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WAR DEPARTMENT

INFANTRY FIELD MANUAL



RIFLE BATTALION

September 28, 1942

FM 7-20

INFANTRY FIELD MANUAL



RIFLE BATTALION



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1942

For sale by the Superintendent of Documents, Washington, D. C.

WAR DEPARTMENT,
WASHINGTON, September 28, 1942.

FM 7-20, Rifle Battalion, is published for the information and guidance of all concerned.

[A. G. 062.11 (8-20-42).]

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DISTRIBUTION:

R and H 1-4 (5), 5-7, 17 (10), 18, 19 (3); IBn 1-3, 10, 11 (2); Bn 4-6 (4), 7 (10), 17-19 (3); IC 2-5, 11 (2); C 6 (3), 7 (5), 17, 18, 19 (3).

(For explanation of symbols see FM 21-6.)

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INFANTRY FIELD MANUAL

RIFLE BATTALION

This manual, together with FM 7-10, June 2, 1942, and FM 7-15, May 19, 1942, supersedes FM 7-5, October 1, 1940 (including C 1, November 15, 1941).

CHAPTER 1

GENERAL

■ 1. **ROLE OF INFANTRY BATTALION.**—The rifle battalion is the basic tactical unit of Infantry. It usually operates as an element of the Infantry regiment. Its mission is assigned by the regimental commander, and its actions are coordinated with those of other units of the regiment. Exceptionally, the battalion may be detached from the regiment to perform an independent mission. It has administrative functions.

■ 2. **COMPOSITION.**—The rifle battalion consists of a headquarters and headquarters company; three rifle companies; and a heavy weapons company. Medical personnel and non-organic transportation are attached. (See fig. 1.)

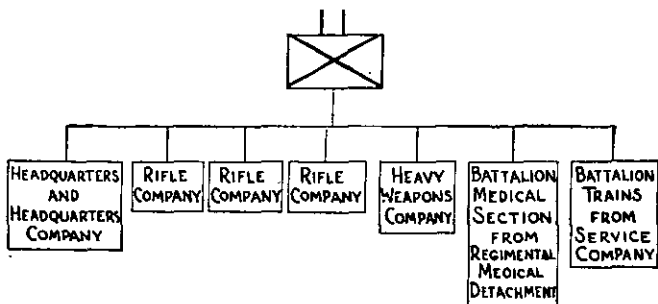


FIGURE 1.—Infantry battalion, rifle.

a. Battalion headquarters and headquarters company.—(1) The headquarters consists of the battalion commander (a lieutenant colonel) and certain members of his staff.

(2) The headquarters company consists of a company headquarters; a battalion headquarters section; and a communication platoon, an ammunition and pioneer platoon, and an antitank platoon.

b. Rifle company.—Each rifle company consists of a company headquarters, three rifle platoons, and a weapons platoon.

c. Heavy weapons company.—The heavy weapons company consists of a company headquarters, two caliber .30 (heavy) machine-gun platoons, and an 81-mm mortar platoon.

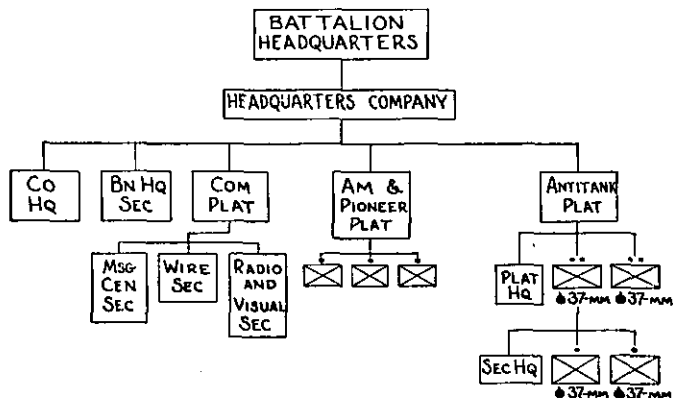


FIGURE 2.—Headquarters and headquarters company, infantry battalion, rifle. (See T/O 7-16.)

d. Attachments.—For operations, the battalion section from the regimental medical detachment joins its battalion. (See FM 7-30.)

e. Motor transport.—(1) Organic motor transport of the rifle battalion consists only of the company transport of its component elements. (See FM 7-30 and Tables of Organization.)

(2) The battalion trains are an integral part of the regimental trains. They include kitchen and baggage, ammunition, and maintenance vehicles organically assigned to the service company, and medical vehicles organically assigned to the medical detachment. In operations, and when the battalion supply echelon is operative, the battalion section of the service company transportation platoon (regimental trains) joins its battalion, except for those elements which may be retained under regimental control.

CHAPTER 2

BATTALION COMMANDER AND STAFF

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SECTION I

BATTALION COMMANDER

■ 3. GENERAL.—*a.* Aggressiveness and the ability to take prompt and decisive action are prime requisites for a successful battalion commander. By these qualities he inspires confidence. By his boldness, energy, and initiative he influences both individual and collective conduct and performance.

b. The battalion commander is responsible to the regimental commander for the condition and operations of the battalion. He meets this responsibility by anticipation; by timely decisions, plans, and orders; and by supervision of execution.

c. In preparation for combat, the mission of the battalion commander is to bring his unit to a high state of combat proficiency. He subordinates administration to training. He encourages initiative, ingenuity, and aggressiveness among his company officers. Having indicated his policies and given his orders, he allows his subordinates maximum freedom of action in order to foster self-reliance and initiative. He supervises the carrying out of his orders.

d. The battalion commander must make his authority felt by each individual of his battalion. He exercises his authority by means of instructions, orders, and personal supervision.

e. For principles of command and leadership, see FM 100-5.

■ 4. RELATIONS WITH STAFF.—The battalion commander makes all major decisions for the operation of the battalion. He is provided with a staff to relieve him of details, to act as his agents, to prepare detailed orders, and to assist in super-

vising the execution of these orders. He must make full use of his staff in order that he may devote himself to his more important command duties.

■ 5. RELATIONS WITH SUBORDINATE COMMANDERS AND TROOPS.—The battalion commander makes inspections and informal visits to his units during which he talks to individuals and to groups. In 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. The battalion commander must not interfere with the command responsibilities of his subordinates, except in emergencies.

■ 6. RELATIONS WITH COMMANDERS OF SUPPORTING UNITS.—A field artillery battalion (105-mm howitzers) is usually placed in direct support of an infantry regiment. An artillery liaison officer, assisted by a liaison section, is sent by the artillery battalion commander to remain with each front-line battalion. The liaison officer acts as artillery adviser and assists the infantry battalion commander in obtaining supporting fires. (See par. 21.) Elements of other units, such as the regimental cannon company, engineers, chemical troops, and quartermaster truck units may be attached to or support the infantry battalion. Liaison is maintained by supporting units through their commanders or representatives who report to the battalion commander and maintain contact with him. Units attached to the battalion become a part of the battalion commander's command.

SECTION II

BATTALION STAFF AND STAFF DUTIES

■ 7. COMPOSITION.—*a.* The battalion unit staff consists of the following:

- (1) Executive officer (second-in-command).
- (2) Adjutant (S-1) (company commander, battalion headquarters company).
- (3) Intelligence officer (S-2).
- (4) Operations officer (S-3).
- (5) Supply officer (S-4) (from the service company).

b. Certain officers who are charged with technical and administrative duties, and who are commanders of subordinate, attached, or supporting units, have staff duties as advisers to the battalion commander and staff in matters pertaining to their specialties in addition to their primary duties of command. Such officers are—

(1) Battalion transport officer (second-in-command, battalion headquarters company).

(2) Company commander of the heavy weapons company.

(3) Antitank officer (commanding battalion antitank platoon).

(4) Communication officer (commanding battalion communication platoon).

(5) Platoon leader of the battalion ammunition and pioneer platoon.

(6) Surgeon (commanding the battalion medical section).

(7) Commanders of attached units, such as regimental cannon, artillery, tank, antitank, engineer, or chemical units.

(8) Artillery liaison officer (from an artillery battalion in direct support).

■ 8. ORGANIZATION OF BATTALION HEADQUARTERS FOR COMBAT.—

The battalion command group should be so organized that it can function continuously, day and night, throughout an operation. To this end staff officers are trained to perform the duties of other staff officers. Each staff officer keeps brief notes to enable him to inform the commander, or other staff officer, of the situation.

■ 9. EXECUTIVE OFFICER.—*a.* The executive officer is second-in-command and principal assistant of the battalion commander. He performs such duties as are delegated to him by the battalion commander.

b. The executive officer usually remains at the command post when the battalion commander is away. He makes decisions in the name of the battalion commander as the occasion demands. He keeps abreast of the situation and of the battalion commander's plans, and keeps the battalion commander informed of the strength, morale, training, equipment, supply, and tactical situation of the battalion. He coordinates all staff activities. He verifies the execution of

orders and notifies the battalion commander of any matters needing correction. He supervises the keeping of the unit situation map and checks reports and orders prepared by the staff for correctness, completeness, clarity, and brevity.

■ 10. S-1.—*a.* The company commander of battalion headquarters company is also the battalion adjutant, S-1. For duties as company commander see paragraph 46.

b. The duties of S-1 include—

- (1) Receiving and delivering replacements to units.
- (2) Securing means for recreation and for building and maintaining morale.
- (3) Maintaining strength and casualty reports.
- (4) Maintaining the unit journal.
- (5) Arranging the interior installations (except signal communication agencies) and supervising the movements of the command post.
- (6) Allotting space to subordinate units in bivouac and assembly areas (coordinating with S-3).
- (7) Arranging for quartering parties. The battalion S-1, if available, will accompany quartering parties; otherwise he will arrange for the detail of another officer.
- (8) Preparing data for tactical reports.
- (9) Arranging for security of the command post.

■ 11. S-2.—*a.* The battalion intelligence officer (S-2) is primarily concerned with the collection, recording, evaluation, and dissemination of information of the enemy. He must be prepared at any time to give his commander a synopsis of the hostile situation and an estimate of the enemy capabilities as they affect the battalion.

b. Other duties of S-2 include—

- (1) Planning of reconnaissances (coordinating security measures with S-3).
- (2) Posting of S-2 data on unit situation map.
- (3) Preparing data for tactical reports.
- (4) Giving special training to the battalion intelligence personnel and controlling them during operations.
- (5) Preparing intelligence plans and orders. (Orders go to intelligence personnel direct; the battalion commander's orders are issued to units through the executive or through S-3.)

(6) Establishing and operating battalion observation posts.

(7) Coordinating battalion information-collecting agencies. Exchanging information with the regiment and with adjacent and subordinate units.

(8) Examining enemy personnel, captured documents, and material for information of immediate importance to the battalion. (See FM 7-25.)

(9) Procuring maps, aerial photographs, and photomaps from the regimental S-2 and distributing them.

(10) Verifying camouflage and concealment measures.

■ 12. S-3.—a. The battalion operations officer (S-3) is concerned primarily with the training and tactical operations of the battalion. He must be prepared at any time to give his commander a synopsis of the situation of the battalion and of adjacent and supporting troops, and to recommend possible lines of action.

b. Other duties of S-3 include—

(1) Planning of security measures (coordinating measures for reconnaissance with S-2).

(2) Insuring that S-3 data are placed on the unit situation map.

(3) Preparing data for tactical reports.

(4) Planning and supervising all training in accordance with the regimental training program.

(5) Maintaining training records and preparing training reports.

(6) Preparing detailed plans based upon the battalion commander's decision (coordinating with S-1 and S-4).

(7) Preparing operation maps.

(8) Assisting the battalion commander in the preparation of field orders (coordinating with other staff officers).

(9) Supervising signal communication and liaison with higher, adjacent, and subordinate units.

(10) Transmitting orders and instructions for the battalion commander.

■ 13. S-4.—a. The battalion supply officer (S-4) is assigned to the transportation platoon, service company (see FM 7-30). He performs staff and supply duties as directed by the battalion commander and is responsible for the functioning

of the battalion supply system in the field and in combat, with particular reference to rations, water, ammunition, gasoline, and oil. For details of battalion supply, see chapter 5.

b. The duties of S-4 include—

(1) Preparing the battalion supply plan based upon the regimental supply plan and the tactical plan of the battalion commander.

(2) Controlling elements of the battalion trains (ammunition and kitchen and baggage trains) when they are operating under battalion control. He is assisted in this duty by the battalion transport officer.

(3) Coordinating the regimental supply echelon with details relating to the movement of battalion supplies and trains.

(4) Ascertaining the supply requirements of companies and attached units through personal contact.

(5) Responsibility for establishing and operating the battalion ammunition distributing point.

(6) Insuring, during combat, that an adequate supply of ammunition is delivered to companies and any attached units. (For functions of the transport officer in ammunition supply, see par. 14.)

(7) Making a reconnaissance for covered routes between the battalion and the regimental distributing points and points of release of trains, and regulating the movement of vehicles on these routes.

(8) Keeping in close touch with the battalion command post in order to coordinate supply operations with the tactical situation, and the supply plans with the tactical plans of the battalion commander.

■ 14. TRANSPORT OFFICER.—a. The transport officer is second-in-command of the battalion headquarters company. His staff duties as transport officer constitute his principal functions.

b. The duties of the transport officer include—

(1) In march or approach march situations, controlling such company transport and elements of the regimental trains as may be grouped under battalion control.

(2) Supervising, coordinating, and expediting the movement of company weapon carriers, ammunition train vehicles, and hand-carrying parties within the battalion area (between company areas and the battalion ammunition distributing point) so as to insure an adequate supply of ammunition to all companies.

(3) Supervising and coordinating the activities of second echelon motor maintenance facilities operating within the battalion.

■ 15. HEAVY WEAPONS COMPANY COMMANDER.—The heavy weapons company commander, in addition to his command duties, performs such staff duties as the battalion commander may direct. He assists the battalion commander in developing the battalion fire plan. He accompanies the battalion commander on reconnaissance, or makes separate reconnaissance and recommendations for the employment of supporting weapons as directed.

■ 16. ANTITANK OFFICER.—The leader (platoon commander) of the battalion antitank platoon is the battalion antitank officer and performs such staff duties as the battalion commander may direct. He assists the battalion commander in the planning and execution of the battalion antitank defense. He accompanies the battalion commander on reconnaissance or makes a separate reconnaissance and recommendations for the employment and coordination of antitank means as directed.

■ 17. COMMUNICATION OFFICER.—*a.* The battalion communication officer is responsible for the technical training and proficiency of the communication platoon of the battalion headquarters company, and for supervision of such technical training of communication personnel throughout the battalion as may be delegated to him by the battalion commander. He is responsible to the battalion commander for the planning, installation, operation, and maintenance of the battalion communication system. His duties include recommending (usually to S-3) initial and subsequent locations of the command post, if not previously designated by the regiment.

b. For detailed duties of the battalion communication officer in combat, see FM 7-25.

■ 18. PLATOON LEADER OF AMMUNITION AND PIONEER PLATOON.—

a. The leader of the battalion ammunition and pioneer platoon performs such staff duties as the battalion commander may direct. He is charged with the supervision of his platoon in the execution of their ammunition, supply, and pioneer tasks. He accomplishes simple field engineering (pioneer) tasks not requiring the technical and special equipment of engineer troops. He assigns duties to members of his platoon in accordance with the requirements of the situation after consultation with the battalion S-4. He is also the battalion gas officer.

b. His duties include—

(1) Performing pioneer reconnaissances; controlling the pioneer operations of his platoon. (See ch. 3.)

(2) Assisting S-4 in selecting, establishing, and operating the battalion ammunition distributing point. (See pars. 59 and 60.)

(3) Within the battalion, supervising and coordinating gas defense training, gas defense measures, and use of decontaminating agents.

(4) Inspecting gas defense equipment.

(5) Supervising gas reconnaissance of routes and areas before their use by troops.

■ 19. SURGEON.—a. The battalion surgeon is a member of the battalion commander's staff and commands the battalion medical section. His staff functions pertain to the health and medical service of the battalion. He is the battalion sanitary inspector. The battalion section normally has no administrative or supply functions. The battalion surgeon, when practicable, is present when field orders are issued.

b. His duties include—

(1) Obtaining from the battalion commander available information of tactical plans for the battalion; making a medical estimate of the situation; reconnoitering for aid station sites; submitting medical plans (when practicable, through S-4) to the battalion commander for approval.

(2) Establishing the aid station, supervising its operation, and personally assisting in the care and treatment of casualties.

(3) Evacuating sick and wounded within the battalion area to the battalion aid station.

(4) Keeping the battalion commander informed of the medical situation.

(5) Furnishing information concerning the medical situation on the battalion front to the regimental surgeon and to the collecting company in immediate support.

