performed is stated in orders.

■ 259. CONSTRUCTION MISSIONS FOR REGIMENTAL RESERVE.—*a.* The regimental reserve prepares defensive positions within its area along or near the regimental reserve line. When the reserve is assigned an assembly area it prepares hasty intrenchments in this area as cover from air and mechanized attack and artillery fire. The regimental reserve may also be ordered to assist in organizing the areas of front-line bat-

talions; to clear routes for its own movement and for supply and evacuation; or to construct dummy works.

b. Tasks in the forward areas may include clearing fields of fire, laying mine fields, developing natural obstacles, and constructing artificial obstacles.

c. The regimental order prescribes the priority of organization of positions within the area of the reserve.

■ 260. MISSIONS OF ENGINEERS.—*a.* When combat engineers are available to assist in organization of the ground, they should usually be assigned tasks in the following order:

(1) To execute demolitions and construct obstacles.

(2) To construct works requiring special equipment or technical skill.

b. The use of engineers and chemical troops and antitank units should be closely coordinated.

■ 261. CONSTRUCTION AND LOCATION OF WORKS.—*a. General.*—For detailed information on types and methods of construction of various field works, see FM 5–15. *Concealment is sought for all except dummy works, and all works are camouflaged.* Dummy works should not be obviously exposed. (See FM 5–20.)

b. Obstacles.—Obstacles are sited by local commanders with a view to best use of the terrain and coordination with defending fires.

c. Trenches and emplacements.—Fields of fire in the direction of probable hostile approach constitute the prime factor in determining the location of combat units. Emplacements for automatic weapons must provide a field of fire covering the assigned fire sector. At least one alternate emplacement is provided for each weapon. Supplementary positions are prepared where secondary missions for weapons make them necessary. Emplacements for mortars should be located close to observation for the control of their fire. Communication trenches are first dug over exposed stretches on the routes of approach from the rear. As a general rule communication trenches should not be used as combat emplacements.

d. Dummy works.—Dummy works serve to mislead the enemy and disperse his fire. They should be started simultaneously with work on the true position and progress concurrently with it. To be effective they must closely re-

semble genuine works, be located where an intelligent enemy might reasonably expect to find a defensive work, and bear evidence of an attempt at camouflage.

SECTION VII

COUNTERATTACK PLANS

■ 262. GENERAL.—*a.* A counterattack is a limited objective attack to regain lost portions of the position. A single coordinated blow is delivered and little or no reserve is held out. A counterattack is preferably directed against the flank of the penetrating forces and toward an objective within the regimental sector. Objectives outside the regimental area may be assigned by higher authority.

b. For the conduct of the counterattack, see paragraphs 270 to 273, inclusive.

■ 263. PLAN.—*a.* The prompt action requisite for successful counterattack is assured by advance planning. Plans are prepared to meet various situations involving hostile entry into the position. Based upon his reconnaissance, the regimental commander prescribes in general terms the counterattacks the regimental reserve is to be prepared to deliver. Plans provide for the use of all available weapons (artillery, chemical mortars, tanks) to support the counterattack. The reserve commander consults the commanders of supporting units and prepares the detailed counterattack plans. These plans cover the direction and objective, line of departure, movement to line of departure, supporting fires, and coordination. For convenience of reference and to expedite execution, counterattack plans are numbered or lettered in the order of the priority of planning.

b. It is essential that the counterattack of the regimental reserve be coordinated with the action taken by the reserves of battalions in the holding garrison; this coordination must be insured by the regimental commander. When the situation permits, these battalion reserves may be used to block further penetration while the regimental reserve counterattacks to eject the enemy and restore the battle position.

c. When the situation permits, counterattack plans are rehearsed. If rehearsals are impracticable, as many subordinate leaders as possible are conducted over the area, and tentative plans are explained to them on the ground.

d. Plans are prepared by all commanders against possible penetration of their areas. In addition, adjacent commanders collaborate in plans to eject penetrations which compromise the integrity of both areas. The higher commander is informed of such plans.

SECTION VIII

CONDUCT OF DEFENSE

■ 264. GENERAL.—The integrity of the battle position is maintained by a combination of fighting in place and counterattack. The conduct of the defense must be aggressive. Advantage must be taken of errors or failures on the part of the enemy. The conduct of defense involves the progressive disruption and weakening of the hostile attack from the time it comes within range of the covering forces up to its close approach to the main line of resistance. All defensive action by troops ahead of the main line of resistance and by those in rear of it is directed toward the defense of the main line of resistance to maintain the integrity of the battle position. A unit intrusted with the defense of a tactical locality *under no circumstances abandons it* unless authorized to do so by higher authority. Important localities on the main line of resistance must be defended to the last man.

■ 265. RECONNAISSANCE.—*a.* Regimental, battalion, and company observation posts, supplemented by patrols, keep the entire sector under observation. Patrols cover the intervals between organized tactical localities. It will frequently be necessary to resort to a reconnaissance in force or a raid to secure needed information of enemy dispositions.

b. At night, listening posts are established by front-line units, and the area between the combat outposts and the battle position is combed by patrols.

■ 266. ADVANCED COVERING FORCES.—*a.* Advanced covering forces of higher units delay and report upon the activities of advancing hostile forces.

b. Motorized detachments keep in touch with the advanced forces of higher units and keep the outpost informed of the situation.

■ 267. GENERAL OUTPOST.—*a. Security elements.*—(1) Advanced elements (outguards) from the outpost cover with

their fire the withdrawal of any mobile advanced detachments.

(2) Whether or not the outguards cover the withdrawal of other friendly forces, they seek to inflict maximum losses upon the advancing enemy by long range fire as soon as profitable targets are presented. However, they do not open fire at long range upon such unprofitable targets as widely dispersed scouts.

(3) The action of the outguards is supported by long-range weapons of the main outpost position (preferably from supplementary positions which will not disclose the location of the outpost line of resistance) and by artillery.

(4) The action of the outguards is so conducted as to bring about maximum hostile deployment in erroneous directions.

(5) Outguards withdraw along previously designated routes before the approach of hostile forces threatens to pin them to the ground. When the outguards are furnished by the reserve of the outpost, they may be withdrawn to a position in rear of the outpost line from which they can subsequently cover the withdrawal of the outpost. When outguards are detailed from the units on the outpost line of resistance, they usually will rejoin their units.

b. Outpost line of resistance.—(1) As outguards withdraw from their advanced positions, supporting weapons of the outpost line of resistance (including artillery of the battle position) inflict maximum losses upon the hostile elements already engaged.

(2) Infantry supporting weapons fire at high rates to aid in creating the impression that the position is strongly held. Automatic weapons which ordinarily are emplaced in pairs may be separated by wide intervals, particularly where the terrain will permit complete coverage of the ground even if one weapon is stopped. Alternate positions are freely used to increase deception.

(3) Riflemen open fire at long ranges (800 to 1,200 yards). Automatic rifles are used freely to enhance the impression that the position is strongly held.