(6) Making timely requests to the regimental surgeon for special support, additional supplies, additional personnel, and for the emergency evacuation of casualties.

■ 20. COMMANDERS OF ATTACHED UNITS.—*a.* Commanders of attached units are advisers to the battalion commander and staff.

b. Their duties include—

(1) Submitting plans and recommendations to the battalion commander and staff for the tactical employment of their units.

(2) Keeping the battalion commander and staff advised of the combat capabilities of their units.

■ 21. ARTILLERY LIAISON OFFICER AND FORWARD OBSERVERS.—*a.* The liaison officer sent to a front-line infantry battalion by an artillery unit in direct support is the personal representative of his artillery commander and remains under his command. Whenever practicable, the liaison officer makes early contact with the infantry battalion commander, accompanies him on reconnaissance, and thereafter remains with him. The liaison officer secures detailed information as to the specific fire missions desired. He is assisted by an artillery liaison section.

b. The primary mission of the artillery liaison officer is to keep his artillery commander informed of the plans and operations of the supported infantry battalion and to assist the infantry battalion commander in obtaining the desired supporting fires.

(1) To carry out his mission, the liaison officer acts as artillery adviser to the infantry battalion commander and

must be able to inform him of the capabilities of the artillery in delivering any fires desired and promptly transmit to his headquarters requests for supporting fires falling within those capabilities.

(2) To enable the liaison officer to carry out his mission, the supported infantry battalion commander must keep the liaison officer informed at all times of the locations of hostile troops and his own front lines, the scheme of maneuver, and the immediate needs of the supported unit.

c. As a secondary mission the artillery liaison officer may be called upon to adjust the fires of his unit, but he will not be used normally as a forward observer of artillery fire.

d. In order to secure timely information as to the location of targets and enable the artillery to place accurate observed fire on those targets which cannot be engaged by infantry weapons, each artillery battery sends out a forward observer. He is provided with a detail of assistants and suitable means of communication. The forward observer makes contact with the commander of the leading rifle company and observers for 81-mm mortars and renders assistance by calls for fire direct to his battery. He is not attached to any rifle unit and does not permit his contact with a supported unit to interfere with his primary mission.

■ 22. CANNON COMPANY REPRESENTATIVES.—Ordinarily 75-mm howitzer platoons are utilized for furnishing close, direct supporting fires for front-line battalions; 105-mm howitzers are usually retained under regimental control for general support and long-range missions. When supporting or attached to a leading or front-line battalion, the platoon leader reports directly to that battalion commander and becomes his adviser. When practicable, the platoon leader accompanies the battalion commander on reconnaissance; thereafter, he remains with or leaves his own representative with the battalion commander. The platoon leader seeks detailed information as to specific fire missions desired; the majority of these will be direct fire upon targets of opportunity. Frequent displacement of weapons is required in order that they may not be engaged by hostile artillery. Communication is maintained between the platoon leader and his section leaders by

means of light, portable radiotelephones; sound-powered telephones, motor messengers, and arm-and-hand signals; pyrotechnics also may be used.

■ 23. LIAISON OFFICERS.—*a.* Staff or other officers may be used as liaison officers. They may be sent to higher or subordinate units or to adjacent units (including advanced reconnaissance elements under control of higher commanders). Contrary to the employment of liaison officers by larger units (see FM 101-5), their missions will usually involve brief visits to other units and prompt return to the battalion commander, in order that they may be readily available for subsequent missions.

b. Prior to departing on a mission, a liaison officer should receive from the battalion commander—

(1) Definite and detailed instructions, in writing if practicable, as to the liaison mission.

(2) Information of the battalion commander's plans, particularly if they affect the unit to which he is to be sent.

(3) Information as to what facilities (signal and transportation) are available for transmission of any messages the liaison officer is to send prior to his return.

c. Prior to departure the liaison officer should—

(1) Become familiar with the situation of his own unit and so far as practicable with that of the unit to which sent.

(2) Insure that arrangements for communication (signal and transportation) are adequate.

(3) Obtain credentials in writing unless obviously unnecessary.

d. On arrival at the headquarters to which sent, the liaison officer should—

(1) Report promptly to the commander, stating his mission and exhibiting his directive or credentials, if in writing.

(2) Arrange for the transmission of messages he may be required to send.

(3) Familiarize himself with the situation of the unit to which sent.

(4) Accomplish his mission without interfering with the operations of the headquarters to which sent.

(5) Keep a record of messages sent to the battalion commander.

(6) Advise the visited unit commander of the contents of messages to be sent to his battalion commander.

(7) Make prompt report to his battalion commander if he is unable to accomplish his liaison mission.

(8) Report his departure to the visited unit commander on the completion of his mission.

e. On return to his battalion commander the liaison officer should—

(1) Report on his mission.

(2) Transmit promptly any requests of the commander from whose headquarters he has just returned.

SECTION III

TROOP LEADING

■ 24. ACTIONS PRIOR TO ISSUANCE OF ORDERS.—*a. Estimate of the situation.*—The estimate of the situation is a continuing process for the battalion commander throughout an operation. During combat operations extending over a period of several days, the battalion commander seldom faces an entirely new situation. Combat usually consists of a series of connected incidents most of which must be acted on immediately. The battalion commander must be constantly thinking ahead to make plans for future operations and for contingent situations that may develop. Infantry is frequently engaged on short notice and time is a vital factor. Quick and successful engagement depends on the preliminary *planning* of the commander and on the execution of his plans by his troops. The necessary preparations for combat, including reconnaissance, estimate of the situation, formulation and issuance of orders; the movement of troops into assembly areas (positions); and arrangements for supply, evacuation, and communication are carried on concurrently so far as is possible. For a form for a commander's estimate of the situation, see FM 101-5.

b. Action upon receipt of orders.—(1) The regimental orders may be delivered to the battalion commander; or he may be directed to report to the regimental commander to receive them. In the latter case before leaving the battalion area, he issues to his executive officer (second-in-command) in-

structions for the conduct of the battalion in his absence. He takes with him the necessary personnel, communication facilities, and transportation. His party may include S-1, S-2, S-3, S-4, the heavy weapons company commander, antitank officer, communication officer, artillery liaison officer (if he has reported), operations sergeant, radio personnel with suitable equipment, and one or more messengers. The battalion commander leaves the majority of his party in a concealed location within signaling distance and takes only one or two officers to receive the regimental order.

(2) When the battalion commander receives an oral order from the regimental or higher commander, he makes such notes as are necessary to outline his mission and to assist him in planning his own order. His notes must be sufficiently clear and comprehensive to permit his successor to understand the assigned mission should the battalion commander become a casualty.

(3) Upon receipt of the order he obtains, or has his staff obtain, from the regimental staff and from any representatives of units in contact with the enemy, any additional information that applies particularly to his battalion. If he is not furnished an operation map, he has pertinent data, shown on the regimental map, copied on his own map. He makes a brief map study and forms a tentative tactical plan. He sends to his battalion any necessary instructions for immediate movement or for expediting its preparations for combat. Whenever possible, he will designate a time and place for subordinate commanders to assemble to receive his orders. He arranges for coordinated action with commanders of adjacent and supporting units or reaches an agreement to effect this coordination when plans have been developed. He informs the staff of his tentative plan and of the recommendations he wants from them, and designates a time and place to receive their reports. His further actions depend on the situation and the time available.

c. Reconnaissance.—When time is pressing, the battalion commander's plan of action may of necessity be based solely on a map reconnaissance or on his previous knowledge of the situation and terrain. Whenever practicable, however, it is based on a personal ground reconnaissance. Before start-

ing he estimates the time available, decides on the route to follow, and determines what to look for. Sufficient time must be allowed to issue orders to subordinate commanders and permit them to make their reconnaissances, prepare their plans for combat, and issue their orders. The battalion commander usually is accompanied by S-3, the artillery liaison officer, and in defensive situations, the heavy weapons company commander. Other available officers may accompany him on his reconnaissance; however, quicker results can be obtained by directing these officers to reconnoiter separately, secure specific information, and report at a designated place and time with their recommendations. He may take with him a portable radiotelephone in order to maintain contact with his command post and other elements.

d. Completion of plan.—(1) After completing his reconnaissance, the battalion commander receives any reports or recommendations not previously rendered and completes his plans. If time permits he has operations maps (or overlays or sketches) prepared for issue to the company commanders. He may release those officers who have accompanied him on his reconnaissance and who are familiar with his plan, in order that they may begin their preparations for combat.

(2) When the battalion commander has not directed an assembly of subordinates to receive his orders, he dispatches fragmentary orders by the most expeditious means, usually by a staff officer. Otherwise he promptly prepares notes for his order while a member of his staff orients the company commanders on the situation and the terrain.

■ 25. BATTALION FIELD ORDERS.—The battalion commander issues field orders to warn the battalion of impending operations (warning orders) or to direct operations. Items shown on operation maps or covered by standing operating procedure will be called to the attention of subordinates at the beginning of the order. Such items and other information already known by subordinates need not be repeated in the order.

a. Warning orders.—Battalion warning orders should give preliminary notice of contemplated action and enable subordinates to make necessary preparations to carry out the

action to be directed by a more complete field order which is to follow. Warning orders should normally include only the answers to such of the interrogatives *who, what, when, where, and why* as are available. Details included in the warning orders may be omitted from the subsequent order.

b. Fragmentary orders.—The battalion 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. 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.

c. Oral orders.—Mutual understanding and more thorough coordination is assured by issuing complete oral orders to assembled subordinate commanders. Such orders must, however, be issued in sufficient time to permit these subordinate commanders to make their reconnaissance and prepare plans for combat. The place of issue preferably is one from which much of the field of operations is visible; locations which may receive hostile fire are avoided. The battalion commander uses simple, clear, concise language. When he is sure of mutual understanding, he announces the time and has watches synchronized. S-3 makes notes so that a record of the order may be entered in the journal.

■ 26. ACTIONS AFTER ISSUANCE OF ORDERS.—*a. Supervision.*—The battalion commander supervises the execution of his orders to insure that the plan is understood and is carried out by subordinate units.

b. Keeping abreast of the situation.—During combat the battalion commander goes where he can best observe the action of the battalion or exert the greatest influence to obtain decisive results. Although the battalion commander operates from the command post, he will ordinarily spend the greater part of his time at the observation post or some other point at which he can obtain the fullest and most direct information regarding the operations and situation of his companies. He makes such reconnaissance as he considers necessary and frequently visits his subordinate commanders and his troops. He maintains continuous contact with his

command post and, before leaving the observation post, he orients his staff as to future plans and informs them of his itinerary and approximate time schedule. At all times he studies the situation and considers possible contingencies and prepares tentative plans to meet them. He keeps his staff informed of any orders issued or information acquired. If he issues orders or acquires information affecting the general situation, he informs higher headquarters at the first opportunity.

■ 27. OPERATION MAP.—*a.* The operation map may be a graphic representation of all or part of the battalion commander's decision and tactical plan. The map should be authenticated, have such brief explanatory notes as are necessary, and should present a clear picture. Detailed instructions that cannot be shown graphically are put into the accompanying order. FM 101-5 gives examples of some of the items which may be placed on the operation map.

b. The battalion commander issues some form of operation map whenever practicable. It may be only a rough sketch or an overlay. It should clarify the tactical plan for the company commanders and serve to shorten the order; it may constitute the entire order. Sufficient copies are reproduced to furnish one to each unit concerned.

■ 28. STANDING OPERATING PROCEDURE.—Standing operating procedure of the battalion will supplement that of the regiment to make routine those administrative and tactical features that may be standardized without loss of effectiveness. (See FM 7-40.) Tactical decisions and dispositions cannot be subject to standing operating procedure. They must be based on the immediate situation and cannot be standardized.

SECTION IV

STAFF RECORDS, REPORTS, AND MAPS

■ 29. REFERENCES.—For the general form and description of staff records, reports, and maps, see FM 101-5 and 7-40.

■ 30. GENERAL.—Battalion staff records should make information readily available, form a basis for reports and historical records, and enable the commander, or any member of

the battalion staff, to orient himself quickly concerning the situation. Staff records must be reduced to the simplest form and fewest number, in order that the staff may function in rapidly moving situations, in the field, at night (with little or no light), and under adverse weather conditions.

■ 31. THE JOURNAL.—A form for a journal and a description of its use are contained in FM 101-5. The battalion headquarters keeps one unit journal; it is kept under the supervision of S-1.

■ 32. SITUATION MAP.—*a.* The battalion situation map is a graphic record of the tactical situation at any time. It is usually maintained at the command post under the supervision of the battalion executive. It should be conveniently accessible to the battalion commander and staff.

b. Military symbols prescribed in FM 21-30 are used on the situation map. Entries are removed as they become obsolete.

c. Copies or overlay tracings of the situation map as it stands at the close of given periods may be prepared to accompany battalion reports. Maps are filed as a record.

■ 33. STAFF NOTES (WORK SHEETS).—Each battalion staff officer keeps such notes as are necessary to write his part of the unit report.

■ 34. UNIT REPORTS.—A form for a unit report and instructions concerning it are contained in FM 101-5. It is prepared under the supervision of the battalion executive. Members of the staff furnish material to be included under topics pertaining to their staff functions.

■ 35. MAPS, OVERLAYS, AND SKETCHES.—Maps, overlays, or sketches showing graphically the situation as of a particular time are a valuable aid in shortening and clarifying unit reports sent to regimental headquarters. Maps, overlays, and sketches are used by reconnaissance and security detachments and by subordinate units to advise the battalion commander with regard to their situation and information of the enemy.

SECTION V

COMMAND POST

■ 36. REFERENCES.—For duties of personnel of the battalion headquarters company at the command post, see chapter 3. For additional details concerning duties of personnel of the battalion communication platoon, see FM 7-25 and 24-5.

■ 37. GENERAL.—In the field the headquarters of the battalion is called the command post. All agencies of signal communication in the battalion center at the command post. The battalion commander, the staff, and such other officers as are required by the commander (see par. 7) constitute the command group that operates at and from the command post.

■ 38. ORGANIZATION.—The command post is organized to furnish facilities for the battalion commander, the staff, communication agencies, and such other officers and enlisted personnel as must be present. It should be concealed from air observation. The different installations should be separated by at least 50 yards to avoid destruction of more than one by a single shell or bomb.

■ 39. LOCATION.—*a. On the march.*—During tactical marches the battalion command group usually moves near the head of the battalion. The number of vehicles is held to a minimum; those not necessary for command purposes move at the head of the battalion motor echelon. Part of the battalion communication platoon (messengers and radio) is prepared to furnish communication and marches near the command group. This group and its accompanying communication agencies constitute a march command post. When the battalion is acting as an advance guard, the command group marches at the head of the reserve.

b. During combat.—(1) During combat the general location of the initial battalion command post is usually prescribed by the regimental commander, who may also prescribe subsequent locations. If the general location is not so prescribed, the battalion commander selects and reports its location to the regimental command post.

(2) The battalion command post is so located as to facilitate control of the battalion. Other considerations that influence its location are the type of tactical operation involved (attack or defense), routes of communication to the regimental command post and to subordinate units, cover and concealment, proximity to good observation in order to facilitate communication with the observation post, 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 static situations wire should be laid to the alternate command post. In the attack the initial location should be well forward 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 the battalion defense area, in rear of the organized position of the battalion reserve, in order to avoid displacement in the event of a local enemy penetration.

(3) The command post should be designated by reference to some terrain feature which is easily located on the ground and on the map. Guides are posted to direct personnel and vehicles to the command post and parking area, respectively.

(4) After the general location of the command post has been prescribed, S-1, accompanied when practicable by the communication officer, selects the exact site in the general vicinity of the designated point. When S-1 is not available, the communication officer may be designated to make this selection.

■ 40. ESTABLISHMENT.—The officer selecting the exact site determines the interior arrangement of the command post and designates the location for installations. The battalion communication officer directs the installation of communication facilities; wire is laid to the battalion observation post(s). (See FM 7-25.) Motor vehicles are parked in a concealed location, removed from the command post so as not to disclose the presence of the command post. Traffic entering and leaving the parking area is rigidly controlled. Tents are pitched only at night or when concealment is assured. Sen-

tries are posted to enforce orders relative to camouflage, concealment, and control of traffic.

■ 41. 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 battalion commander as necessary. Enlisted personnel work in shifts.

b. Full use of signal communication facilities is made in the transmission of orders and messages. All incoming messengers go first to the message center. Messages delivered by scheduled messengers are receipted for by the message center clerk on duty. The battalion sergeant major supervises the delivery of messages to addressees, their circulation to interested 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 which is turned over periodically to S-1 for entry in the unit journal.

d. Officers see that a synopsis of each message or order sent or received orally, or by telephone or radiotelephone, is sent to the unit journal.

■ 42. DISPLACEMENTS.—In an offensive situation the battalion command post is kept close to the attacking echelon in order to facilitate communication between the command post and the troops, and to afford protection to the command post. To permit rapid displacement the movement of the command post must be anticipated and reconnaissance made in time to permit its accomplishment at the desired time. (See FM 7-25.) The communication officer keeps the wire head pushed close to the advancing troops in order that wire communication may be available when the command post is moved. When the battalion commander directs that the command post be moved forward, the old location is abandoned except for temporary guides, and the staff and other personnel proceed to the new location without delay. When desirable, a staff officer may remain 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. If the regiment has not prescribed the general locations of command posts for the battalion along an axis of signal communication, the battalion commander prescribes the new location. The communication officer establishes communication in the new location in advance, when practicable. The regiment is kept informed of the movement. For displacement of the command post in retrograde movements, see paragraphs 227, 235, and 238.

■ 43. COMPANY COMMAND POSTS.—In combat, companies select the locations for their command posts and report those locations to the battalion commander.

■ 44. SECURITY.—The battalion command post, being well forward, is provided incidental security against hostile air and ground forces by front-line units(s) and the battalion reserve. However, small hostile groups may suddenly appear at any point in the area and the command post must be provided with a well-planned system of local protection. The headquarters company commander (S-1) is responsible for the security of the command post in combat. He uses available personnel of the battalion headquarters company who are at the command post, and such other troops as may be detailed for the purpose. Observers and small patrols should be employed to cover all approaches. The command post must be concealed from air observation. Air-antitank guards are posted to give warning of hostile mechanized or air approach including the descent of hostile troops by parachute or glider. For the protection of personnel, fox holes are dug to provide individual protection against air and mechanized attack.

CHAPTER 3

BATTALION HEADQUARTERS COMPANY

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SECTION I

COMPANY HEADQUARTERS

■ 45. COMPOSITION.—For tactical operations, company headquarters is divided into a command group and an administration group.

a. The command group consists primarily of personnel whose duties in combat are directly associated with battalion headquarters and in large part performed at the battalion command post, ammunition distributing point, or train bivouac. In this group are the following:

Company commander (battalion adjutant (S-1)).

Second-in-command (battalion transport officer).

First sergeant.

Motor sergeant, chauffeurs, and motor mechanic.

Bugler and orderlies.

Basic privates.

b. The administration group consists of personnel whose duties relate to the mess and supply of the headquarters and headquarters company, and to company personnel administration. This group includes the following:

Mess sergeant, cooks, and cooks' helpers.

Armorer-artificer.

Company clerk.

c. For duties of the supply sergeant, see paragraph 47b.

■ 46. DUTIES OF COMMAND GROUP.—a. *Company commander (battalion adjutant).*—The company commander is respon-

sible for the administration, discipline, and training of the company and for the proper maintenance of its transport. He assigns appropriate duties to individual members of the company in accordance with the Table of Organization, and provides for additional training of individuals to replace key personnel. The company commander also functions as the battalion adjutant (S-1). For the duties of S-1, see paragraph 10. Individuals armed with the M1903 rifle and anti-tank grenades, and chauffeurs armed with the Browning automatic rifle, are trained in the use of those weapons. The M1903 rifles and antitank grenades are used for the anti-mechanized protection of vehicles, installations, and personnel. A minimum of three men should receive training and practice in firing for each M1903 rifle provided for antitank defense in the Table of Organization. (See FM 23-30.) The automatic rifles are used for antiaircraft defense of the motor vehicles; they may be used against enemy ground personnel.

b. Second-in-command (battalion transport officer).—The second-in-command performs the normal duties of the second-in-command of a company. In addition he serves in the special capacity of battalion transport officer. For his duties as transport officer, see paragraph 14.

c. First sergeant.—The first sergeant assists the company commander in the administration of the company.

d. Motor sergeant.—The motor sergeant is responsible to the company commander for first echelon maintenance of all motor vehicles assigned to the company and for the training of all chauffeurs in the company. He directs the activities of the company motor mechanics, within the means of the company, in second echelon maintenance of motor vehicles assigned to the company and those assigned to the rifle companies of the battalion. (See FM 25-10.) He supervises the loading and movement of any cargo trucks attached to the company and also acts as assistant to the battalion transport officer.

e. Motor mechanics.—The motor mechanics perform second echelon maintenance under direction of the motor sergeant.

f. Orderlies.—Orderlies serve the battalion commander and staff. They participate in the defense of the command post.

g. Bugler.—The bugler sounds such calls, warnings, and alerts as may be ordered. He is especially trained as a messenger and serves the company commander in that capacity. He participates in the defense of the command post.

h. Chauffeurs.—The chauffeurs operate their assigned vehicles as directed by the company commander and perform first echelon maintenance.

i. Basic privates.—Basic privates are used as messengers, for replacements, and in the defense of the command post.

■ 47. DUTIES OF ADMINISTRATION GROUP.—*a. Mess sergeant.*—The mess sergeant is responsible to the company commander for the procurement of rations and water, division of rations into meals, training of cooks and cooks' helpers, and for operation of the headquarters and headquarters company mess. The mess sergeant, cooks, and cooks' helpers operate in the kitchen location, which is usually in the regimental train bivouac. (See FM 7-30.)

b. Supply sergeant.—The supply sergeant is charged with receiving and issuing supplies, except rations and water, for battalion headquarters and for the several components of headquarters company. He supervises the work of the armorer-artificer. During combat he usually will be in the forward area in order to assist the company commander in matters relating to supply, particularly ammunition supply.

c. Company clerk.—The company clerk is employed in the regimental personnel section under the supervision of the personnel officer.

■ 48. MARCH DISPOSITIONS.—*a.* When not performing duties that require their presence elsewhere, the members of the company command group usually march with or near the battalion command group.

b. The administration group marches with the battalion trains, commanded by the senior present but subject to the orders of the train commander.

■ 49. TRAINING.—In addition to being trained for their special duties, all personnel of company headquarters are trained as individual soldiers.

■ 50. COMPANY ADMINISTRATION.—The battalion headquarters company is administered in a manner similar to that of a rifle company. For details see FM 7-10, FM 7-30, and TM 12-250.

SECTION II

BATTALION HEADQUARTERS SECTION

■ 51. COMPOSITION AND DUTIES.—The battalion headquarters section is composed of a group of men provided for the operation of the battalion command post and observation post(s). Personnel and their duties are as follows:

a. Sergeant major.—Supervises the functioning of enlisted men in battalion headquarters; assists the executive officer and S-1; also handles messages. (See par. 41.)

b. Operations sergeant.—Keeps the situation map and assists S-2 and S-3.

c. Intelligence sergeant.—In charge of battalion observation post(s) and scouts; operates at observation post or with patrols; and may assist operations sergeant, especially in work for S-2.

d. Clerk, headquarters.—Keeps records and does any typing required.

e. Gas corporal.—Battalion gas noncommissioned officer; assists battalion gas officer. (See par. 18 and FM 21-40.)

f. Scouts and observers, intelligence.—Operate at observation post(s), or accompany front-line units, patrols, raiding parties, or reconnaissance and security detachments as intelligence scouts.

g. Chauffeurs.—Operate assigned motor vehicles, and perform first echelon maintenance.

SECTION III

COMMUNICATION PLATOON

■ 52. GENERAL.—The communication platoon is composed of a platoon headquarters, a message center section, a wire section, and a radio and visual section, under command of the battalion communication officer. For duties of the battalion communication officer, see paragraph 17. He is assisted by

the battalion communication chief who is second-in-command; together they, with any basic privates assigned to the platoon, compose the platoon headquarters. The regimental communication officer supervises the technical training of the platoon. For methods of installing, operating, and maintaining the means of signal communication, see FM 24-5. For details of communication methods and procedure and use of technical equipment, see FM 7-25. For equipment and transportation, see Table of Basic Allowances No. 7 and Table of Organization 7-16.

■ 53. MESSAGE CENTER SECTION.—*a. Composition.*—The personnel of the message center section consist of a section leader, a chief record clerk and assistants, messengers, and chauffeurs.

b. Mission.—The message center section operates the battalion message center; its sole purpose is to speed the transmission of messages. In a message center as small as that of the battalion, one man may perform the duties of the message center during slack periods. Each member of the message center team must be trained to perform all the duties incident to message center operation. The message center section should be able to operate as two or more teams in order to provide for continuous operation when the command post is being moved and to allow rest for its members.

c. Duties of personnel.—(1) The section leader is the message center chief. He organizes the message center, assigns locations within the message center for clerks and messengers, places necessary guides along routes of approach to the command post in order to guide messengers and others, instructs messengers in the route to all command posts and other installations, sees that sufficient forms and other message center equipment are on hand, notifies the battalion communication officer and the battalion sergeant major as soon as the message center is in operation, and supervises operation of the message center.

(2) The message center record clerks are assistants to the message center chief. They perform such encoding and decoding of messages as may be necessary.

(3) Foot and motor messengers are provided for the delivery of messages to subordinate, higher, and adjacent units.

■ 54. WIRE SECTION.—The wire section includes a section leader who is battalion wire chief, a chief switchboard operator and assistants, linemen (telephone and telegraph), and chauffeurs. The wire section installs the switchboard, telephones, and telegraph instrument at the command post and operates the switchboard. The section delivers the sound-powered telephone equipment to battalion personnel designated to use it. The section is responsible for constructing a wire line to the battalion observation post(s) and keeping a wire line well forward in an attack ready for prompt displacement of the command post. In defensive situations the wire section may be required to install lateral lines to adjacent battalions, and in prolonged defensive situations when extra telephones are made available, lines to front-line companies will be installed. In some circumstances it may be directed to lay wire between its own command post and the regimental command post; normally, however, the regimental wire section lays wire to the initial battalion command post which is thereafter extended by the battalion wire section prior to movement of the battalion command post.

■ 55. RADIO AND VISUAL SECTION.—The radio and visual section includes a section leader who is battalion radio and visual chief, radio operators, and chauffeurs. The section installs and operates the radio equipment, panel display and message dropping ground, and the pick-up message equipment; it operates the telegraph instrument and visual signaling equipment used at the battalion command post, such as lights, flags, or pyrotechnics.

■ 56. MEANS OF SIGNAL COMMUNICATION.—*a.* The technical communication equipment carried by the communication platoon consists of light field wire with the means to lay and recover it; battery operated telephones and telegraph instruments; sound-powered telephone sets; key- and voice-operated radio sets; and visual signal equipment. Motor and recover it; battery-operated telephones and telegraph means of communication whenever necessary.

b. Reliance is not placed upon any one means of communication to the exclusion of others. Wherever possible during combat, the battalion command post will have wire communi-

cation to the regimental command post and to the battalion observation post. It will have radio communication to the regimental command post and the companies and between the command post and the battalion commander wherever he may go. These will be the minimum technical means which will be in use.

SECTION IV

AMMUNITION AND PIONEER PLATOON

■ 57. REFERENCES.—For training in simple field engineering and field expedients, see FM 5-15 and 25-10.

■ 58. COMPOSITION.—The battalion ammunition and pioneer platoon consists of one officer (platoon leader), one platoon sergeant, two chauffeurs, one basic private, and three squads. Each squad consists of a corporal (squad leader) and seven privates (ammunition bearers).

■ 59. FUNCTIONS.—The ammunition and pioneer platoon is concerned with the ammunition supply of the battalion and the accomplishment of simple field engineering tasks not requiring the technical training and special equipment of engineer troops. The platoon has two functions: ammunition supply and pioneer work. The platoon leader assigns duties to members of the platoon in accordance with requirements of the situation after consultation with S-4. During combat the platoon operates the battalion ammunition distributing point as a base for all of its activities.

a. Ammunition supply.—In combat the platoon leader makes available to the battalion supply officer such portion of the platoon as is necessary for ammunition supply. The platoon operates the battalion ammunition service as directed by the battalion supply officer, loads and unloads ammunition vehicles, and when the situation does not permit the transportation of ammunition by weapon carrier beyond the battalion ammunition distributing point, it carries the ammunition forward by hand to the company areas where it is taken over by company ammunition bearers. It may carry the ammunition directly to the weapons.

b. Pioneer work.—The pioneer duties of the platoon include minor road repair, bridging of small streams and ditches, temporary repair of small bridges and culverts, making ravines and ditches passable for motor vehicles, maintenance of crossings at fords, elimination of obstructions and obstacles to motor vehicles (including mines and traps), marking routes and localities, execution of minor demolitions, and execution of such field expedients as are necessary for the road and cross-country movement of the battalion vehicles. On the march, when engineers are not attached, the platoon may be divided into two groups. The first group is employed near the head of the battalion for minor road maintenance and repairs and for removing obstacles and obstructions. The second group accompanies the battalion trains and assists their movement. During combat a portion of the platoon will usually be employed on pioneer tasks in order to assist the forward movement of vehicles.

■ 60. DUTIES OF PERSONNEL.—*a.* The platoon leader supervises the work of his platoon and may assist S-4 in the operation of the battalion ammunition distributing point. He also functions as battalion pioneer and gas officer. (See par. 18.)

b. The platoon sergeant is assistant to the platoon leader. He may be placed in charge of all men of the platoon assigned for duty with ammunition supply, or he may be used to assist in supervising pioneer work.

c. The squad leaders supervise the work of their squads in the supply of ammunition or on pioneer work.

d. The chauffeurs drive the vehicles assigned to the platoon and perform first echelon maintenance.

e. The privates are the ammunition bearers and also perform pioneer work. Under the supervision of their squad leaders they may be used, in whole or in part, for the following ammunition supply functions:

(1) To advance ammunition by hand from the forward limit of movement of ammunition-carrying vehicles to the company areas or the position of the weapons.

(2) For attachment to one or more subordinate units when it appears that considerable movement of ammunition by hand will be necessary.

(3) To accompany empty ammunition vehicles to assist in loading them at the regimental ammunition distributing point. For duties performed in pioneer work, see paragraph 59b.

SECTION V

ANTITANK PLATOON

■ 61. REFERENCES.—For characteristics of the 37-mm gun and for mechanical training, gun drill, and technique of fire, see FM 23-70. For training of individuals in other weapons, see FM 23-5, FM 23-7, FM 23-10, FM 23-15, and FM 23-30. For tactics of the squad, section, and platoon, see FM 7-35.

■ 62. COMPOSITION.—*a.* The platoon consists of a command group (headquarters) and two antitank sections of two squads each. A minimum crew accompanies each gun in all combat situations; however, when practicable, all personnel are transported on organic vehicles. The command group includes a platoon leader, platoon sergeant, agent corporal, transport corporal, chauffeur, and messengers.

b. For organization, equipment, armament, and transportation see T/O 7-16 and T/BA 7.

■ 63. MISSION.—*a.* The mission of the antitank platoon is the antimechanized defense of the battalion. To insure the accomplishment of this mission, fire must not be opened too early. The conditions under which fire should be opened may be prescribed by the battalion commander. Platoon, section, and squad leaders usually designate terrain features which hostile armored vehicles are to cross (or pass) before the antitank guns open fire. These designated features should place the hostile armored vehicles in such position that there is a reasonable expectation of obtaining effective hits and that the vehicles are definitely committed. Different terrain features may be designated which different types of armored vehicles, according to the character of their armor, must cross (or pass) before antitank guns open fire. Fire against moving targets at ranges greater than 1,000 yards is unremunerative; best results are obtained at ranges of 600 yards or less. For illustration of when fire should and should not be opened, see FM 7-35.

b. The use of antitank guns against targets other than armored vehicles is exceptional. In the execution of a special task such as the attack of a fortified position the platoon may be ordered to fire against emplaced heavy weapons, pill boxes, or similar point targets.

■ 64. READINESS FOR ACTION.—Crews manning antitank guns must be prepared at all times to meet a sudden armored attack. Men are trained to fire in any direction in the shortest possible period of time. During marches, when the platoon is directed to provide protection by occupying successive positions along the route or zone of advance, guns may be held mobile, coupled to truck (prime mover), in the vicinity of each tentative firing position. In other situations guns are uncoupled and either occupy firing positions or cover positions in the immediate vicinity of firing positions. For definition of primary, alternate, and supplementary firing positions; cover positions; and for characteristics of suitable firing position areas, see FM 7-35.

■ 65. COMMUNICATION.—The platoon must rely on foot messengers, arm-and-hand signals, and the platoon headquarters truck for transmitting orders or information unless adequate technical means, such as sound-powered telephones or radiotelephones, are allotted to it. Messages pertaining to ammunition supply are usually transmitted by chauffeurs of trucks going to the rear for ammunition. The platoon leader ordinarily maintains contact with the battalion commander by stationing the platoon agent corporal with him.