(4) Antitank guns, from positions covering areas favoring the advance of tanks, open fire when tanks arrive within their effective range. They endeavor to disrupt, canalize, and retard the advance of the tanks toward the battle position.

(5) Heavy long-range fires from the outpost line of resistance should force the deployment of forces considerably stronger than those required to drive in the outguards and should result in bringing hostile artillery into action. Unless the outpost is required to hold for a definite time, its withdrawal is started as soon as it is apparent that a highly superior hostile force is deployed for action. The withdrawal, along previously reconnoitered routes, should be in a direction which will tend further to mislead the enemy as to the location of the battle position. It may also be designed to draw the pursuing enemy in front of flanking fires from the next outpost delaying position to the rear.

(6) The action upon each successive delaying position should be designed to create as great a change of direction of the hostile front as practicable, and to bring about the deployment of the maximum number of hostile units.

(7) Outpost troops, after passing the main line of resistance, usually withdraw to positions in reserve.

■ 268. COMBAT OUTPOSTS.—*a.* Combat outposts in rear of a general outpost consist only of small security detachments to give warning of hostile approach and repel small hostile detachments which may have succeeded in penetrating the outpost lines. They may assist in covering the withdrawal of elements of the outpost, but such assistance usually can be better provided by supporting weapons from the battle position.

b. When there is no general outpost to the front, combat outposts send forward patrols to maintain or seek contact with the enemy. They also send forward small security detachments to give warning of hostile approach. They relay such warnings to the battle position, and resist until the strength and proximity of the hostile forces require their withdrawal. The withdrawal is made by previously selected routes which will not interfere with fires from the battle position. These routes are kept under observation by front-line units.

c. When the defensive battle is interrupted by nightfall, patrols from the combat outposts maintain close contact with the enemy.

■ 269. BATTLE POSITION.—*a. General.*—The battle position is defended by fire and by counterattack (see sec. IX).

b. Long-range fires.—(1) Artillery of the battle position supports with its fires the defense of the outpost line of resistance and the delaying action conducted by the outpost. Infantry heavy weapons reinforce these fires as the action comes within their range. All of these weapons which can do so place fires upon known or suspected assembly areas for hostile forces.

(2) Long-range fires of machine guns of units on the main line of resistance are delivered from positions which will not disclose the location of that line.

c. During advance of hostile attack.—(1) As the hostile attack advances it comes within effective range of an increasing number of the defending weapons, including the heavy weapons of the reserve. Heavy weapons except those on the main line of resistance, open fire at extreme effective ranges. All weapons on the main line of resistance withhold their fires until profitable targets are presented in order not to disclose their locations prematurely. Machine guns occupying primary positions on the main line of resistance will not ordinarily fire at ranges greater than 500 yards.

(2) Previously prepared artillery concentrations are laid upon known or suspected avenues of hostile approach and upon favorable targets presented during the hostile advance. These fires should be laid principally upon areas defiladed to the fires of automatic weapons.

(3) The fires of infantry mortars are used to supplement the fires of artillery. They also are used against approximately located hostile automatic weapons.

(4) The fire of rifles and automatic rifles is usually withheld until the enemy comes within a range of 500 yards.

(5) Antitank weapons sited for defense of the main line of resistance withhold their fires until tanks come within effective range (see FM 101–10); premature firing discloses gun positions and invites hostile bombardment. Antitank weapons may exceptionally be employed to fire on ground targets other than mechanized vehicles. The decision to employ these guns for this purpose must not jeopardize the accomplishment of the primary mission of the antitank guns and there must be ample ammunition available for both tasks. When such use is justified, antitank weapons are particularly effective against definitely located machine guns.

d. Close-in defense.—(1) Just before the hostile attack reaches the area covered by planned close-in defensive fires, automatic weapons in the threatened area switch their fires to their final protective lines.

Previously prepared defensive fires of mortars and artillery (standing barrages) are called for. Riflemen and automatic riflemen increase their rate of fire against the most threatening targets.

(2) If the enemy assaults he is met successively by fire, grenades, and close combat.

e. Defense within position.—If the enemy succeeds in penetrating the position, his advance is successively resisted by company supports and battalion reserves. If these fail to stop him, all or a part of the regimental reserve is used either to block the penetration from previously prepared positions or to counterattack. Units adjacent to the penetration take steps to prevent its being widened. Shoulders of the penetration are held. Flanking fires of adjacent units and previously prepared artillery and mortar fires are directed upon the penetrating elements. The regimental reserve should be used to counterattack before the enemy has had time to establish himself. (See sec. IX.)

f. Defense of flanks.—(1) Close touch is maintained with the progress of the action in adjacent sectors by means of observers, patrols, and liaison personnel. When an adjacent sector is penetrated, the fires of some supporting weapons may be diverted to assist in limiting it. Flanking fires of automatic weapons are particularly valuable for this purpose. If the penetration reaches major proportions, the regimental reserve is moved to a previously reconnoitered or prepared flank position from which it can resist any attempt to extend the penetration.

(2) Any initial threat to an exposed flank will usually be met by the reserve of the flank battalion. Constant patrolling of the exposed flank is essential, and when a major threat becomes apparent the reserve battalion is moved to a previously prepared extension.

g. Action against tanks.—(1) The obstacles and mine fields in front of the position are covered by the fire of rifles and automatic weapons to prevent the enemy from removing or neutralizing them before or during the tank attack. The fires of antitank weapons are withheld until the hostile tanks

come within effective range. Individuals and units that have weapons suitable for disabling armored vehicles engage the tanks that come within effective range of these weapons. Before the tanks reach the main line of resistance all supporting weapons except antitank weapons are placed in pits or otherwise protected against destruction and their crews take cover. All other individuals whose duties permit also take cover. As soon as the tanks have passed, firing positions are resumed and fire is opened on hostile infantry following the tanks.

(2) When a tank attack penetrates through the position, local commanders take immediate action to close any gap created, using local supports and reserves.

h. Action by regimental commander.—The regimental commander keeps in close touch with the situation by personal observation of front-line units at critical points and stages. He influences the action by shifting the fires of supporting weapons under his control, including heavy weapons of the regimental reserve, and by use of the remainder of the reserve either to occupy prepared positions along or near the regimental reserve line or to counterattack. He must notify the higher commander when his reserve is committed, and must make immediate effort to reconstitute another reserve from any available troops.

SECTION IX

COUNTERATTACK

■ 270. GENERAL.—*a.* Counterattack is the decisive element of the defense. (For counterattack plans, see pars. 262 and 263.)

b. The decisive elements of any successful counterattack include surprise, boldness, and speed of execution. It is also essential that all available supporting fires be coordinated to the maximum extent practicable.