■ 66. ANTIMECHANIZED WARNING SERVICE.—a. All leaders within the platoon must be informed as to the location and movements of friendly tanks, their identifications, warning signals, and the distinguishing features of hostile tanks. In addition to the standard warning signal described in b below, other means, such as radio and pyrotechnics, are employed to give warning. At least one observer is posted near each gun position to observe for signals and to give warning to the crew of the approach of hostile mechanized vehicles.

b. The following standard signal is prescribed for use in transmitting warning of the approach or presence of hostile

aircraft or mechanized vehicles: Three long blasts of a whistle, vehicular horn, siren, or klaxon, repeated several times; or three equally spaced shots with rifle, carbine, or pistol; three short bursts of fire from machine gun, automatic rifle, or submachine gun. In daylight, the individual giving the signal points in the direction of the impending danger; at night, the alarm signal will be supplemented by voice warning to indicate the direction of danger.

■ 67. COORDINATION WITH OTHER UNITS.—*a.* The platoon leader makes timely recommendations to the battalion commander for the use of his platoon to insure that the combination of antitank guns, antitank grenades, antitank mine fields, and obstacles provide the best possible protection to the battalion. He cooperates with the commander of any other antitank elements which may be located in the immediate vicinity of his position area(s).

b. Antitank guns must be protected against night attack by specially detailed troops armed with rifles and bayonets, or be moved within an area occupied by riflemen.

■ 68. AMMUNITION SUPPLY.—The platoon leader is responsible that sufficient ammunition is available at gun positions and that the ammunition supply is promptly replenished. He usually delegates supervision of ammunition supply for one or both sections to the platoon sergeant.

a. Attack.—In the attack, resupply is normally effected as follows: Section leaders send empty squad trucks to a point designated by the platoon leader or platoon sergeant; the latter then directs these vehicles to the battalion ammunition distributing point for refill and return. For further details, see chapter 5.

b. Defense.—(1) In the defense, ammunition for front-line units is placed on positions in such quantities as prescribed by higher authority. Replenishment will generally be effected only during the hours of darkness. Ammunition placed on positions is distributed between primary, alternate, and supplementary emplacements in ammunition shelters dug into the sides of the emplacements. Additional ammunition may be stored in other nearby shelters. The requirements of an ammunition shelter are that the ammunition be kept dry and concealed.

(2) After the initial supply of ammunition is completed, trucks of platoons whose guns are emplaced in the areas of forward battalions are assembled under battalion or regimental control in rear of the battle position. The battalion transport officer is charged with the movement of the trucks to the rear. He informs the transport corporal as to the route the trucks are to follow and the location of the truck assembly area. The vehicles of the antitank platoon of a battalion in regimental reserve will usually be retained with the platoon in order to move the guns to supplementary positions in defense of an area occupied by the reserve battalion, or to move with the battalion in the execution of a counter-attack.

SECTION VI

SECURITY

■ 69. GENERAL.—*a.* For antiaircraft security the elements of the company employ all practicable passive measures which are consistent with their mission. Passive measures include dispersion, concealment, and camouflage. In case of air attack, personnel take cover except gun crews of the anti-tank platoon who are engaged in a fire fight with hostile tanks; such crews continue to combat the tanks. Individuals armed with the M1903 rifle and antitank grenades combat hostile tanks when they approach within effective range. (See FM 23-30.)

b. Individual protection will be sought and improved, or excavated, whenever troops are halted. When the halt is expected to be brief, troops take advantage of such natural protection as is afforded by the terrain. When the halt is to be for a longer period but less than 6 hours, individual prone shelters (slit trenches) will be constructed. When the duration of the halt may be more than 6 hours, standing type one- or two-man fox holes will be dug. For types of emplacements for the 37-mm gun, see FM 7-35.

CHAPTER 4

BATTALION MEDICAL SECTION

■ 70. REFERENCES.—For composition and functions of the regimental medical detachment, see FM 7-30. For details of medical supply and operations of the battalion medical section, see FM 8-10. The process of evacuation of casualties is shown in figure 3.

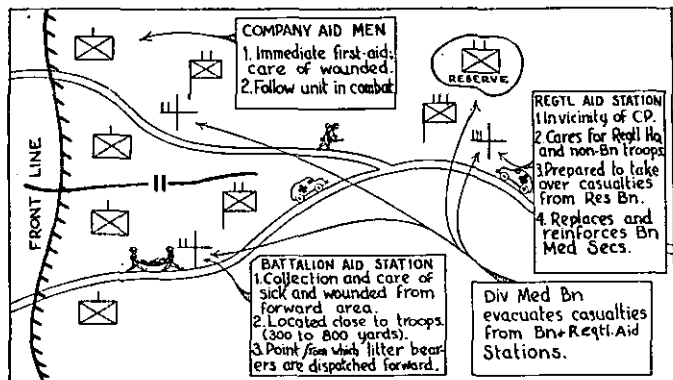


FIGURE 3.—Evacuation of sick and wounded.

■ 71. COMPOSITION.—The battalion section of the regimental medical detachment comprises the personnel and vehicles provided by current Tables of Organization and forms a component part of the battalion trains. (See par. 78.) Tables of Organization indicate the duties of each individual assigned to the section.

■ 72. MISSION.—The battalion medical section serves the battalion by furnishing medical care for the sick and wounded in bivouac, on the march, and during combat until these casualties are evacuated by the division medical service.

■ 73. DUTIES OF COMMISSIONED PERSONNEL.—For duties of the battalion surgeon, see paragraph 19. The primary duty of

the assistant battalion surgeon is to care for the sick and wounded. On the march he accompanies the aid station group at the rear of the battalion to care for march casualties. During combat he functions at the battalion aid station.

■ 74. COMPANY AID MEN.—Three company aid men are attached to each lettered company and one to the battalion headquarters company when on the march, in bivouac, or in combat. The respective company commanders attach one company aid man to each rifle platoon, to each platoon of the heavy weapons company, and to the antitank platoon. Their duties are as follows:

a. To follow closely the platoon to which they are attached.

b. To send information to their battalion surgeon by litter bearers and walking wounded. These messages give the location of the platoon, any contemplated changes in location or disposition, and the approximate number and location of casualties in the platoon area.

c. To administer first aid to the sick and wounded.

d. To inform sick and walking wounded of the exact location of the aid station and the best route thereto.

e. To place all seriously wounded in defiladed locations along the route of advance. This facilitates the work of the litter bearers.

■ 75. LITTER SQUAD.—The litter squad provides teams of litter bearers. Four-man teams are habitually used for long hauls. The vehicles of the section are utilized to assist the litter bearers in those areas which are comparatively free from aimed small-arms fire. In combat the litter bearers are sent out to move all seriously wounded within the battalion area to the aid station.

■ 76. AID STATION GROUP.—The aid station group establishes and operates the battalion aid station; emergency treatment is given. Only minor surgical procedures are attempted, and then only when immediately imperative. Casualties requiring evacuation to hospitals are held at the aid station until picked up by litter bearers or ambulances from the division collecting company. Walking wounded are directed to division collecting stations. The slightly wounded are sent or escorted back to their companies.

■ 77. EXPEDIENTS IN THEATER OF OPERATIONS.—The exigencies of combat may require the use of civilian shelter, utilities, and transport for the care and evacuation of the wounded. Prisoners of war may be used for the evacuation of their own nationals. All available means for caring for the wounded within the battalion area must be thoroughly exploited.

CHAPTER 5

ADMINISTRATION

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SECTION I

BATTALION TRAINS

■ 78. **COMPOSITION.**—Battalion trains comprise the battalion section of the transportation platoon of the service company and the battalion section of the regimental medical detachment. The battalion trains are composed of the personnel and vehicles provided by current Tables of Organization. (See T/O 7-11 and 7-13.)

■ 79. **MISSION.**—During tactical operations and when the battalion supply echelon is in operation the mission of the battalion trains is to furnish supply, maintenance and evacuation facilities for the battalion. For details, see section II and FM 7-30.

■ 80. **DUTIES OF PERSONNEL.**—*a.* For duties of the battalion supply officer (S-4), see paragraph 13.

b. The battalion supply sergeant is the principal enlisted assistant to the battalion supply officer and works in the battalion area under the supervision of the battalion supply officer.

c. The section truckmaster is responsible for the movement of vehicles entrusted to his charge. He usually accompanies the battalion kitchen and baggage train. When vehicles in his charge are under battalion control, he is responsible to the battalion supply officer for their movement; when they are under regimental control, he is responsible to the regimental transport officer.

d. The chauffeurs, in addition to operating the vehicles of the battalion transportation section, perform first echelon maintenance duties and man the weapons provided for anti-

aircraft security and antimechanized defense of the vehicles.

e. The basic private is trained as a chauffeur and is used as a replacement.

SECTION II

SUPPLY

■ 81. REFERENCES.—For definitions, fundamentals, and methods relating to supply, see FM 100-10; for logistical data, see FM 101-10; for supply within the infantry regiment, see FM 7-30. For medical supply and evacuation, see chapter 4 and FM 7-30.

■ 82. RESPONSIBILITY.—Supply is a responsibility of command which cannot be delegated. When the battalion echelon of supply is in operation, the battalion commander is responsible for the initial supply and the replenishment of all classes of supply to his battalion. He is responsible for submitting to the regimental commander an estimate of supplies needed for all the elements of his battalion. This estimate must insure an adequacy of supplies for his present or contemplated strength without creating an immobilizing surplus. Estimates or requisitions must be forwarded sufficiently in advance to enable the regiment to make supplies available for distribution in time to meet the requirements of the battalion. The battalion commander must use the means at his disposal to effect this distribution.

■ 83. MEANS.—a. To assist him with the supply the battalion commander employs his staff, principally the battalion supply officer (S-4) and the transport officer. (See pars. 13 and 14.) He employs personnel of the ammunition and pioneer platoon to assist in ammunition supply. Supplies for battalion headquarters are furnished by the battalion headquarters company. (See ch. 3.)

b. Transportation for supplying the battalion is furnished by the battalion trains and by company transport organic within the battalion. (See FM 7-30.)

■ 84. CLASS I SUPPLY.—a. General.—(1) Rations and water are the principal items of class I supply for the battalion.

These items are consumed at a relatively uniform rate irrespective of combat operations or terrain.

(2) The field ration may consist of field ration A, B, C, or D, or combinations of these. For a description of these rations and their use, see FM 7-30.

(3) Troops should receive three meals daily. A minimum of two of these meals should be hot. Plans for feeding troops are based upon the tactical situation, availability of vehicles, road net, traffic conditions, terrain, and weather. Methods of preparation and distribution of rations are discussed in FM 7-30. (See fig. 4.)

b. Battalion feeding plan.—(1) During tactical operations the kitchen and baggage train usually moves and bivouacs under regimental control. The battalion section of the train is released to battalion control when necessary. The regimental supply plan for feeding the troops prescribes the place and hour that kitchen vehicles will be released to the battalion and when and where they will be returned to regimental control. Based upon the regimental plan and the tactical plans of the battalion commander, the battalion supply officer formulates a plan for feeding troops. This plan includes—

(a) Attachment to companies for rations of units operating with the battalion which do not have messing facilities.

(b) Provision for feeding elements of companies in remote locations.

(c) Route and plan of movement for kitchen vehicles from the regimental point of release to the battalion point of release.

(d) Place and hour that kitchen vehicles will be released to companies and when and where they will be returned to battalion control.

(e) Route and plan for movement of kitchen vehicles to return them to regimental control.

(2) When the battalion commander has approved the plan, the battalion supply officer informs each company of the place and hour that kitchen vehicles will be released and when and where they are to be returned to battalion control. He arranges for company guides to meet the kitchen vehicles and conduct them to company mess locations (see fig. 4). For characteristics of desirable mess locations, see FM 7-10.

■ 85. CLASS II SUPPLY.—*a.* Class II supplies comprise articles for which allowances are established by Table of Basic Allowances. Type items are clothing, gas masks, arms, trucks, and items of signal equipment.

b. Clothing and equipment are ordinarily replaced during periods when the battalion is not engaged in combat.

c. During tactical operations companies send requests for necessary replacements of weapons, or prescribed items of

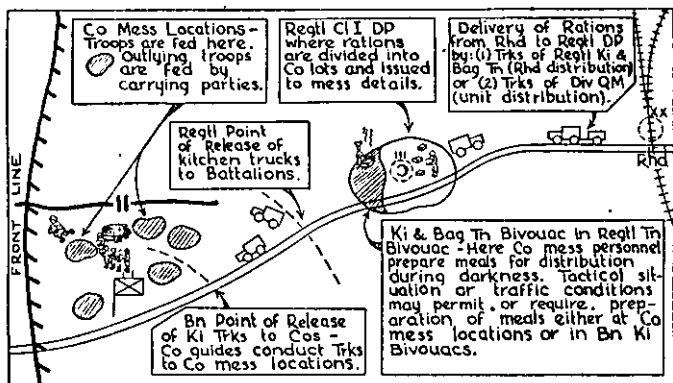


FIGURE 4.—Ration distribution.

equipment, through command channels to the regimental commander. Delivery is made in the same manner as class I supplies. Damaged weapons or equipment are sent for repair or replacement to the regimental train bivouac by the first available transport going to the rear.

■ 86. CLASS III SUPPLY.—*a.* Class III supplies include gasoline, lubricating oil, and grease. The regiment carries a reserve of gasoline and oil in containers. A part of this reserve may be distributed to battalion vehicles. During movement or in combat regimental and higher headquarters will establish distributing points for gasoline and oil. At such points resupply may be effected by exchanging empty for filled containers or by direct filling of vehicle tanks from multiple-outlet trucks.

b. During movement these distributing points are established along the route of march when necessary. During combat individual vehicles of the battalion going to the rear refill at regimental distributing points established at the train bivouac or other convenient locations, such as the regimental ammunition distributing point. Also they may refill at distributing points established in rear areas by higher authority. For refilling vehicles which do not make trips to the rear, the battalion commander (usually through his supply officer) arranges for small stocks of class III supplies to be established at a convenient location in the battalion area, such as the battalion ammunition distributing point, or he may arrange for filled containers to be sent forward when meals are delivered to the troops.

■ 87. CLASS IV SUPPLY.—*a.* Class IV supplies comprise articles which are not covered in the Table of Basic Allowances and for which demands are directly related to current or contemplated operations, except articles in classes III and V. Type items are fortification materials.

b. In defensive situations, when engineer tools and field fortification materials are furnished the battalion, tools and material will be released to the battalion on trucks at distributing points accessible to the battalion. The battalion commander (usually through his supply officer) arranges for delivery of tools and material to companies. He also arranges for the return of tools when work is completed.

■ 88. CLASS V SUPPLY.—*a. General.*—(1) Class V supplies for the battalion include ammunition, pyrotechnics, antitank mines, and chemicals. The amount of such supplies carried on weapon carriers and on the battalion ammunition train is that deemed necessary to initiate and sustain combat until replenishment from the rear can become effective. In addition the battalion ammunition train carries a small unit reserve.

(2) The Table of Basic Allowances prescribes the amount of ammunition carried by the individual soldier for emergency use, and the amount initially carried on weapon carriers and the ammunition train. Also it prescribes the amount of extra ammunition to be issued prior to combat to

rifle units, and any special ammunition (mortar ammunition, grenades, and pyrotechnics) which may be issued to any unit. A small reserve, after extra ammunition has been issued, is prescribed in the same table and is carried in the battalion ammunition train.

(3) The battalion commander prescribes the location of the battalion ammunition distributing point and, in offensive situations, the route of advance for ammunition.

b. Initial supply.—Prior to entry into combat the regiment releases to the battalion all weapon carriers moving under regimental control and the battalion section of the ammunition train. As soon as their need is foreseen, the battalion commander releases weapon carriers to companies; he releases ammunition train vehicles for the issue of extra ammunition to rifle units or in order to dump loads on company defense areas. Usually extra ammunition is issued in the battalion assembly area before the battalion develops for combat. At the same time, ammunition train vehicles may be released temporarily to the heavy weapons company for the issue of special ammunition such as mortar ammunition and grenades. *Upon completion of the issue or dumping of ammunition, ammunition train vehicles are returned to the battalion ammunition distributing point.* The battalion supply officer is usually charged with controlling the ammunition train vehicles in initial supply. (See par. 13.) He may be assisted by the battalion transport officer. In defensive operations, in accordance with the regimental order, the battalion commander prescribes the amount of ammunition to be placed on the battalion defense area. The minimum amount so prescribed should be an amount sufficient to obviate resupply prior to darkness. When the amount exceeds loads carried by the weapon carriers and ammunition train vehicles, a sufficient number of emptied vehicles is returned to the regimental ammunition distributing point to obtain the additional amounts required. (See fig. 5.)

c. Replenishment.—(1) *General.*—(a) The battalion ammunition plan must provide for replenishment in amounts and types which will support the tactical situation. Often the ratio of types and amounts of ammunition requested by company commanders, to satisfy their immediate or future

requirements, will vary from the normal loads of ammunition-carrying vehicles. The battalion commander is responsible for the delivery of ammunition to points selected by company commanders from which the company commanders can effect distribution.