■ 271. USE OF REGIMENTAL RESERVE.—*a.* A counterattack by the regimental reserve is launched during the period of temporary confusion and disorganization which occurs when the attacking troops have entered the position and have not had time to reorganize and establish themselves. This period is relatively short. Consequently, the counterattack is

launched without delay on the orders of the regimental commander. He may order a counterattack when vital terrain is lost or threatened or when the holding garrisons lack adequate reserves to counterattack. Unless strongly supported by suitable tanks and antitank weapons, the reserve does not counterattack while enemy mechanized forces remain in the area of the planned counterattack.

b. The regimental commander makes provisions for constituting a new reserve.

■ 272. EXECUTION.—*a. Speed.*—In order that the counterattack may strike the enemy elements when they have lost the momentum and coordination of their attack and are not disposed to defend their gains, the reserve must be prepared to act as soon as it receives the regimental commander's orders. The reserve's readiness for action is insured by the prior preparation of plans for various contingencies (see par. 263), by quick decisions, and by timely dispositions and movement from the position or area being occupied.

b. Coordination.—Coordination is obtained by arrangement with commanders in areas adjacent to that of the counterattack for its support, either by fire or by cooperation of troops; by notifying supporting artillery and heavy weapons of the area and approximate time of the counterattack; and by calling for supporting fires, usually by prearranged signal. Smoke may be used to obscure hostile observation of the counterattack area.

c. Strength and direction.—The counterattacking force usually delivers its full strength in a single blow against the flank or flanks of the penetration. Since counterattacks have the limited objective of restoring the position, reserves may be very small or may be entirely omitted within the counterattacking force.

d. Action after counterattack.—(1) When the counterattack succeeds in driving out the penetrating forces, they are pursued with fire. Troops do not advance beyond the original limits of the position except on specific orders. New reserves are created from units displaced from their original positions by the penetration and counterattack.

(2) If the counterattack fails to eject the penetrating force, counterattacking troops dig in on the line on which stopped and hold it. Higher authority is informed.

■ 273. COUNTERATTACK WITH TANKS.—When tanks are attached to the infantry regiment, they are held concealed until the need for them arises and are then launched according to previously prepared plans. These plans should take into consideration the recommendations of the tank commander as to the capabilities and limitations of the tanks.

SECTION X

RELIEF

■ 274. GENERAL.—If the defense is prolonged, higher authority provides for the periodic relief of units in line.

■ 275. PRELIMINARY ARRANGEMENTS.—The relief of a regiment is preceded by a detailed reconnaissance of the sector and routes by officers of the relieving regiment. All commanders down to and including platoon leaders should visit the position prior to executing the relief. Commanders familiarize themselves with the dispositions and defensive arrangements of the outgoing units and with the known hostile dispositions. Arrangements are completed for the transfer of supplies and special equipment to be left by the regiment relieved. Guides from the outgoing regiment meet each platoon and conduct it to its position.

■ 276. EXECUTION.—Secrecy is essential in the preparation and execution of the relief. The relief should be carried out under cover of darkness and in time to permit the bulk of the relieved regiment to be beyond artillery range before daylight. Measures to prevent congestion include officers' control posts at critical points.

■ 277. COMMAND.—The commander of the outgoing regiment is responsible for the defense of the sector until the relief is completed.

SECTION XI

RESERVE REGIMENT

■ 278. MISSIONS.—Missions assigned the reserve regiment may include—

a. Counterattacks to restore the battle position.
b. Participation in a counteroffensive.
c. Occupation and defense of a flank position or extension.
d. Relief of a front-line regiment.
e. Occupation of a sector of a rear battle position.

f. Meeting a threat by hostile troops transported by air.

g. Establishment of general outpost.

■ 279. GROUND ORGANIZATION TASKS.—The reserve regiment may be used in whole or in part to assist front-line regiments in the organization of their positions, to organize flank extensions, or to prepare, or assist in preparing, a rear position.

■ 280. LOCATION AND SECURITY.—Initially the regiment is held mobile in an area which affords cover and concealment and which will facilitate its probable employment. It is disposed for all-around defense against mechanized forces. It secures itself against hostile aircraft and prepares plans to counter an attack by troops transported by air. Security measures may include—

a. Camouflage and concealment.

b. Antitank weapons and obstacles to block probable approaches for mechanized units.

c. Assignment of automatic weapons to antiaircraft missions.

d. Establishment of antiaircraft and antimechanized warning systems.

e. Establishment of liaison with the combat echelon.

f. Detail of local security forces.

■ 281. DUTIES OF RESERVE COMMANDER.—The reserve commander prepares detailed plans for the execution of the several tentative missions assigned him and continually revises these in accordance with the developments of the situation. He keeps himself advised of the situation by personal reconnaissance, by information from higher headquarters, and by reports from liaison personnel. Before receiving orders for the employment of his regiment, either he or a suitable representative remains at the command post of the next higher commander except when necessarily absent on reconnaissance or other duties.

SECTION XII

DEFENSE UNDER SPECIAL CONDITIONS

■ 282. REFERENCES.—Conduct of the defense is frequently affected by special conditions. For defense in woods and towns, defense of a river line, and defense during operations in deserts, jungles, or mountains, see FM 100–5 and 7–5. For jungle operations, see also FM 31–20. For operations in snow and extreme cold, see FM 31–15.

CHAPTER 7

RETROGRADE MOVEMENTS

SECTION I

GENERAL

■ 283. REFERENCES.—For the general doctrines covering retrograde movements, see FM 100–5; for details of operation of supply and evacuation services of the regiment see FM 7–30; for detailed operation of signal communication and intelligence see FM 7–25.

■ 284. TYPES AND GENERAL CONSIDERATIONS.—*a. General.*—Retrograde movements include withdrawals from action, retirements, and delaying action.

b. Withdrawal from action.—(1) A withdrawal from action is the operation of breaking off combat with a hostile force. It may be followed by a retirement or by the occupation of a rear position or area from which subsequent offensive or defensive action will be conducted.

(2) Withdrawals are classified as daylight withdrawals or night withdrawals according to the time the movement is begun. Daylight withdrawals usually result in excessive losses and should be avoided.

(3) Secrecy, careful planning, and rapid movement are essentials to success.

(4) Orders from higher authority usually will prescribe—

(*a*) Location of rear position or area to which withdrawal is to be made.

(*b*) Regimental zone or route(s).

(*c*) Composition, location, and general conduct of covering forces.

(*d*) Hour (or priority) of withdrawal.

(*e*) Secrecy and security measures, including demolitions.

(*f*) Administrative details, including removal or destruction of supplies.

c. Retirement.—A retirement is a retrograde movement in which the regiment seeks to avoid or break contact with the enemy. (See pars. 310 and 311.)

d. Delaying action.—Delaying action is a form of defensive action employed to retard the enemy's advance and gain time without becoming decisively engaged. Delay is usually obtained by forcing the enemy to early deployment and to time-consuming preparations for battle. (See pars. 312 to 330, incl.)