(b) The battalion commander will keep the regimental commander informed of his requirements. (See par. 82.)

(2) *Battalion ammunition distributing point.*—The battalion ammunition distributing point is located in the most advanced area that is practicable in the situation. The bat-

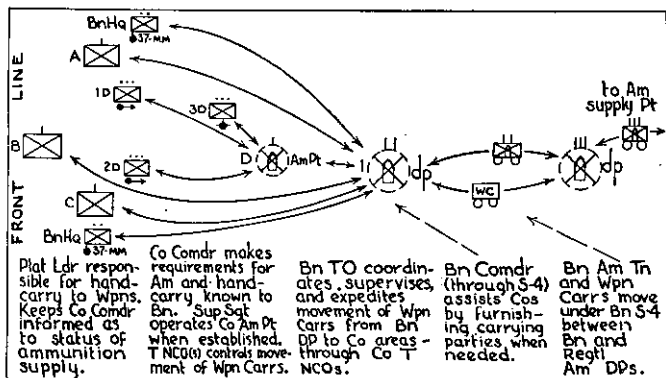


FIGURE 5.—Ammunition supply, infantry battalion.

talion supply officer establishes and operates the battalion ammunition distributing point and organizes hand-carrying parties with personnel furnished from the ammunition and pioneer platoon. In attack the battalion ammunition distributing point is advanced by bounds along a route of ammunition advance prescribed by the battalion commander. Desirable characteristics of battalion ammunition distributing points are—

- Convenience to the units served.
- Location at or in rear of a point where routes to subordinate units diverge.
- Facility of motor movement to the rear.
- Concealment from air and ground observation.

(e) Defilade from hostile flat-trajectory fires.

(f) Ease of identification by day or night.

(g) Adequate space for truck turn-around and transfer of loads.

(3) *Control of weapon carriers.*—(a) Prior to entry into combat, weapon carriers are released to company control.

(b) In general, the battalion commander (through the transport officer) supervises, coordinates, and expedites the movement of weapon carriers in rear of company areas. He assumes control of company transport when enemy activity or lack of cover and concealment precludes its retention in company areas, or when it reports to the battalion ammunition distributing point for refilling. Weapon carriers are returned to company control as soon as practicable.

(c) In defensive situations weapon carriers whose presence is not essential on the battle position are usually assembled under regimental control in or near the train bivouac. The tactical situation and the terrain permitting, a part or all of the company transport of the heavy weapons company of a battalion in regimental reserve may be retained within its company area.

(4) *Offensive operations.*—(a) To maintain adequate stocks at the battalion ammunition distributing point from which replenishment to the companies can be effected, loads of partially emptied trucks are consolidated or unloaded in order to obtain empty vehicles for immediate dispatch to the regimental ammunition distributing point. Loaded trucks are usually held at the battalion ammunition distributing point until emptied or moved forward along the route of ammunition advance. As soon as emptied each ammunition truck is sent back to the regimental ammunition distributing point for refill.

(b) Replenishment of ammunition to companies is effected by means of ammunition-carrying vehicles, usually weapon carriers, supplemented by hand-carrying parties when necessary. Companies return emptied vehicles to the battalion ammunition distributing point, where they are refilled or dispatched to the regimental ammunition distributing point for refill and return.

(c) When conditions, such as unsuitable terrain or intensity of hostile fires, prevent the movement of vehicles over all or part of the routes to company areas, hand-carrying parties from the ammunition and pioneer platoon or other personnel are used to complete the movement of ammunition to company areas or to the weapons.

(d) The battalion transport officer assists in the replenishment of ammunition by supervising, coordinating, and expediting the movement of vehicles and hand-carrying parties forward of the battalion ammunition distributing point.

(5) *Defensive operations.*—When the initial supply of ammunition has been placed in the battalion defense area (b above), weapon carriers and ammunition train vehicles are returned to the battalion ammunition distributing point, where they normally revert to regimental control. They usually are refilled and held under cover at or near the regimental train bivouac. After dark, ammunition train vehicles and weapon carriers are released to the battalion and brought forward to the battalion ammunition distributing point. Replenishment of ammunition is effected in the same manner as in offensive operations.

(6) *Fast moving situations—pursuit, motorized security, and retrograde movements*—(a) During fast-moving situations when considerable distances may separate the battalion from distributing points, ammunition requirements for the operation must be anticipated, additional transport secured, ammunition issued, and replenishment obviated so far as practicable.

(b) Plans for ammunition supply in retrograde movements must include provisions for an adequate amount of ammunition, without replenishment, for elements of the battalion with the covering force. Temporary ammunition distributing points, when required, will be established along the route of withdrawal to provide replenishment for the remainder of the battalion.

■ 89. ORDERS.—a. Administrative matters in the battalion order may include such of the following items as are applicable:

- (1) Hour and place of issue of extra ammunition.

(2) Location of the battalion ammunition distributing point.

(3) Route of advance of ammunition (in attack only).

(4) Amount of ammunition to be placed on position (in defense only).

(5) Disposition of company transport or of train vehicles.

(6) Location of the battalion aid station.

b. Any additional directions of an administrative nature may be included in the order or issued later in fragmentary form to those concerned. These directions may include plans for feeding, instructions concerning supply of gasoline and oil, and disposition of individual rolls.

■ 90. INDIVIDUAL ROLLS.—On the march the individual rolls of units of the battalion may be transported in kitchen and baggage train vehicles when part of organic loads have been dumped. Rolls are delivered to units during long halts when the duration of the halt and weather conditions warrant. During offensive combat rolls are usually sent forward with supper and collected after breakfast. In defensive situations the men often may keep individual rolls with them. The battalion commander (usually through the battalion supply officer) makes the necessary arrangements for the transportation of rolls and for their delivery and collection.

■ 91. EXPEDIENTS IN THEATER OF OPERATIONS.—a. *Exploitation.*—Efficient use must be made of all resources in the battalion area to supplement supply and to provide for deficiencies when the normal means for procurement and distribution of supplies are inoperative or partially inoperative. Troops must be trained to load, lay, and fire captured weapons in general use by the enemy; and to effect minor repairs and operate enemy transport, both mechanized and motorized, in constant use within the theater of operations.

b. *Battlefield recovery of vehicles, weapons, and other supplies.*—Means within the battalion must be employed to recover vehicles, both our own and those of the enemy, which are serviceable or can be made serviceable within the combat zone before the fluctuation of battle permits the enemy to recover or destroy them. Individuals or crews may often find it expedient to discard their own weapons for those of the

enemy when their ammunition is exhausted and serviceable weapons and ammunition of the enemy are available. Usable stocks of all types of supplies which are discovered within the battalion area must be safeguarded and higher authority immediately notified of the general type, amount, and location of such supplies.

c. Destruction of serviceable or reparable vehicles and usable supplies.—Troops must be trained in quick, effective methods for the destruction of matériel and supplies of all types. In the case of weapons and vehicles, efficient destruction will require further action than the mere removal of certain working parts. If organic means are not supplied with vehicles, efficient methods must be improvised for their destruction and to render useless all other types of supplies. Prompt action will be taken to prevent serviceable equipment or usable supplies from falling into the hands of the enemy. Generally, such action should be initiated only in compliance with the orders of a platoon leader or higher authority.

CHAPTER 6

TROOP MOVEMENTS AND SECURITY ON THE MARCH

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III. Night, motor, and rail movements.....	100-102

SECTION I

GENERAL

■ 92. 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. 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. For details of infantry troop movements, see FM 7-40.

SECTION II

DAY MARCHES

■ 93. GENERAL.—The battalion may form part of the main body, it may be detailed as a security force of a larger unit, or it may move as an individual unit. When the battalion forms part of the security force of a larger unit, it may be detailed as the advance, flank, or rear guard.

■ 94. AS PART OF MAIN BODY OF A LARGER FORCE.—When part of the main body, the battalion conducts its march in accordance with the orders of the column commander or the provisions of standing operating procedure. The motor elements of the battalion usually march under regimental control in a separate serial. Normally only such vehicles march with the battalion as are required for command, communication, and antiaircraft and antimechanized protection. Heavy machine guns for antiaircraft protection may be distributed throughout the battalion or advance by bounds on the flanks of the battalion. The antitank platoon may be held under regimental control for the protection of the regiment as a

whole; otherwise it is disposed by the battalion commander for the protection of the battalion, usually by distributing squads or sections throughout the column. The battalion sends patrols to the flanks to furnish ground security and function as air-antitank guards, and requires each subordinate unit to designate men to transmit warning signals.

■ 95. AS ADVANCE GUARD OF A LARGER FORCE.—*a. Mission.*—The mission of the advance guard battalion is to prevent unnecessary delay of the main body and to protect it against surprise and ground observation. The advance guard battalion insures for the main body the time and space required for its deployment for action.

b. Control.—(1) The march order of the regimental or column commander prescribes the composition of the advance guard, route or zone of advance, objective of the march, hour it will pass the initial point, distance at which the main body will follow, and any special instructions required, such as successive terrain features to be seized along the route or zone of advance.

(2) Based on the orders of the higher commander, the battalion commander prescribes the formation of the advance guard, including attached units, and such instructions concerning security and reconnaissance measures and the conduct of the advance as are not covered in standing operating procedure. When contact with the enemy becomes imminent, he joins the support commander to gain first-hand information upon which to base his direction of the advance guard action. When the battalion commander leaves the vicinity of his command post at the head of the reserve, he takes with him a radiotelephone and a motor messenger for prompt communication with his command post and with his companies.

c. Reinforcements.—The advance guard battalion may be reinforced by elements of the intelligence and reconnaissance platoon, a part of the antitank company, elements of the cannon company, and a detachment of engineers. Engineer and artillery reconnaissance details march as far forward as possible in the advance guard. When not attached to the advance guard, elements of the cannon company usually follow it in close support. Artillery support usually is furnished by units

with the main body. When road conditions are such that artillery with the main body cannot give prompt support to the advance guard, or when the advance guard is motorized, at least a battery of light field artillery is attached. In some situations tanks are attached.

d. Formation.—From front to rear the advance guard battalion is divided into a support and a reserve. It may be preceded by elements of the regimental intelligence and reconnaissance platoon. When contact is not imminent and the bulk of the advance guard is able to march in route column on a two-way road, its vehicles not employed for command, reconnaissance, security, and control usually move by short bounds in rear of the foot troops of the main body under control of the battalion transport officer. The transport officer maintains communication with the battalion commander by radiotelephone and motor messenger. On roads not favorable for passing, vehicles may follow or be within the column of advance guard foot troops.

(1) *Motorized elements.*—When under control of the advance guard commander, the elements of the regimental intelligence and reconnaissance platoon precede the leading foot elements by from 3 to 5 miles. They halt for observation on successive objectives constituted by the more important terrain features. Routes leading from the flanks as well as from the front are observed. Communication with the advance guard commander is maintained by radiotelephone and motor messenger. When the elements of the intelligence and reconnaissance platoon which precede the advance guard operate under regimental control, the advance guard commander maintains contact with them, usually by a liaison officer.

(2) *Support.*—The support is usually a rifle company. It sends forward the advance party. Weapon carriers of the support, when not under battalion control, follow immediately in rear of the foot elements. Motor messengers and supporting weapons may be attached to the support. Supporting weapons may include one or more sections of the cannon company, heavy machine guns, 81-mm mortars, and antitank guns. Foot elements of engineers usually march with the support; when engineers are not attached to the

advance guard, elements of the battalion ammunition and pioneer platoon are attached to the support.

(3) *Reserve*.—The reserve constitutes the principal maneuver guard commander upon encountering strong hostile. The march command post of the battalion is usually at or near the head of the reserve. When artillery is attached to the advance guard, it marches with the battalion motor echelon; its commander accompanies the battalion commander.

(4) *Patrols*.—The advance guard sends out patrols to the flanks to reconnoiter those points which afford extended observation of the main body, or which provide concealment for hostile reconnoitering or harassing detachments. Such patrols ordinarily are sent out under direction of the support commander, either directly from the support or (to points close to the route of march) from the advance party. If necessary the battalion commander attaches elements from the reserve to the support to enable it to conduct patrolling to more distant points, or he may send out motorized patrols from the reserve.

(5) *Antiaircraft security elements*.—The machine-gun platoons of the heavy weapons company furnish antiaircraft security for the advance guard battalion. They may be distributed throughout the depth of the column, or may furnish protection by successive displacement of sections to firing positions adjacent to the route of march. Guns are mounted in weapon carriers and are manned by minimum operating crews. Air-antitank guards occupy successive points near the route of march. These guards are detailed from both the support and the reserve. When they fall behind the advancing column, they join the tail of the reserve; additional guards are sent out as required. Flank patrols also act as air-antitank guards. Antiaircraft protection of the motor echelon is provided by the automatic rifles of vehicles so equipped.

(6) *Antimechanized defense elements*.—The battalion commander directs the distribution of organic and attached antitank units according to the terrain, the hostile mechanized threat, and the location of adjacent columns. Antitank units may be distributed as follows:

(a) Guns of the antitank platoon and any attached anti-tank units may occupy successive positions along the route of march. Antitank units are given priority on roads to permit rapid movement to successive positions.

(b) Mobile antitank units may be distributed throughout the column. At least one section of guns is usually attached to the support; one of those guns may be attached to the advance party.

(c) A combination of methods (a) and (b) above may be employed.

e. Operation of advance guard battalion.—(1) The advance guard battalion accomplishes its mission by reconnoitering the terrain to the front and on each side of the line of march, overcoming isolated hostile resistance, and preparing so far as practicable the route of advance by removing obstacles and by repairing bridges or constructing detours around them. Observation aviation, the regimental intelligence and reconnaissance platoon, and foot and motor patrols furnish the battalion commander prompt information of hostile forces. At all halts the advance guard forms a march outpost. Observers from the forward elements are sent to nearby points of observation to cover the front and flanks. During long halts, units of the support occupy critical terrain features controlling the approaches to the column. These portions are organized as for a bivouac outpost and reconnaissance is initiated. (See par. 106.)

(2) When contact becomes imminent, or when entering the zone of effective hostile artillery fire, the support moves forward on a broad front. The reserve may be ordered to adopt a partially deployed formation. Weapon carriers are brought forward and may be released to companies. When the enemy is encountered, the support promptly attacks or seizes favorable terrain according to the mission assigned the advance guard. The battalion commander informs the artillery commander or his liaison officer of the fire support desired, and directs the employment of the heavy weapons company and attached elements of the cannon company. Antitank guns are disposed to prevent the advance of hostile mechanized elements.

(3) The mission given the advance guard in the regimental march order determines the action to be taken by the advance guard commander upon encountering strong hostile resistance. The advance guard mission may require defensive or delaying action against a greatly superior force. Usually the mission is aggressive. The attack of an advance guard is executed on a broad front holding out small or no reserves. It is delivered promptly to drive the enemy out of position or seize a terrain feature that will cover the deployment of the main body.

■ 96. FLANK GUARD OF A LARGER FORCE.—*a. Mission.*—The mission of the flank guard battalion is to protect the marching column from ground observation and surprise attack 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 or for its uninterrupted passage.

b. Reinforcement.—The reinforcements of the flank guard battalion may include a squad of the intelligence and reconnaissance platoon, artillery, engineers, tanks, chemical troops, and antitank units. The employment of these reinforcing units is generally the same as the employment of similar units with an advance guard. The flank guard battalion may be given special material, such as antitank mines and chemicals, and the means for constructing obstacles and executing demolitions. In addition to the usual means of communication, observation aviation may be used to maintain liaison between flank guards and the main body and to transmit enemy information directly to flank guards.

c. Operations.—On the march the formation of the battalion and its conduct of antiaircraft security and anti-mechanized defense are similar to the advance guard battalion (par. 95*d*(5) and (6)). The flank guard battalion employs the necessary patrols and advance, flank, and rear guards for its own protection and to give timely warning of the approach of hostile forces. It takes advantage of terrain features on the exposed flank, such as stream lines and ridges, to establish road blocks and prepare demolitions at defiles. Its operations are conducted with special reference to the routes which favor attack against the flanks of the

command. When the locality from which an attack is expected is well defined, the flank guard battalion occupies a position covering the routes of hostile approach until the main body has passed and, on completion of its mission, joins the rear of the main body. When a route generally parallel to the line of march of the main body exists, the battalion may move on that route, distributed in detachments over sufficient depth to offer resistance at various points. If the battalion is motorized, echelons of the battalion may move by bounds from one position to another.

■ 97. REAR GUARD OF A LARGER FORCE.—*a. Mission.*—A battalion may be employed as the rear guard of a retiring force with the mission of protecting the main body from harassment and attack. By the successful execution of this mission the battalion enables the main body to avoid battle and regain freedom of action. It must execute its mission without help from the main body.

b. Strength and composition.—The rear guard battalion normally is reinforced by the attachment of antitank weapons and elements of the cannon company, and may be reinforced by artillery, engineers, chemical troops, and motor transport for foot elements. Elements of the regimental intelligence and reconnaissance platoon may be attached for employment on reconnaissance and security missions; otherwise the battalion commander uses such motor transport as is available to organize the necessary motor patrols for these missions. Sufficient motors should be made available to the battalion commander for placing motorized patrols or detachments on exposed flanks.

c. Formation.—When the distance from the enemy permits, the rear guard battalion moves in march formation in the reverse order of an advance guard battalion. The successive elements, starting with the one nearest the enemy, are one or more motor patrols, a rear point, a rear party, a support, and a reserve. The support sends out the rear party which, in turn, sends back the rear point. The strength of each subdivision corresponds, in general, to that in an advance guard battalion. When a rear guard battalion moves on foot, the motor echelon, moving by short bounds, precedes the foot elements of the reserve. The battalion antitank platoon

may be distributed in the column, or disposed with a section moving by bounds on each flank of the rear guard to prevent its encirclement by hostile mechanized forces.

d. Operation.—(1) The rear guard battalion opens long-range fire with its infantry heavy weapons and artillery in order to force the enemy to deploy and thus delay him. Anti-tank guns are placed in positions from which they can fire on hostile armored vehicles before those vehicles can disrupt the progress of the rear guard or break through it and strike the main body. Unless the security of the main body requires a defense in place, the rear guard battalion conducts itself as in a delaying action on successive positions. (See sec. IV, ch. 10.)

(2) Engineers, if available, and the ammunition and pioneer platoon are employed to execute demolitions (such as the destruction of bridges and roads passing through defiles), to construct obstacles, and to keep open routes of withdrawal. Chemical troops execute appropriate smoke missions, such as the screening of withdrawing elements; they contaminate obstacles and demolitions.

(3) Antiaircraft security and antimechanized defense are conducted as for an advance guard (par. 95*d*(5) and (6)).

■ **98. BATTALION MARCHING ALONE.**—The battalion conducts an independent march in accordance with the principles and technique prescribed for the regiment. (See FM 7-40.) The commander of a battalion marching alone details the necessary detachments for security.

a. Strength and composition of advance guard.—The advance guard usually consists of a rifle company reinforced by any or all of the following:

(1) One section of the antitank platoon.

(2) One platoon or one section of heavy machine guns.

(3) One or more squads of the ammunition and pioneer platoon, depending upon condition of roads and availability of engineers.

(4) Engineer troops, if attached to the battalion.

b. Formation.—The advance guard is organized as a support which sends forward an advance party in the same manner as when the battalion is the advance guard of a larger force. The support also sends out patrols to oper-

ate on a broad front. The battalion follows the advance guard at approximately 500 yards.

c. Flank security.—The battalion secures its flanks by flank guards and by the patrols sent out from the advance guard. Flank guards seldom exceed the strength of one rifle platoon reinforced by a heavy machine-gun platoon, an 81-mm mortar section, a section of the antitank platoon, and a squad of the ammunition and pioneer platoon. Such flank guards operate in the same manner as do flank guards of larger units.

d. Rear guard.—When advancing toward the enemy, a rear guard seldom exceeds in strength a reinforced rifle platoon and may consist only of a rifle squad. It is normally motorized and follows the motor echelon. In retrograde movements it may consist of a rifle company, reinforced as indicated in *b* above. It is formed as a support which sends back a rear party.

■ 99. TRAINING FOR ENDURANCE.—Troops must be trained to march 20 miles a day for several successive days without undue fatigue. Upon occasion troops will be required to march as much as 35 miles in 24 hours and arrive at their destination fit for combat. In training areas and in rear areas of the combat zone, the battalion commander so conducts training that his unit achieves and maintains a high standard of proficiency in marching. For march technique, see FM 7-40.

SECTION III

NIGHT, MOTOR, AND RAIL MOVEMENTS

■ 100. NIGHT MARCHES.—Night marches are conducted by the battalion in accordance with the principles governing the regiment. (See FM 7-40.)

a. Control.—(1) To insure maintenance of direction the battalion commander provides guides and route markers when these are not provided by higher authority, designates the officer to lead the battalion column(s) and employs his staff to supervise the march.

(2) The battalion commander prescribes the password and identifying marks to be worn by subordinate commanders, security elements, and messengers.

b. Security.—The strength of an advance guard for the battalion during the night march will vary from a rifle platoon to a rifle company reinforced with engineers or elements of the ammunition and pioneer platoon. Flank and rear security detachments are usually smaller than for day marches, and consist of rifle units and engineer or pioneer elements. The battalion may constitute a security force for the regiment or larger unit.

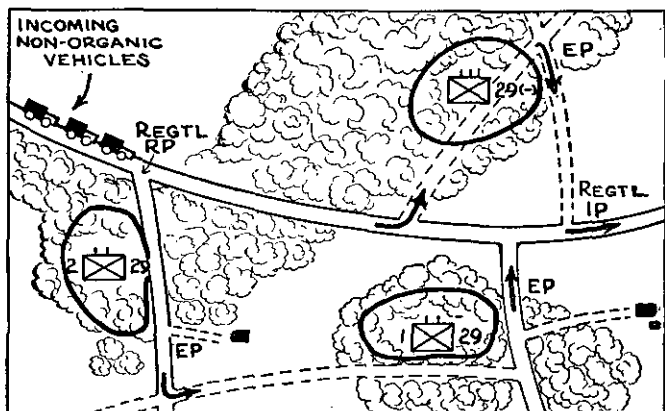


FIGURE 6.—Routing of vehicles for movement of regiment by motor during darkness. (Battalion entrucking points are shown.)

■ 101. MOTOR MOVEMENTS.—*a.* For 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. For details of motor movements of the infantry regiment, see FM 7-40.

b. Motor movements made by the battalion are governed by the principles prescribed for the regiment in FM 7-40.

c. When entrucking can be accomplished under cover of darkness, battalion (and company) entrucking points may be used. (See fig. 6.)

d. If a battalion must be entrucked in daylight, vehicles cannot remain in column on or along the side of a road while troops and equipment are being loaded, even if protected by natural concealment. Hence entrucking areas and initial points are designated for companies in order to insure orderly loading and movement to the battalion (or regimental) initial point. (See fig. 7.) Concealment and dispersion are used to afford passive protection during entrucking.

■ 102. RAIL MOVEMENTS.—For general procedure governing movements by rail, see FM 100-5. For technical and logisti-

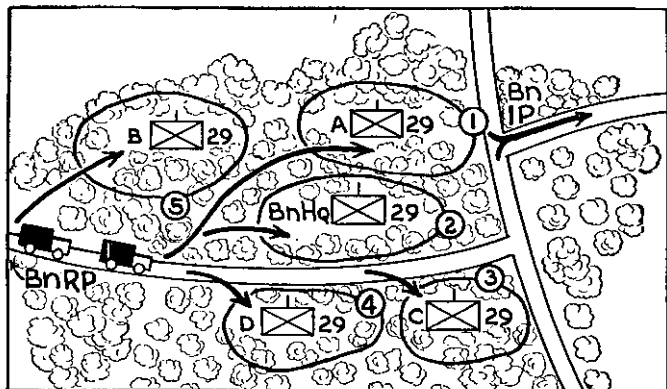


FIGURE 7.—Daylight entrucking area of one battalion showing company entrucking areas and numbered company initial points.

cal data pertaining to rail movements, see FM 101-10. 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. For details of rail movements of a regiment, see FM 7-40. Usually the battalion making a rail movement will do so as part of the regiment; exceptionally, it will move alone by rail. When the battalion moves alone by rail, the duties of the battalion commander and his staff are similar to those prescribed for the regimental commander and staff. (See FM 7-40 and AR 30-945.)

CHAPTER 7

BIVOUACS

■ 103. GENERAL.—The battalion bivouac area is usually selected by the regiment. The distribution of units in the area should be made so as to facilitate the succeeding operation. For the requirements of bivouac sites, see FM 7-40 and 100-5.

■ 104. QUARTERING PARTY.—*a. Composition.*—To facilitate movement into the bivouac, the battalion commander should designate a battalion quartering party comprising generally—

(1) A quartering officer, usually the battalion adjutant.

(2) A guide, preferably a noncommissioned officer, from each company of the battalion and each attached unit with the battalion.

(3) When the battalion is operating alone, a medical officer, if available.

b. Duties.—(1) The battalion quartering officer with his party reports to and accompanies the regimental quartering officer. He subdivides the battalion bivouac area and allots space to subordinate units and to the battalion command post. When kitchens are released from regimental control, he locates them on one side of the battalion bivouac area and latrines on the opposite side. Upon the arrival of troops he reports to the battalion commander.

(2) Shortly before the troops are due to arrive, the battalion quartering officer assembles the company and unit guides at the point where the troops leave the route of march to enter the bivouac area. Guides meet their units, including vehicles with the motor echelon, and lead them to their respective areas without halting the movement until arrival thereat, in order to avoid blocking roads.

(3) When the battalion is operating alone, the quartering officer reserves locations for the aid station and the interior guard and plans the disposition of the guard. He has the surgeon examine the sources of water supply and mark the places for obtaining water for drinking and cooking. for

bathing, and for washing clothes; he obtains his recommendations concerning the location of kitchens. When the guard is detailed, he sees that it is posted for the interior security and control of the area (sentries over water sources and at entrances into the area). Unit guides function as indicated in (2) above.

■ 105. BATTALION WITHIN REGIMENTAL BIVOUAC AREA.—*a. Security.*—When the battalion occupies a bivouac area within the regimental area, the regimental commander usually details the interior guard and coordinates the anti-aircraft security and anti-mechanized defense of the area. The battalion commander requires all individuals to dig individual prone shelters or standing type fox holes for occupancy in case of hostile air or mechanized attack. He also requires emplacements to be dug for all machine guns and anti-tank guns assigned security missions, and for all other machine guns and mortars which may be employed in defense of the bivouac.

b. Alerts.—(1) One officer at the battalion command post and at each company command post, and one noncommissioned officer in each platoon are constantly on duty to alert the battalion in case of attack.

(2) The battalion commander instructs all units of the battalion as to the action to be taken when alerted. The action usually is prescribed in the standing operating procedure of the unit.

c. Signal communication.—(1) Within the battalion bivouac area communication is normally maintained by foot or motor messenger. Units of the battalion establish command posts within their respective areas and notify the battalion commander and their own subordinate units of the location. Company messengers, who are familiar with the route to their own company command posts, are held readily available at the battalion command post. Sound-powered telephones may be employed.

(2) The regimental commander usually maintains communication with the battalion by foot and motor messengers; wire is not installed unless the length of stay and distance between command posts justify it. Radio is employed only when authorized by the regimental commander.

d. Control of motor elements.—Within the battalion bivouac area, vehicles are controlled as directed by the battalion commander. Vehicles are dispersed, if practicable, with a minimum of 75 yards between vehicles. They are parked irregularly and concealed or camouflaged. At night, each vehicle moving within the bivouac must be preceded by a man on foot to prevent running over sleeping personnel.

(1) *Company transport.*—Company vehicles are usually parked in the subareas of the units of the battalion to which they pertain.

(2) *Battalion trains.*—Kitchen and baggage trucks are released to their companies upon arrival in the bivouac area. The battalion section of the ammunition train, if present, is parked as directed by the battalion commander.

■ 106. BATTALION AS BIVOUAC OUTPOST.—*a. Mission.*—The battalion may be detailed as the bivouac outpost of the regiment or division, or it may be assigned as part of the division bivouac outpost. (See FM 7-40 and FM 100-5.)

b. Control.—(1) The commander of a battalion assigned to outpost duty will receive his instructions from a higher commander. These instructions include the designation of the outpost line of resistance, the limits (if any) of the battalion outpost position or sector, any detached posts to be established, action to be taken if the outpost is attacked in force, special reconnaissance to be executed, approaches to be especially guarded, signal communication to be established, and coordination with adjacent units (if any) of the outpost.

(2) The advance (or rear) guard battalion assigned outpost duty may reconnoiter and occupy the outpost position under the protection of a march outpost provided by its support. In this event the reserve will usually occupy the outpost line of resistance and the support will be withdrawn to become the reserve of the outpost battalion, when occupation of the outpost line of resistance is complete.

c. Strength and composition.—The battalion on outpost duty is normally reinforced by antitank guns. Engineers may be directed by higher authority to construct obstacles, mine fields, and other barriers. Artillery support for the

outpost usually is provided by artillery with the main body at the rate of one battalion of light artillery per rifle battalion of the outpost. If the outpost is operating at such distance from the main body that it cannot be supported by the artillery with the main body, such artillery should be attached. Motors, motor patrols, or elements of the regimental intelligence and reconnaissance platoon may be attached to the battalion to be used for distant patrolling.

d. Organization.—(1) The elements of an outpost battalion from front to rear are motorized detachments or patrols, supports, and a reserve.

(2) The outpost line of resistance is subdivided into support areas. Supports are numbered from right to left; they vary in size from a rifle platoon to a rifle company and are reinforced by attachments from the heavy weapons company and the antitank platoon. Small groups (outguards) are posted by the supports to maintain observation over the support sector.

(3) The size of the reserve depends on the width of the outpost sector and the mission. If the mission is delay, only a small reserve need be held out. If the mission is to hold the outpost line of resistance, a larger reserve is designated. The reserve usually will not exceed a rifle company.

(4) Some heavy machine guns usually will be attached to the supports. (See FM 7-15.) Heavy machine guns having the primary mission of antiaircraft defense during daylight hours usually remain under control of the outpost commander. Such guns may be moved and attached to supports at night or during periods of reduced visibility. 81-mm mortars are emplaced to fire in support of the outpost line of resistance. Artillery defensive fires are prepared. The antitank platoon is disposed to cover approaches to the outpost position; elements of the platoon with the reserve may be held mobile prepared to move rapidly to any one of several previously reconnoitered positions. The battalion commander maintains communication with the support by wire, radio-telephone, and messenger.

(5) Patrols cover the intervals between the supports and the foreground of the position. Distant patrolling is conducted in accordance with instructions from higher headquarters.

(6) Weapon carriers are with the outpost. Kitchen and baggage trucks and the battalion ammunition train usually remain with the regimental trains.

■ 107. BATTALION OPERATING ALONE.—When the battalion bivouacs alone, the battalion commander details the bivouac outpost and interior guard. He prescribes the necessary measures for antiaircraft security and antimechanized defense, and for the local protection of the battalion trains and the command post against attacks by small groups of the enemy who may succeed in infiltrating through the bivouac outpost.

a. *Bivouac outpost.*—The bivouac outpost may consist of one rifle company and attached supporting weapons. The company is responsible for the all around protection of the bivouac area. It covers approaches to the area by locating detachments at critical points, establishing road blocks, and by patrolling. It normally does not hold out a reserve. Sufficient force for necessary patrols may be centrally located or the detachments may be required to do the necessary patrolling. Ordinarily the antitank platoon and not more than one platoon of heavy machine guns are attached to the bivouac outpost. In case of attack the battalion occupies a previously reconnoitered locality for defense. Communication within the outpost may be by wire, radiotelephone, and messengers.

b. *Antiaircraft security.*—At least one platoon of heavy machine guns is employed for the antiaircraft protection of the bivouac area. The guns are emplaced in open spaces on high ground around the perimeter of the bivouac area. All guns are carefully camouflaged.

c. *Antimechanized defense.*—Antitank guns attached to the bivouac outpost retain their prime movers for rapid movement to threatened areas. Men armed with M1903 rifles and antitank grenades are posted to cover those approaches to the bivouac area not covered by antitank guns.

CHAPTER 8

THE OFFENSIVE

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SECTION I

GENERAL

■ 108. REFERENCES.—For fundamental doctrines of offensive combat, see FM 100-5 and 7-40. For tactics of the rifle company and heavy weapons company, see FM 7-10 and FM 7-15. For tactics of the battalion antitank platoon and the anti-tank company, see FM 7-35. For details of antimechanized defense, see FM 5-30.