■ 285. TACTICAL CONSIDERATIONS.—Retrograde movements are protected by continuous ground reconnaissance to the flanks and rear, by covering forces, by rapid movements under cover of darkness, by strong antiaircraft defense, and by continuous all-around antimechanized defense. Plans for any retrograde movement must recognize the threat to its success which may be caused by the use of hostile parachute or air-landing troops landing to the rear. To offset this threat, advance guards are made stronger and, where practicable, motorized detachments are held ready for instant dispatch to any area reported so threatened. Demolitions, obstructions, and contaminations are used to protect the flanks and delay the hostile advance.

SECTION II

DAYLIGHT WITHDRAWAL

■ 286. GENERAL.—*a.* A general covering force will usually be detailed by the higher commander with the mission of stopping, restricting, or diverting the hostile pursuit. Each unit in contact also must employ a portion of its strength as a local covering force to protect its initial movement to the rear.

b. The regiment may be detailed in whole or in part to the general covering force (see par. 298), or it may be required to break contact with the enemy and withdraw, protected either by the general covering force or solely by elements of the regiment designated to cover the withdrawal.

c. Paragraphs 287–297, inclusive, discuss details of the withdrawal of the regiment. Paragraph 298 deals with the regiment as the general covering force.

■ 287. PLAN.—*a.* The plans of the regimental commander for withdrawing his regiment will usually be based on orders

from higher authority prescribing the time or order of priority of withdrawal of the regiment.

b. Regimental plans are as detailed as time permits. They must include the placing of a regimental covering force, arrangements for time or priority of withdrawal of units engaged, and assignment of zones of withdrawal to initial phase lines or assembly areas.

■ 288. RECONNAISSANCE.—*a. General.*—Reconnaissance, principally by staff officers, is conducted to determine the position of the regimental covering force, zones of withdrawal for all units, phase lines, and areas for units on the rear position.

b. Covering position.—The principal factors in selecting the initial position for the regimental covering force will be the location and direction of movement of the most threatening hostile action; probable routes of withdrawal of units engaged; the location and principal area of fire of the general covering force; and the prescribed time of withdrawal of adjacent regiments. The regimental covering force must be located where it can support the next units to its front by fire.

c. Phase lines.—Zones of withdrawal of subordinate units and phase lines to control their movement to the rear are selected. The phase lines should be suitable for delaying action. The initial phase line should be selected no farther forward than the first suitable delaying position in rear of the regimental covering force. Successive phase lines conform to the requirements for successive delaying positions (see par. 316).

■ 289. ORDERS.—*a.* Speed in communicating essential information to subordinate units is of paramount importance. They are informed as early as possible of the withdrawal, the approximate time it is to begin, their zones of action, and the initial phase line or assembly areas. Early information of its mission and position must be sent to the unit selected as the regimental covering force. Staff officers are freely used to expedite the transmittal of instructions.

b. Orders from the regiment usually prescribe the position to be occupied by the covering force, state the zone of withdrawal of the regiment, and specify certain steps to be taken by the covering force to prevent hostile interference within that zone. The orders also provide for means of

informing the covering force when its withdrawal from the initial position will begin, and may prescribe routes of withdrawal.

■ 290. REGIMENTAL COVERING FORCE.—*a. Composition.*—The composition of the regimental covering force usually depends upon reserves available. The covering force for a regiment should not be larger than a reinforced battalion. It may be necessary to require a battalion already closely engaged to cover the withdrawal of other units. When practicable the covering force is made strong in automatic weapons (some for antiaircraft fire), and in antitank weapons. It is provided with artillery support (if attached or available) and, where practicable, engineers and chemical troops.

b. Conduct.—The commander of the regimental covering force takes full advantage of the long-range fires of his own weapons, and coordinates their fires with those of the general covering force, if there is one. He usually disposes his resisting forces on as wide a front as practicable. He holds out a reserve to meet threatened penetrations or flank envelopment. When the covering force withdraws, the commander uses his reserve in a rearward position to cover the withdrawal of the forces on the line of resistance. When an aggressive pursuit makes it necessary, he occupies successive positions to the rear in accordance with the doctrines governing delaying action. (See pars. 312 to 330, incl.) When the relaxation of hostile pressure permits, he organizes his force as a rear guard.

■ 291. FRONT-LINE UNITS.—*a.* The regimental commander prescribes the order of withdrawal of front-line battalions so as best to effect the withdrawal of the regiment as a whole. When the terrain is favorable and the security of the regiment permits it, all subordinate units may be withdrawn simultaneously. However, those units least heavily engaged must usually be withdrawn first. In some situations, particularly when the beginning of the withdrawal is coordinated with a counterattack ordered by higher authority, the hardest pressed units may be withdrawn first.

b. Battalion commanders are given time, when practicable, to reconnoiter their zones of withdrawal and to suballot them to their companies.

c. Elements in battalion defense areas operating under regimental control usually are attached to battalions until the regiment is assembled or the rear position is reached.

d. Ordinarily the initial withdrawal of units engaged must be straight to the rear under cover of the fire of such local covering forces as can be assembled. Progressively larger units are assembled and reorganized as the units move to the rear.

e. Initial control of all subordinate units will usually not be obtained by the regimental commander until their arrival at the first phase line. He keeps in close touch with the progress of all units back to the initial phase line. He makes plans in time to issue orders for further action to each unit upon the arrival of its leading elements.

■ 292. SUPPORTING UNITS.—*a.* Plans are made to provide artillery support for the regimental covering force in its initial position and in such successive positions as it may occupy.

b. Engineers prepare demolitions which are executed as the last troops withdraw. These demolitions conform to any restrictions or requirements imposed by higher authority. Restrictions must not be imposed that would prevent the execution of a demolition at any time necessary to prevent its falling into enemy hands. Engineers also may be used to assist in the destruction of supplies which cannot be transported to the rear.

c. Chemical troops contaminate demolitions and defiles. They may also place smoke to obscure certain phases of the withdrawal.

■ 293. SECURITY.—*a.* The regiment secures its withdrawal by its covering force and by flank guards and an advance guard. (See par. 95*c*(2).) The strength of the flank guards will be largely dependent upon the location of adjacent units and the flank security provided by higher authority.

b. Antimechanized weapons are attached to all security detachments. The bulk of the regimental antitank weapons will ordinarily be attached to the covering force.

c. Antiaircraft security is obtained through the use of dispersed formations by all units. All units detail air guards and fire at attacking aircraft. Automatic weapons for antiaircraft fire are designated and placed by any units that halt in assembly areas.

■ 294. SECRECY.—Secrecy ordinarily will be lost as soon as the actual withdrawal has started, but may be preserved to some extent during the preparatory phase. To this end, vehicles moving to the rear are required to move singly or in small groups and as rapidly as possible. Deception may be sought by prescribing the use of open but regular formations for vehicles moving toward the front.

■ 295. MOTOR TRANSPORT.—*a. Company transport.*—Weapon carriers are brought as far forward as practicable to transport weapons and ammunition to the rear. Usually it will be inadvisable to bring the bulk of them farther to the front than the initial phase line. Owing to the impracticability of moving antitank weapons by hand for any considerable distance, the prime movers of the antitank company must ordinarily be brought farther forward.

b. Trains.—Some vehicles of the ammunition and medical trains are brought to the front when practicable to transport supplies and equipment to the rear. Other train vehicles will ordinarily be moved to the rear by prescribed routes from the train bivouac area. They should be held until the withdrawal of the troops is started to avoid premature disclosure of the maneuver.

■ 296. SUPPLY AND EVACUATION.—*a. Supply.*—(1) The principal supply problem in a daylight withdrawal is that of ammunition. Adequate supplies must be insured for units to be employed on covering missions. This may be accomplished by transferring to such units surplus stocks in the hands of other units.

(2) Adequate stocks must be placed upon the rear position for the intended type of action. The placing of stocks upon the rear position should be so timed as to coincide approximately with the arrival of the units.

b. Evacuation.—(1) Elements of the regimental medical detachment accompany their appropriate units in a withdrawal. When covering forces have no organically attached medical facilities, these are provided from other units.

(2) Casualties at aid stations are evacuated prior to the beginning of the withdrawal insofar as practicable. Arrangements are made with collecting units to evacuate casualties occurring in covering forces. If some casualties must be abandoned, suitable medical personnel and supplies are

left with them under protection of the Red Cross flag to insure their proper care.

■ 297. SIGNAL COMMUNICATION.—*a. General.*—Plans are made to provide for signal communication—

(1) During initial stages of the withdrawal.

(2) During the movement to the rear position.

(3) After arrival on the rear position.

b. During initial stages.—Existing signal communication facilities on the old position are maintained. Regimental and battalion command posts remain open in their old locations until the bulk of their units has cleared their local covering forces. When command posts move to the rear, abandoned wire is cut and sections are removed to prevent early use of the lines by the enemy.

c. During movement to rear.—(1) The route of withdrawal of the regimental command post is announced.

(2) The routes of withdrawal of battalion command posts are stated in regimental orders. If it is necessary to depart from these routes, battalions are required to make immediate report.

d. On rear position.—When the rear position is to be occupied for defense or delaying action, communication personnel are dispatched to it to install the regimental wire net.

■ 298. REGIMENT AS GENERAL COVERING FORCE.—*a. General.*—When the regiment acts as the general covering force of a larger unit, its initial position and the time this position is to be held will be prescribed by higher authority. The regiment may be reinforced by artillery, engineers, antitank and antiaircraft weapons, and chemical troops. Tanks and combat aviation may support its action.

b. Conduct.—(1) The regiment organizes and defends the covering position in a manner generally similar to that employed in a delaying action for a specified time (see sec. V).

(2) The fact that both flanks will often be open necessitates holding out of a fairly large reserve (usually not more than a reinforced battalion). This reserve is used to meet a threatened envelopment of either flank, to block a breakthrough, to counterattack, and to cover the withdrawal of troops on the line of resistance of the covering force.

(3) The regiment as general covering force accomplishes its mission by—

(*a*) Delay by means of obstacles and demolitions.

(*b*) Use of all fires, beginning at long ranges.

(*c*) In some situations, by counterattack, which may be the most effective means.

(4) When it withdraws, the covering force is covered by the fires of its own reserve and supporting weapons.

c. Counterattack.—The regiment as general covering force may be required to execute a counterattack to facilitate the withdrawal of larger forces. Such a counterattack may be made in conjunction with tanks and combat aviation.

SECTION III

NIGHT WITHDRAWAL

■ 299. GENERAL.—*a.* In a night withdrawal, secrecy is facilitated and enemy action is restricted. Plans can be made in greater detail.

b. The bulk of the troops and transport is moved to the rear under the protection of a covering force composed of small detachments left in contact by the forward battalions. These contact detachments remain in position and screen the withdrawal by simulating normal activity until the remainder of the regiment has withdrawn far enough to be secure from interference by hostile ground forces.

c. In view of the broad front upon which these contact detachments are deployed, a single commander cannot ordinarily maintain effective control. Each regiment in contact usually designates a covering force commander for its contact detachments. The higher commander provides for their artillery support, coordinates the action of the elements holding the various sectors, indicates the time of their withdrawal, and prescribes their action in case of hostile attack. Contact detachments may be directed to withdraw either at a prescribed hour or upon order.

d. The higher commander also provides for a covering force (outpost) for the rear position to which withdrawal is made. The missions of this force include covering the withdrawal of the contact detachments and the artillery supporting them. It has the further mission of protecting the assembly of the larger force for further retrograde movement or to serve as an initial outpost if the rearward position is to be defended.

■ 300. PLANS.—The plan must be simple. The regimental plan includes the designation of a covering force and measures for the coordination and control of its action; time the withdrawal of each subordinate unit is to start; routes of withdrawal and initial assembly areas for each. It also includes measures for identification, secrecy, deception, and security.

■ 301. RECONNAISSANCE.—*a.* Regimental reconnaissance is made to select initial assembly areas of subordinate units and routes for their withdrawal. Reconnaissance also is made of the rear position. It is important that reconnaissance be completed in daylight to the greatest extent practicable. Plans for reconnaissance by the regiment and battalions should be so made that company commanders are enabled to make a detailed daylight reconnaissance of their initial routes of withdrawal and assembly areas. When the rear position is to be occupied for defense, it is important that battalion representatives make arrangements during daylight to guide companies into their defense areas. Reconnaissances include the marking of routes and positions.

b. Battalion assembly areas are selected in the general vicinity of the regimental reserve line. They should be defiladed from the front and concealed from air observation. The existence of roads and a turn-around within each area is desirable to eliminate the excessive noise made by motor vehicles in cross-country movement.

■ 302. ORDERS.—*a.* As soon as the decision to withdraw is known, subordinate commanders are given a warning order. It includes the new position area (if known), the time of withdrawal, and the commander (by name) and composition of the covering force. It may prescribe such limitations on reconnaissance as are necessary to insure secrecy.

b. The withdrawal order is usually issued in fragmentary form. Orders for the covering force should be given priority to enable its commander to begin his task of coordination and control. The time he takes command should be stated; this will usually be the hour at which forward battalions are to initiate their withdrawal. (For a check list of an order for a withdrawal, see FM 101–5 and 7–55.)

■ 303. COVERING FORCE.—*a. General.*—The covering force for a night withdrawal has the dual mission of resistance

and deception. General limitations as to its strength frequently will be prescribed by the higher commander; if not, they are prescribed by the regimental commander.

b. Commander.—The covering force commander is usually the regimental executive officer or the commander of one of the battalions. A part of the staff, and facilities and personnel of the regimental command post (including intelligence personnel), are allotted for his assistance.

c. Dispositions, composition and strength.—(1) The covering force is generally disposed in three echelons. From front to rear these are—

(*a*) Widely deployed elements and single machine guns on the main line of resistance, generally outlining the position held at nightfall.

(*b*) Small supports, located in the company support areas.

(*c*) Slightly larger detachments in the battalion reserve areas.