SECTION II

APPROACH MARCH

■ 109. GENERAL.—*a.* For the battalion, the approach march begins when it changes from route march formation to one made up of several smaller columns and ends when its attacking echelon crosses the line of departure. The battalion ordinarily initiates the approach march upon receipt of a development order from the regimental commander. (See FM 7-40.) However, when necessary to reduce losses from artillery or air attack, battalion commanders promptly initiate the development of their own units. The commander of

an advance, flank, or rear guard battalion also initiates its development when necessary to increase readiness for action.

b. The planning and conduct of the approach march of a leading battalion by day are considered in paragraphs 110 to 119, inclusive. The conduct of the approach march of a rear battalion is covered in paragraph 120. For a discussion of a night approach march, see paragraph 121.

■ 110. ORDERS OF BATTALION COMMANDER.—Depending upon his knowledge of the situation, the opportunity for prior reconnaissance, and the instructions received from the regimental commander, the battalion commander initially may issue complete instructions for the movement of the battalion to the final march objective, or he may issue partial instructions and supplement these instructions by fragmentary orders as the approach march progresses. Development orders may include the following:

a. Information of the enemy and friendly troops.

b. Battalion assembly area (position) or other final march objective.

c. Battalion zone of advance, or frontages and directions of advance for subordinate units.

d. Phase lines (successive march objectives) and hours or conditions for continuing the march beyond each of these lines, or instructions for periodic reports of progress.

e. Formation, designation of base company (if any), distance between successive echelons.

f. Instructions for reconnaissance, security, and contact (connecting groups), to include instructions to leading company or companies, and missions of antitank weapons, heavy machine guns (including anti-aircraft defense), and ammunition and pioneer platoon.

g. Instructions for control of motor transport (whether company vehicles are to be retained under battalion control or released to companies), route and method of movement of vehicles retained under battalion control.

h. Instructions for signal communication.

i. Location of march command post or its axis of advance.

■ 111. ZONE AND DIRECTION OF ADVANCE.—a. The regimental development order usually prescribes a zone of advance for

the battalion. (See FM 7-40.) The battalion commander announces it in his field order by designating easily distinguishable terrain features along the lateral limits of the zone.

b. The battalion commander normally prescribes a frontage and direction of advance for subordinate units in order to regulate and control their movements and actions; exceptionally he may prescribe a boundary between leading rifle companies. He usually designates a rifle company as a base company on which other units guide.

■ 112. PHASE LINES (SUCCESSIVE MARCH OBJECTIVES).—*a.* Phase lines are usually employed when the distance to the final march objective is considerable, the width of the battalion zone is abnormal, or the visibility is poor. They serve as intermediate, successive march objectives for the control and coordination of further action. They are particularly valuable in wooded and broken terrain, and when the situation is obscure.

b. Distances between phase lines will depend largely upon the character of the terrain and conditions of visibility; to a lesser extent they depend upon the imminence of contact with the enemy. When contact is imminent, the battalion must be able to protect, with its supporting weapons, the advance of its security elements to the next phase line. Hence, in open country, under conditions of normal visibility, phase lines may be from 1,000 to 2,000 yards apart; when the terrain or visibility limits the observation of supporting weapons, phase lines should be closer together. In open country, when contact with strong enemy forces is not expected, phase lines may be several miles apart.

c. When phase lines are not prescribed by the regimental development order, the battalion may be required to report its progress at stated times or time intervals. In such case the battalion commander may prescribe phase lines on his own initiative, or require reports of progress from his subordinate units. When phase lines are prescribed by the regimental order, the battalion commander may designate intermediate phase lines if required by conditions of the terrain or poor visibility. However, when the advance is made in a

zone of normal width with good visibility in open terrain, phase lines need not be employed since the battalion commander will be able to observe and control the movement or action while advancing generally abreast of his leading echelon.

■ 113. FORMATIONS.—*a.* Depending upon the terrain, width of the zone of advance, and whether the flanks are exposed or are protected by adjacent units, the battalion may be disposed in wedge formation, inverted wedge formation, or column of companies. A wedge formation with one rifle company in the leading echelon, one echeloned to the right rear, and one to the left rear, is a suitable formation when neither flank is secure or when the situation indicates that prompt enveloping action toward either flank may be required. An inverted wedge formation, with two rifle companies in the leading echelon and one in the second echelon, is indicated when the zone of advance is too wide or visibility is too restricted for one rifle company to provide adequate frontal security across the entire zone. A column formation may be employed when the zone of advance is narrow and both flanks are secure; if the battalion has an exposed flank, security is increased by echeloning the rear rifle companies toward that flank. Placing three rifle companies in the leading echelon is avoided; a zone so wide or of such limited visibility that it cannot be secured by two rifle companies requires extensive use of flank patrols.

b. If contact with hostile ground forces is probable during the march, a machine-gun section (or platoon) and a mortar section may be attached to each leading rifle company or directed to follow and support it. Heavy machine-gun elements on antiaircraft security missions may be distributed throughout the width and depth of the formation. The heavy weapons company (less detachments) usually moves abreast of or behind the rear rifle company or companies of the battalion.

c. Since the rear of the battalion is protected by regimental antitank guns and by those of battalions in rear, the battalion antitank platoon usually moves between the leading and second echelons. Messenger and radio elements of the

communication platoon move with the march command post, which is usually with the second echelon. In the absence of an engineer reconnaissance detail a similar detail from the ammunition and pioneer platoon may move with the leading echelon. The remainder of the battalion headquarters company usually moves with the heavy weapons company (less detachments).

d. Distances between echelons will vary from 200 to 500 yards, depending upon the terrain and conditions of visibility.

■ 114. RECONNAISSANCE.—a. Reconnaissance is continuous. Maps and aerial photographs, if available, are used to supplement study of the ground. Friendly troops to the front and on the flanks are valuable sources of information.

b. Unless covering forces to the front are sufficiently strong to protect the regiment against ground attack except by hostile patrols or armored units, the regimental intelligence and reconnaissance platoon usually operates, under regimental control, from 3 to 5 miles ahead of the foot elements of the leading echelon of the regiment. Part of this platoon, usually a reconnaissance squad, may be attached to the battalion when the latter comprises the entire leading echelon of the regiment. Instructions of the battalion commander to an attached unit of this platoon may include—

(1) Route or zone of advance and approximate hour the leading echelon of the battalion will reach each phase line.

(2) Areas to be reconnoitered (such as ridge lines, defiles, stream crossings) and the essential information to be sought.

(3) Arrangements for liaison with friendly units operating in front of the battalion.

(4) Times and places for periodic contacts with the battalion command post; any special instructions regarding reports.

c. The battalion commander directs the commander(s) of the leading company (or companies) as to reconnaissance to be made by dismounted patrols. He may augment the patrols with battalion intelligence personnel.

d. (1) The battalion commander makes a continuing estimate of the situation so that combat action of the battalion

can be initiated in a minimum period. He reconnoiters the zone of advance for areas exposed to hostile observation, gassed areas, and obstacles to motor movement; necessary detours; stream crossings; areas where mechanized or air attack are most probable and ways of avoiding or protecting such areas; favorable routes of approach and tentative firing positions for the battalion supporting weapons; and suitable locations for successive march objectives. He is assisted in his reconnaissance by his staff and by a reconnaissance detail from the heavy weapons company, headed either by the company commander or by the reconnaissance officer. He may also require reconnaissance to be made by the antitank officer, the leader of the ammunition and pioneer platoon, and other subordinates.

(2) When covering forces to the front are sufficiently strong, the battalion commander and his party may precede the battalion in order to obtain early information of the enemy and plan the attack.

■ 115. SECURITY.—*a.* In addition to the security provided by advance motorized elements, the leading echelon provides for frontal security of the battalion. It covers its advance with scouts or patrols. (See FM 7-10.)

b. When the battalion is on an exposed flank, a flank guard is usually detailed by the regimental commander. A small patrol from the leading echelon will usually suffice to protect an interior flank when the interval between the battalion and the adjacent unit is small, the terrain is open, and visibility is good. Under less favorable conditions, larger patrols or detachments (squads or, rarely, platoons) may be detailed from supports or reserves with the mission of providing security and maintaining contact with adjacent units.

c. For antiaircraft security the battalion commander insures full utilization of concealment and dispersion, and assigns antiaircraft missions for heavy machine guns. (See FM 7-15.) He directs the detailing of air-antitank guards to cover the front, flanks, and rear of the battalion.

d. As far as is consistent with the tactical situation, the battalion commander directs the movement of the battalion so as to utilize terrain difficult for hostile tank action. The

location of such terrain is considered in determining phase lines. (See par. 112.) Connecting groups and security patrols may be reinforced with antitank rifle grenadiers.

e. (1) The battalion antitank platoon is employed to provide frontal and flank antitank protection to the battalion. It is usually directed to march and operate as a unit when the battalion zone of advance is narrow or when only one flank of the battalion is exposed to mechanized attack. Distribution by sections is usually essential when an extensive front must be covered or when tank attacks against both flanks of the battalion are possible. When units of the regimental antitank company are attached to the leading battalion, they are disposed to give depth to antitank defense and to provide additional flank protection.

(2) When the terrain affords long fields of fire and wide observation to the front and flanks, antitank guns cover the advance of the battalion by moving by bounds to successive terrain features. Unless an armored attack is imminent, each gun on completing a bound remains coupled to its prime mover in a cover position located near a tentative firing position. Ordinarily the antitank weapons are moved by echelon so that at least part of them are always prepared for action.

■ 116. CONTROL OF MOTOR VEHICLES.—a. Upon initiation of the approach march the regimental commander releases weapon carriers and battalion ammunition vehicles to the leading battalion. The battalion commander releases company transport to units unless the situation or terrain conditions prohibit vehicles from closely following their units; in this event vehicles are moved forward, weapons and an initial supply of ammunition are unloaded and carried by hand, and vehicles revert to battalion control.

b. Since movement by hand of the 37-mm antitank guns is usually impracticable for extended distances, the vehicles of the battalion antitank platoon usually accompany the unit even if movement by circuitous covered routes is necessary.

c. Ordinarily, when other unit transport is retained under battalion control, the vehicles of the heavy weapons com-

pany headquarters and the headquarters truck of each heavy weapons platoon are released to their units.

d. Whenever practicable, transport retained under battalion control follows the battalion by short bounds. Under unfavorable conditions movement by long bounds from cover to cover or by circuitous covered routes may be necessary.

■ 117. SIGNAL COMMUNICATION.—Communication is maintained by foot and motor messengers, by visual signals, and by radio when not silenced. Wire is not laid until initial command and observation posts for the attack are established. In using pyrotechnic signals the possibility of disclosing the presence of troops to the enemy must be considered.

■ 118. SUPPORTING ARTILLERY.—The battalion of light artillery which normally supports the infantry regiment is usually given the mission of direct support for the leading infantry battalion(s). An artillery liaison officer with his liaison section accompanies the commander of each leading infantry battalion. Artillery battery forward observers advance with each rifle company in the leading echelon.

■ 119. CONDUCT OF APPROACH MARCH.—*a.* The units of the leading echelon, moving on a broad front, advance aggressively from one phase line to the next or as directed by the battalion commander. By close adherence to the prescribed direction of advance or by regulation on the base company, delays for readjustment are avoided. Minor deviations from the prescribed direction of advance are authorized in order to take advantage of trails or more favorable terrain. Principal roads, important road junctions and crossroads, and prominent landmarks are avoided.

b. Companies in rear of the leading echelon take advantage of cover, and where practicable, use trails or secondary roads.

c. The appropriate supporting weapons of the battalion are kept in constant readiness for use in defense against hostile air and mechanized attacks and are prepared to render prompt support to the leading echelon. When covering forces in advance of the battalion are sufficiently strong, heavy machine-gun and antitank-gun elements may be sent ahead in order to establish antiaircraft security and antimechanized

defense for a defile or for the battalion assembly area prior to the arrival of the battalion. When the battalion is to relieve or pass through other infantry units, elements of the heavy weapons company and the antitank platoon may be sent ahead to supplement the covering forces and occupy initial firing positions for the attack prior to the arrival of the rifle companies.

d. Regular halts are omitted. Such halts as are necessary to rest or reorganize the troops are made on phase lines or at the time when periodic reports of progress are made. (See par. 112.) Higher commanders provide for long halts as indicated by the situation; when such a halt is made, a march outpost is established by the leading battalion.

e. The actions of the leading battalion upon encountering the enemy are similar to those prescribed for an advance guard battalion in paragraph 95e.

■ 120. DAYLIGHT APPROACH MARCH, REAR BATTALION.—A battalion in rear of the leading echelon of a regiment seeks maximum concealment, but maintains readiness for action against ground forces. Except for variations noted below, the principles enunciated in the preceding paragraphs are equally applicable to the rear battalion.

a. *Distribution of troops.*—The heavy weapons company (less those machine-gun elements providing antiaircraft security to rear elements of the battalion) may move in the leading echelon in order to establish early protection for the battalion when it halts on phase lines or occupies an assembly area.

b. *Route of advance.*—Greater advantage is taken of paths and trails. Movement is directed along the edges of woods and cultivated fields and along the sides of ravines or hills to make concealment and progress easier.

c. *Contact.*—The battalion maintains contact with the leading battalion by means of connecting groups; a liaison officer provided with means of radio communication may also be used on occasion.

d. *Motor vehicles.*—The motor elements of the battalion, less those essential for reconnaissance, security, and control, are grouped in either a battalion or a regimental motor

serial. The battalion transport officer usually controls the battalion vehicles.

e. Signal communication.—The march command post moves with the leading echelon.

■ 121. NIGHT APPROACH MARCH.—The procedure, except as noted below, is as prescribed for night marches in chapter 6.

a. Reconnaissance.—When practicable, the battalion commander conducts a daylight reconnaissance of the route of march and of the battalion assembly area or other final march objective. When practicable, he takes with him company guides who will conduct the companies from their point of release from the battalion column to their respective locations on the final march objective.

b. Orders of battalion commander.—The battalion commander's order includes the following:

(1) The latest information relative to the enemy and friendly troops, including the security force.

(2) March objective.

(3) Route.

(4) Initial point.

(5) Time the head of the leading unit passes initial point.

(6) Formation of the battalion.

(7) Special measures prescribed for security, secrecy, and control.

(8) Instructions as to dispositions and security measures to be taken upon arrival at the final march objective or when and where such instructions will be issued.

(9) Instructions relative to company transport and battalion train.

(10) Location of the battalion commander.

c. Distribution of troops.—Usually the foot elements of the battalion are marched in column without distance. With the exception of the vehicles needed for command and control purposes, transport is held in a concealed area and moved forward so as to arrive at the final march objective shortly after the foot elements arrive. The battalion anti-tank platoon usually moves with the battalion motor serial. (See *e* below.)

d. Control.—The success of a night approach march depends in great measure upon the forethought exercised to insure control. Successive bounds, when used, are shorter than in daylight. Routes are carefully marked. At the final march objective, guides are provided and active supervision is exercised by the battalion commander and his staff, in order to insure that units move to their assigned locations without halting.

e. Security.—If practicable contact is gained before dark with the security force covering the march objective and its dispositions are made known to the battalion. In some situations a motorized detachment, including antitank guns and heavy weapons, may be sent ahead of the battalion to outpost the battalion march objective. For other security measures in a night march, see chapter 6.

f. Signal communication.—Chief reliance for signal communication is placed on the foot messenger. Radios normally are silenced. Pyrotechnic or other visual signals, and sound signals when close to the enemy, are prohibited except in an emergency following certain discovery of the movement by the enemy. Some use may be made of motor messengers, particularly between battalion and regimental command posts.

SECTION III

ASSEMBLY AREAS (POSITIONS)

■ 122. GENERAL.—*a.* When the battalion is an advance guard or the leading unit in an approach march not protected by friendly forces to the front, it may go into action directly from the approach march. When practicable, however, the battalion interrupts its approach march to occupy an assembly area preliminary to deployment for attack. In the assembly area the attack is organized; equipment not essential to combat is discarded; any weapon carriers under battalion control are released to company control; and extra ammunition is issued to rifle companies. (See par. 88b.) Reconnaissances and plans for the attack are completed while the troops are in their assembly positions.

b. (1) When the attack is to be launched approximately at dawn, the battalion may be rested in a rear assembly area

and conducted under cover of darkness to a final assembly area. Movement to the final assembly area is made at such time as will insure complete and coordinated dispositions for the attack. The utmost precautions must be taken to preserve secrecy.