(2) Covering forces left in each battalion defense area will usually be limited to the equivalent of a rifle company, one platoon of heavy machine guns, and one 81-mm mortar section. Selection of supporting weapons to be left in place is so planned as to provide some of each type of weapon, distributed both in width and depth to conform to daytime dispositions. Some antitank weapons must be left in place, covering those avenues suitable for use by mechanized forces at night. (See fig. 13.)

d. Conduct.—(1) Detachments left on the main line of resistance are located to give the impression that the entire line is occupied. They resist any hostile attacks and conduct such other firing as will simulate normal occupancy.

(2) Groups in the company support areas remain in readiness to resist by fire or counterattack any enemy attack which threatens to overrun the main line of resistance.

(3) Elements in each battalion reserve area (usually a platoon) patrol to the front and flanks to maintain contact, to detect infiltration by hostile patrols, and to give warning of hostile approach.

(4) Artillery support is called for as required through the artillery liaison officer.

(5) Withdrawal of elements of the covering force is made initially to a prescribed assembly point, routes to which are reconnoitered in advance. The time of withdrawal of the

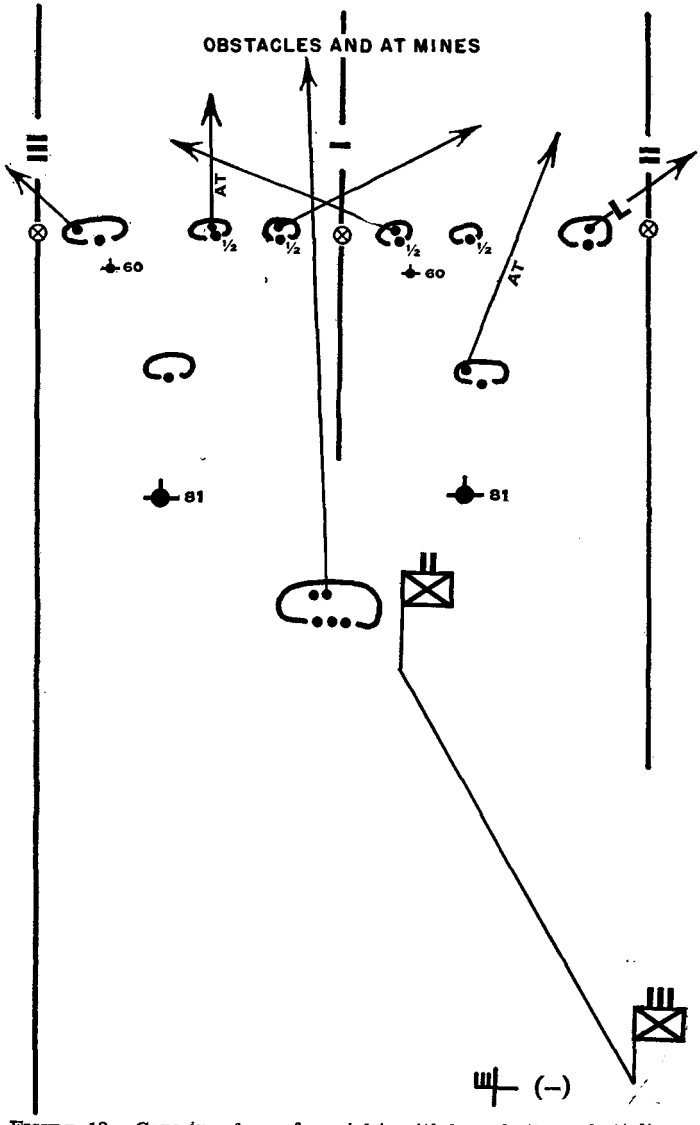


FIGURE 13.—Covering force for night withdrawal (in a battalion defense area).

regimental covering force is generally prescribed by higher authority. It should permit the covering force to come under the protection of the outpost of the rear position by daylight. Motor transportation may be furnished for this purpose. Supporting artillery usually is started to the rear, according to plans made by the higher commander, just ahead of the foot troops. The covering force commander keeps the commander of the supporting artillery unit informed of the progress of withdrawal of the foot troops. Elements of the covering force usually will move in the following general order: trains (ordinarily only one or two medical vehicles); elements from the battalion reserve areas; elements from company support areas and from the main line of resistance. Echelons usually start their movement to the rear upon a prescribed time schedule. The covering force maintains a suitable security formation until it clears the outpost covering the rear position.

■ 304. WITHDRAWAL OF MAIN FORCES.—*a.* Higher authority will usually prescribe that main forces of the regiment will begin their withdrawal shortly after dark.

b. Regimental plans then ordinarily provide for the simultaneous withdrawal by all elements not designated as a part of the covering force. Small units are progressively united according to plans of subordinate commanders and move to the prescribed battalion assembly areas over previously designated and reconnoitered routes. From these areas they move, usually according to a time schedule prepared by the regiment, to an initial point for the formation of route column for the movement to the rear position.

c. Trains and rear installations usually lead the column to the rear, followed in turn by company transport not required for security purposes, and the foot elements. Battalions are arranged in accordance with the plans for their use in the rear position. A small rear guard secures the movement.

■ 305. SECRECY.—Secrecy is indispensable to a successful night withdrawal. All daylight activities which might disclose the intention to withdraw, such as abnormal movement of trains to the rear, are prohibited. The size of reconnaissance parties is restricted and any necessary daylight motor movements to the rear are made by infiltration. Careful provision is made to prevent noise during the withdrawal of

the main forces. Lights are prohibited; special enforcement of secrecy measures are taken in assembly areas. Secrecy is also promoted by deceptive measures, some of which are mentioned in preceding paragraphs of this section.

■ 306. MOTOR TRANSPORT.—Company transport and some vehicles of the ammunition and medical trains should be released to units as far forward as practicable, shortly after dark. To permit this, it may sometimes be necessary to start their movement forward during daylight. For a majority of the units, it will usually be unwise to make vehicles available forward of battalion assembly areas. Antitank company prime movers, however, must go forward to the vicinity of gun positions. Some vehicles are left to transport heavy weapons and ammunition of the covering force.

■ 307. SUPPLY AND EVACUATION.—*a.* Ammunition supply of forward elements is replenished only to the extent necessary to meet estimated requirements before the start of the withdrawal. Supplies for the rear position are made available as soon as practicable after the troops arrive on the rear position. The feeding of a hot supper on the old position will frequently be impossible because of lack of time. In such cases, troops are authorized to consume the field ration C or D.

b. The problem of evacuation in a night withdrawal does not differ materially from that in a daylight withdrawal (see par. 296). A skeleton aid station remains with the covering detachment.

■ 308. SIGNAL COMMUNICATION.—*a.* In a night withdrawal, plans provide for communication in the old position and en route to and within the new position.

b. The time of displacement and route of movement of the regimental command post are announced. The locations of the regimental and battalion command posts in the new position are announced. The old (forward) command post remains open until the bulk of the regiment has cleared the battle position.

c. During daylight a reconnaissance is made and command post sites and wire routes in the new position are selected and marked. Construction does not begin until after dark.

d. Continuous wire communication with and within the covering force is provided by leaving necessary communica-

tion personnel, using the wire lines already established in the old position, and installing wire communication between the old and the new command posts. Wire circuits are cut as soon as discontinued and some of the wire removed to prevent use by the enemy.

e. During the withdrawal, radio is silenced in the new position and traffic in the old position is continued or increased for purposes of deception.

f. Pyrotechnics are used in the old position as prearranged signals and as an aid in simulating normal activity.

■ 309. REGIMENT AS COVERING FORCE.—If designated as a covering force for the rear position in a night withdrawal, the regiment forms the outpost for the rear position and covers the withdrawal of the covering forces left on the old position and the artillery supporting them. The plans for and conduct of its action are generally as indicated in paragraphs 246 and 267.

SECTION IV

RETIREMENT

■ 310. GENERAL.—A regiment usually executes a retirement pursuant to orders of higher headquarters. On an independent mission, a regiment initiates a retirement in compliance with specific instructions or upon the completion of an assigned mission. Without competent orders to do so, a decision to retire is justified only when all possibilities of accomplishing the assigned mission have been exhausted and a continuation of the battle will lead either to excessive losses or to a decisive defeat. No commander is authorized to order a retirement on his own initiative simply because of local misfortune or reverses suffered by an adjacent unit.

■ 311. CONDUCT.—*a.* If the regiment is in contact with the enemy, it must first execute a withdrawal from action.

b. After contact with the enemy is broken, the regiment is regrouped in assembly areas and march column is formed. The march is conducted and secured as prescribed in chapter 4. Trains are sent ahead to a selected bivouac area to clear the way for the combat echelon. If necessary, dumps of supplies are established along the route of march.

c. For a detailed discussion of a retirement, see FM 100–5.

SECTION V

DELAYING ACTION

■ 312. GENERAL.—*a. Purpose.*—The purpose of delaying action is to gain time while avoiding decisive action. Delaying action finds especial application in the operations of covering forces and other security detachments.

b. Method.—Delay may be accomplished by offensive action, by defensive action in one position, by delaying action in successive positions, or by any combination of these methods.

c. Scope.—The regiment may conduct delaying action independently, either on a special delaying mission or as a security element (for example, rear guard) of a larger force. This section deals only with independent delaying action by the regiment. The regiment may also conduct delaying action as a part of a larger delaying force. In such a situation, the general conduct of the regiment will be in accordance with orders from the delaying force commander; methods of executing those orders are governed by the considerations discussed herein.

d. In open country where the hostile forces have freedom of action the regiment, acting as a delaying force, will be particularly vulnerable to encirclements and flank attack by mobile enemy forces. This will usually make it mandatory that higher authority provide for the cooperation of observation aviation and mobile forces (mechanized or motorized) to give warning of and meet such threats.

■ 313. MISSION.—A delaying mission will state or imply the necessity of holding hostile forces beyond a definite line until a certain time. If the limiting line and time are not specified, the regimental commander must determine both from the information available.

■ 314. TIME AND SPACE.—*a. General.*—The regimental commander bases his plan upon a consideration of the available time and space.

b. Time.—The time factor will largely determine the duration of the resistance to be made on each available delaying position. The resistance may vary from a delay by long-range fires alone to an outright defensive battle (see ch. 6).

c. Space.—(1) The space available for delay will indicate the number of successive positions that may be occupied.

(2) In considering the space factor, the regimental commander determines the most distant forward delaying position that his regiment can reach and occupy.

■ 315. INITIAL ACTIONS.—Upon receipt of orders for his delaying mission the regimental commander makes a map study, selects tentative positions, plans his reconnaissance, warns subordinate commanders, and issues orders for immediate movement, if necessary.

■ 316. SELECTION OF POSITION.—*a. Reconnaissance.*—Reconnaissance is made first to determine the exact location of the initial delaying position. If the situation permits, battalion commanders with parties of limited size accompany or closely follow the regimental commander's party.

b. Delaying position.—(1) Prime requisites for a delaying position in open country are—

(*a*) Good observation and fields of fire at long ranges. The use of topographical crests facilitates the development of long-range fires. If a long delay on one position is necessary, the fields of fire must also be good at shorter ranges.

(*b*) Concealed routes of withdrawal.

(*c*) Natural obstacles to the front and flanks.

(*d*) Maximum concealment for the forces on the delaying position.

(2) In close terrain, delaying positions are selected to promote a different type of action from that contemplated in open terrain. In general they should—

(*a*) Be astride avenues of approach.

(*b*) Provide concealment for the delaying forces, thereby promoting surprise.

(*c*) Provide obstacles or difficult terrain to the front and flanks which will restrict hostile movements and hinder the full development of the enemy's superior combat power.

c. Outpost position.—After the initial delaying position has been selected, reconnaissance is made for an outpost position. This should be within supporting range of the artillery of the delaying position, but far enough to the front to permit the outpost to perform its missions of harassment, delay, and deception. In open country, depending upon the ground forms, it will usually be from 1,500 to 4,000 yards to the front. Its general characteristics should conform to those prescribed in *b* above.

d. Successive positions.—(1) Successive positions to the rear of the initial position are reconnoitered and selected as time permits. The regimental commander does not leave the initial position for this purpose after contact becomes imminent. In such a situation he delegates the duty of reconnoitering and selecting rear positions.

(2) In open terrain each position should be far enough to the rear to compel the hostile artillery to displace before the position can be attacked; ordinarily this distance will be not less than 6,000 yards. In close terrain successive positions may be closer.

(3) The location of successive positions should give up no more ground than is necessary.

■ 317. PLANS.—Plans provide for—

a. The designation, location, and conduct of the outpost.

b. The assignment of sectors to battalions, with boundaries usually extending to the rear through the second delaying position.

c. Coordination to insure mutual support.

d. The designation and location of the reserve and its tentative missions.

e. Security of the flanks.

f. Measures to delay the enemy to the front and flanks and between successive positions by demolitions, contaminations, and the adaptation of natural obstacles.

g. Coordination of artillery fires with other measures for defense.

h. Coordination of the withdrawal under conditions permitted by the assigned mission.

■ 318. ORDERS.—Complete orders for the defense upon the initial position may be issued. Orders for subsequent action will usually be fragmentary. For check list for orders, see FM 101–5 and 7–55.

■ 319. DISPOSITIONS.—*a. Frontages.*—In general, frontages for a delaying position may be approximately twice as great as would be assigned for a sustained defense (see par. 237*g*). Increased frontages are obtained by the placing of a greater number of small units (companies and platoons) on natural defensive terrain features on the line of resistance, and by allowing greater intervals between adjacent defense areas.

Intervals between individuals in platoons or smaller defense areas are not increased. Intervals between adjacent units must permit mutual support by flanking fire.

b. Depths.—(1) Delaying positions are organized in much less depth than defensive positions. This is accomplished partly by the elimination of echelons and partly by decrease of distances. Front-line companies normally hold out few if any supports, and these are located for flank protection or to cover wide intervals. Battalion reserves may consist only of part of a rifle company, suitably located to meet possible threats at critical points. They also cover with fire the gaps between areas on the line of resistance. Minimum distances between defense areas prescribed for the defense (150 yards) also apply to delaying action. The heavy machine guns of the forward battalions may be located initially on the line of resistance. The mortars are emplaced in the first defilade to the rear.

(2) The artillery is located closer to the line of resistance than in the defense.

c. Exceptions.—Where a prolonged defense in one position is required by the mission, frontages are decreased and depths increased.

d. Regimental reserve.—The regimental reserve is located so as to facilitate its use for flank protection or for covering the withdrawal of troops from the line of resistance. Where both flanks are open it usually consists of a battalion.

■ 320. ORGANIZATION OF GROUND.—*a.* The construction of field fortifications is usually limited to individual protection. Fields of fire are cleared and the position is camouflaged.

b. Advantage is taken of natural obstacles to the front and flanks, and their effectiveness is increased by such demolitions, contaminations, and hasty works as time permits.

■ 321. CONDUCT OF DEFENSE AT FIRST POSITION.—*a. Outpost.*—The conduct of the outpost is similar to that prescribed for the outpost of a defensive position in paragraph 246.

b. Line of resistance.—(1) The defense of the line of resistance differs from that of the main line of resistance of a defensive position in that the delivery of effective long-range fire is particularly sought even though this results in disclosing the location of the position.

(2) The location of the delaying position (when practicable, on or near a topographical crest) makes it unlikely that machine guns can deliver effective long-range fires from supplementary positions far enough from the line of resistance to avoid disclosing its location. These weapons, therefore, may fire from their primary positions as soon as suitable targets come within their effective range.

(3) Rifles and automatic rifles open fire at extreme ranges (800 to 1,200 yards in open terrain).

(4) Artillery fires are delivered generally as in a defense. In open country, where the hostile forces have great freedom of maneuver, the artillery devotes particular attention to the interdiction of any detected hostile movement toward the flanks.

(5) Antitank weapons are sited to cover the most probable avenues of approach for mechanized units. They usually do not fire at other targets.

c. Reserve.—The reserve has two primary missions. The first is the security of the flanks. The reserve commander prepares plans and reconnoiters routes to meet a threat to either flank. Patrols are sent out to give warning of flank threats. When the defense is to be prolonged the reserve has a second mission of covering the withdrawal from the line of resistance. A covering position is selected and plans are made as outlined in section II.

d. Engineers and chemical troops.—During action at the first position, engineers and chemical troops are assigned the mission of preparing demolitions and contaminations to delay the hostile force in the area between successive positions.

■ 322. WITHDRAWAL.—*a.* If the enemy gains close contact with the position, the withdrawal is made in general conformity with the methods for a daylight withdrawal outlined in section II.

b. Where the mission permits, the withdrawal is made before the enemy approaches a position from which he can launch his assault. It should be started before his rifle fire becomes effective, usually at about 500 yards. All units withdraw simultaneously by previously designated zones or routes. A few automatic weapons and small groups are left in place to stop any headlong hostile rush. Vehicles should be left to transport these elements to the rear.

c. The time of withdrawal is determined by the regimental commander. Subordinates are informed in advance or simultaneously by prearranged signal.

d. When the mission and situation permit, defense of the initial position or any successive one is prolonged in order to withdraw under cover of darkness. Night withdrawals must be sought when the enemy has superiority in combat aviation, or mechanized forces, or both.

■ 323. BETWEEN SUCCESSIVE POSITIONS.—Demolitions and contaminations prepared between positions are executed by special details as the last troops clear them. Small detachments with automatic weapons are left on intermediate positions from which they can delay the advance of the enemy and the removal of obstacles. These detachments are instructed to withdraw before they are seriously threatened. If antitank mines have been placed, a traffic warning patrol is maintained until the last friendly vehicles have cleared in order to prevent their damage by mines.

■ 324. ACTION IN SUCCESSIVE POSITIONS.—The action on successive delaying positions conforms, in general, to that prescribed for the first position.

■ 325. DELAYING ACTION IN CLOSE TERRAIN.—*a.* In close terrain, lack of observation facilitates surprise action by small forces but makes more difficult the problems of coordination and control.

b. The regiment, delaying on a broad front which contains a number of avenues of hostile advance, will usually decentralize control by assigning battalions the missions of delaying on one or more of such avenues. Coordination and periodic resumption of control by the regiment is assured by prescribing successive positions to the rear to be reached at stated times.

c. Delay is effected by surprise fire from concealed automatic weapons placed to sweep trails or deliver flanking fire upon them. Areas which prevent the enemy leaving the roads are particularly suitable for this type of action. Such fires may be accompanied by offensive action where conditions are favorable. Lack of observation for artillery and mortars usually requires that their fire be registered in advance. Engineers and chemical troops are particularly useful in delaying action in close terrain.

d. Reserves are located where the routes of approach to the front best facilitate their support of any of the delaying units.

■ 326. SIMULTANEOUS OCCUPATION OF SUCCESSIVE POSITIONS.—Exceptionally the regiment may occupy two delaying positions simultaneously. They are so located that artillery from the rear position can cover the withdrawal from the forward position. Ordinarily, two battalions are placed on one position and one on the other.

■ 327. SECURITY.—The measures taken for antimechanized and antiaircraft security are similar to those which obtain in the defense and in a daylight withdrawal (see pars. 250 and 293).

■ 328. MOTOR TRANSPORT.—Company transport and such ammunition and communication vehicles as are necessary are usually released to battalions and separate units before contact with the enemy is made. Medical sections are also released.

■ 329. SUPPLY AND EVACUATION.—*a.* The supply procedure is generally similar to that discussed in paragraphs 296 and 307. Supplies may be placed on each successive delaying position in advance of its occupation.

b. Advance arrangements are made with higher authority for evacuation of aid stations.

■ 330. SIGNAL COMMUNICATION.—Timely measures are taken for signal reconnaissance and for establishment of signal communication on successive delaying positions. Wire lines are laid to battalions. The regiment does not ordinarily lay wire between successive positions.

APPENDIX

LIST OF REFERENCES

Tactics and Technique of Air Attack ..... FM 1–10
Tactics and Technique of Air Reconnaissance and Observation ..... FM 1–20
Field Fortifications ..... FM 5–15
Camouflage ..... FM 5–20
Engineer Antimechanized Measures ..... FM 5–30
Field Artillery—Tactics and Technique ..... FM 6–20
Organization and tactics of Infantry; the Rifle Battalion ..... FM 7–5
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Antitank Company, Rifle Regiment ..... FM 7–35
Infantry Reference Data ..... FM 7–55
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Administration ..... TM 12–250
Chaplains—General Provisions ..... AR 60–5; TM 16–205