(2) If the rear assembly area is less than 1 hour's march from the line of departure, companies usually move directly to their attack positions without halting in a final assembly area.

■ 123. ASSIGNMENT OF BATTALION ASSEMBLY AREA (POSITION).—*a.* The battalion assembly area usually is designated by the regimental commander; exceptionally, it is selected by the battalion commander.

b. Except when a rear assembly area is occupied preparatory to an attack at dawn, the assembly area should be the most forward locality in rear of the line of departure which affords cover from small-arms fire and concealment from hostile air and ground observation. It should be sufficiently large to permit dispersing all elements of the battalion. Terrain is desirable which permits all around observation on or near the perimeter of the area, turn-arounds for motor vehicles, and natural protection against mechanized attack.

■ 124. RECONNAISSANCE AND OCCUPATION OF ASSEMBLY AREA.—*a.* The regiment may send a quartering party, which includes the battalion quartering party, to the assembly area. (See FM 7-40.) Composition and operation of the battalion quartering party are generally the same as for movement into a bivouac. (See par. 104.)

b. When time prior to the attack is short, the battalion commander usually will be engaged in reconnaissance and preparation of plans for the attack while the assembly area is being reconnoitered. He then informs the quartering officer of his contemplated formation for the attack and any desired arrangement of units within the assembly area. He directs the quartering officer to allot space to all elements of the battalion, including attached units. When time permits, the battalion commander precedes his battalion to its assembly area in time to reconnoiter the area and approve

the allotments of space made by the quartering officer, or direct the necessary changes.

c. So far as practicable units are placed in the assembly area to conform to their prospective employment in order to facilitate their forward movement to attack positions. Due consideration also is given to concealment and dispersion of troops and transport.

d. All elements of the battalion move directly to their designated positions in the assembly area without pausing. Congestion is avoided.

■ 125. SECURITY.—a. Each battalion commander is responsible for the local security of his battalion, including the establishment of an air-antitank warning system. The regimental commander will coordinate the security measures taken by the battalion commanders (see FM 7-40) and have the advance guard or leading battalion establish an outpost to protect the assembly position of the regiment.

b. The occupation of a battalion assembly area is protected by elements of its leading rifle company (or companies). Each company in the assembly area is responsible for its own local security.

c. The battalion commander should direct that part or all of the heavy machine guns occupy positions to provide anti-aircraft security and local security to the assembly area. Positions which afford all around fire are sought on or near the perimeter of the assembly area. Any heavy machine guns not employed on anti-aircraft security missions and the 81-mm mortars may be temporarily emplaced to support the action of the covering force, outpost, or local security detachments.

d. Protection against mechanized attacks striking deep in flank or from the rear is normally provided by regimental antitank guns or by adjacent units. The battalion antitank platoon is ordinarily employed to provide protection to the front and forward flanks of the assembly area. It is directed to occupy, as a unit or by sections, positions which cover the most favorable approaches for hostile armored vehicles prepared to repel attacks coming from specified directions.

e. Instructions for the antitank platoon, for heavy machine guns employed for anti-aircraft security, and for local security elements, are issued in time for these elements to move to

positions directly from the approach march without halting in the assembly area.

f. For passive measures for security and local protection, see paragraph 69.

g. If the occupation of the assembly area is to continue from daylight into darkness, plans are made in daylight for changes in the positions of weapons or local security detachments to be effected at dark. If practicable the battalion commander should request authority to move the entire battalion shortly after dark to a new assembly area located at least $\frac{1}{2}$ mile from the area occupied in daylight.

SECTION IV

CHARACTERISTICS AND METHODS OF ATTACK

■ 126. GENERAL.—The battalion ordinarily attacks as part of the regiment. The regimental attack order assigns each battalion in the attacking echelon a mission (usually the capture of a terrain objective), designates its zone of action or frontage, indicates supporting (or attached) units, prescribes a line of departure, and usually fixes the time of attack. Intermediate terrain objectives may be prescribed.

■ 127. CHARACTERISTICS OF ATTACK.—*a. Meeting engagements.*—A meeting engagement is a collision between two opposing forces neither of which is fully prepared for combat. The time element is usually vital and the force which attacks first in a decisive direction will gain a tremendous advantage. The conduct of an advance guard battalion in such a situation is discussed in chapter 6. Regimental orders to battalions in rear are usually issued in fragmentary form. The battalion commander is frequently directed to continue the movement of his battalion toward a prescribed area while he reports for orders. Following receipt of the order, reconnaissance must be limited to essentials, decisions promptly reached, and orders to subordinates issued by the most expeditious means. The control of supporting weapons is frequently decentralized. Ordinarily the attack should be coordinated so far as this can be accomplished within a limited time. Speed in launching the attack and rapidity of action

are more essential to success, however, than thoroughly coordinated and powerful fire support.

b. Attack against discontinuous resistance.—Resistance that is not continuous may be encountered by an advance guard battalion, by leading battalions in approach march, or by battalions engaged in pursuit. Maneuver by the leading elements rather than the organization of a powerful attack is relied upon to reduce such resistance. Infiltration of small groups along covered approaches and the continued advance of elements which encounter no resistance will outflank isolated detachments and usually bring about their withdrawal. Hostile elements continuing to resist are reduced by encirclement or by combined frontal and flanking action.

c. Attack against an organized position.—Thorough coordination and either tank support or the development of great fire power in the initial stages are required when the enemy has prepared his position and organized his fires. The delays required for preparing and coordinating the attack of such a position will vary with the degree to which the enemy has been able to organize his defense; against a highly organized position they may be considerable. Preparations must be made as rapidly as is consistent with thoroughness in order to reduce to the minimum the time available to the defender for improving his defenses.

■ 128. METHOD OF ATTACK.—*a.* Whether an attack is the result of a meeting engagement, is directed against discontinuous resistance, or is a deliberate attack against an organized position, its conduct is essentially the same. Differences exist mainly in the coordination and speed developed in the opening phase.

b. The battalion attacks in daylight by combining fire and movement to close with the enemy and then by employing shock action to complete his destruction or capture. Fire weakens the enemy by inflicting casualties and neutralizes his elements by forcing them to take cover; in the presence of the enemy, fire must be used to protect all movements not masked by cover, or by fog, smoke, or other conditions of reduced visibility. Through movement the battalion increases its fire effect by decreasing the range and by placing elements in positions on the hostile flank from which they

can develop convergent fires; by movement, also, the battalion advances its attacking echelon close enough to the hostile position to permit the assault to be made with hand grenades and the bayonet.

c. The battalion envelops by preference. However, in the initial stages of an attack against a hostile position it is seldom possible for the main attack of the battalion to be directed so as to pass the flank of the hostile position and strike its flank and rear, unless the battalion is on an exterior flank of a larger force. An interior battalion must usually make what is essentially a frontal attack. However, it endeavors to combine flanking with frontal action by effecting a penetration. The penetration secures positions from which flanking fire of light machine guns and other flat-trajectory weapons can be placed on hostile elements still resisting, or from which attacks of supports and reserves can be directed against the hostile flank or rear.

d. The cover from fire and concealment from observation afforded by the terrain will seldom be uniform in all parts of the battalion zone of action, nor will the available supporting fires normally be sufficient to neutralize at one time all the hostile forces opposing the advance of the battalion. The battalion commander's plan, therefore, must provide for a concentration of effort for the purpose of advancing a portion of the attacking echelon toward objectives whose capture will facilitate the advance of the remainder of the battalion. This constitutes the main attack. It is usually made through the weakest part of the hostile dispositions, that is, in terrain where the defender cannot use his weapons to advantage, where covered approaches permit an advance close to his position, or where his defensive works are exposed to observation by the attacker's heavy weapons and artillery. The main attack must be made in conjunction with a secondary attack in order to force the defender to disperse his efforts so that he cannot use his full defensive strength against one portion of the attacking echelon. In attack orders, however, the battalion commander does not distinguish between, nor use the terms "main attack" and "secondary attack."

e. To increase the power of the main attack the battalion commander concentrates the bulk of his supporting fires on

those targets whose destruction or neutralization will most effectively assist its advance. (See FM 7-15.) The power of the main attack may also be increased by assigning to it a narrower zone of action than that given to the secondary attack.

f. The secondary attack is designed to hold the enemy in position, to deceive him as to where the main attack is being made, to prevent him from reinforcing the elements opposing the main attack, and to cause him to commit his reserves prematurely and at an indecisive location. Since these purposes can best be accomplished by a vigorous advance, the secondary attack is seldom directed to support the main attack, initially, by fire only. It is given this mission only when its departure position lies within effective range of its objective and when its zone of advance is so lacking in cover that its initial advance depends upon the capture of a terrain feature by the main attack. When given such an initial mission, the secondary attack advances, at the latest, as soon as it is able to maneuver elements in rear of the main attack so as to facilitate its own advance by flanking fire.

SECTION V

RECONNAISSANCE, PLANS, AND ORDERS FOR AN ATTACK AGAINST AN ORGANIZED POSITION

■ 129. RECONNAISSANCE.—Upon receipt of the regimental attack order the battalion commander conducts reconnaissance, formulates his plan, and prepares to issue his attack order. The battalion commander conducts his personal reconnaissance and directs that of his staff so as to obtain information of the following:

a. Zone of action, assigned line of departure, and battalion objective(s).

b. Critical points and areas held or likely to be occupied by the enemy.

c. Areas swept or likely to be swept by hostile flat-trajectory fire.

d. The location, extent, and type of obstacles; the location of gassed areas.

e. The location, nature, and extent of favorable avenues of approach to the hostile position (areas where the defender's

observation and fire are restricted by the nature of the terrain).

f. The location of suitable company objectives.

g. The location of any friendly units through which the battalion is to pass and determination of assistance that may be expected from them.

h. The location of suitable position areas and targets for supporting weapons.

i. Determination of the extent to which the battalion ranks will be initially protected by the location of adjacent units and the nature of the intervening terrain.

j. Suitable locations for the reserve, for supply and evacuation facilities, and for the battalion observation and command posts.

k. Location of likely avenues for hostile tank attack.

■ 130. FORMULATION OF PLAN.—Based on the information secured by reconnaissance, the battalion commander decides how best to employ the elements of his battalion and attached or supporting units in order to accomplish his mission promptly and with the fewest casualties. He makes any necessary adjustments in his tentative plan of attack. His final plan of attack must insure maximum teamwork between the attacking rifle elements and the supporting weapons. It consists of two main parts, the plan of maneuver and the plan of supporting fires. In addition, it covers the administrative details of supply and evacuation, and the establishment of the signal communication system necessary for control. (See fig. 8 ○.)

■ 131. PLAN OF MANEUVER.—The battalion commander's plan of maneuver is his plan for employing his rifle companies to accomplish his mission. It includes determination of company objectives; where and in what direction the main and secondary attacks are to be made; zones of action of the attacking rifle companies; formation of the battalion; security measures initially necessary; and in some cases the time of attack.

a. Objectives.—(1) The regimental attack order usually directs each leading battalion to capture a terrain objective or a succession of terrain objectives. (See FM 7-40.) The

objective assigned to the battalion (or the *initial* objective where more than one is assigned) may be located so far in rear of the hostile main line of resistance that the assignment of portions of this objective as initial objectives for leading rifle companies would result in the attack breaking down into separate, uncoordinated attacks by isolated companies. To prevent this the battalion commander selects intermediate terrain features and assigns them as successive objectives to his attacking rifle companies.

(2) Suitable successive objectives for the main attack are those terrain features whose capture will make untenable nearby portions of the enemy position or which will facilitate flanking or enveloping action against them. The first of these successive objectives, which should constitute the initial battalion objective, is usually the first critical terrain feature in rear of that on which the hostile main line of resistance is located.

(3) Suitable successive objectives for the secondary attack are hostile positions which prevent or impede the advance of the main attack, or terrain features on which such hostile positions could be established.

(4) Objectives assigned to attacking companies should—

(a) Be easy to recognize on the ground.

(b) Be visible from the line of departure or previous objective whenever practicable. (Suitable objectives for the company making the main attack may lie beyond and be masked by terrain occupied by hostile forward groups. Also an objective may not be visible because of intervening woods used as a covered approach by an attacking company.)

(c) Be such that their attainment will promote the accomplishment of the mission of the regiment and facilitate probable future action.

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

(e) Whenever practicable be within effective range of battalion supporting weapons located on or in rear of the line of departure (or last previous objective).

(5) No pause is made on any objective forward of the initial objective assigned to the battalion, except where imperative for reorganization. Continuity of fire support is

insured by prompt forward displacement of organic and attached supporting weapons.

b. Location of main and secondary attacks.—(1) *Main attack.*—Prior to the attack, knowledge of the hostile dispositions and strength will usually be incomplete since the enemy will seldom disclose his exact strength or dispositions until forced to do so. The battalion, therefore, primarily attacks *terrain*. The location of the main attack of the battalion may be prescribed in the regimental order. Otherwise the battalion commander directs his main attack at the weakest part of the hostile position in his zone. (See par. 128*d*.)

(2) *Secondary attack.*—An interior battalion is usually assigned a zone of action from 500 to 1,000 yards in width. It is not necessary that elements of the battalion extend continuously across this entire zone; part of the zone often can be covered by fire, by small patrols, or by both. Where the battalion zone is narrow, the unit making the secondary attack may be given all of the battalion zone not allocated to the main attack, in order to permit maneuver of its elements. In a wide zone a gap may be left between the units making the main and secondary attacks; the unit making the secondary attack then is directed to attack in a zone of action which contains the best remaining cover and concealment.

c. Direction of attack.—The battalion commander designates the direction of attack by magnetic azimuth and, whenever practicable, by successive landmarks. When the main attack and secondary attack initially are convergent (for example, when the main attack is directed to outflank hostile resistance on the initial battalion objective while the secondary attack is made frontally), separate directions of attack should be prescribed for each. Otherwise only a single direction of attack indicating the general direction of advance of the battalion as a whole is ordinarily prescribed.

d. Zones of action.—(1) Each rifle company in the attacking echelon is assigned a zone of action. It is responsible for driving out or destroying all hostile elements within its zone.

(2) The battalion commander ordinarily does not designate boundaries between companies but defines their zones of ac-

tion by assigning each company an area or a section of the line of departure from which to start its attack and by establishing the lateral limits of its objective(s). If desired the width of the zone may be indicated by directing that the company attack on a frontage prescribed in yards. An interior company may be assigned a zone of action from 200 to 500 yards wide.

(3) Companies remain within the battalion boundaries unless they are authorized to cross them by the battalion commander or his representative. However, either attacking company is authorized to move elements in rear of the adjacent company of its own battalion in order to execute a flank attack or place flanking fire on the enemy.

e. Attack positions.—The regimental attack order may direct the battalion to attack from a given area or locality; this is particularly applicable to an exterior battalion making an envelopment. Usually, however, the regimental commander prescribes a line of departure. At times a line of departure prescribed by the regimental commander may be difficult to locate on the ground or be so located that it cannot be reached without exposure to hostile observation and fire. Under these circumstances the battalion commander should prescribe a more suitable line of departure or direct each attacking company to launch its attack from a prescribed area; these attack positions must not be in advance of the line of departure prescribed by the regimental commander.

f. Reserves.—(1) Initially, a portion of the rifle strength must be held in reserve for later use in repelling counterattacks, replacing an exhausted or disorganized part of the attacking echelon, exploiting a hostile weakness developed by the attacking echelon, or striking the final blow necessary to capture an objective.

(2) The reserve may vary in size from one platoon to two companies (see *g* below). When the reserve that can be held out initially is considered inadequate, the battalion commander may also require that company commanders secure his prior approval before committing their supports.

(3) The reserve is placed initially in a locality where it is afforded protection against hostile observation, flat-

trajectory fire, and air or mechanized attack. It should be able to move rapidly to points of possible employment, particularly to further the main attack. If the battalion is making an envelopment the reserve usually is disposed toward the outside flank so that it may promptly extend or exploit the envelopment. When the battalion has an exposed flank, the reserve should be disposed so that it can move promptly to meet any hostile threat that may develop.

g. Formation.—The formation of the battalion is governed by the relative strength of the main and secondary attacks and of the reserve. Most frequently the battalion commander will place one rifle company in the main attack, one in the secondary attack, and one in battalion reserve. When he has only two rifle companies at his disposal, the battalion commander normally takes the reserve from one rifle company and uses the remainder of that company to make the secondary attack. When the situation is obscure, the zone of action is narrow, or passage through part of the zone is to be avoided, both the main and secondary attacks may be made by elements of one rifle company; the two rifle companies in reserve may be in column behind the leading company or echeloned toward an exposed flank. Exceptionally, when the battalion is making a secondary attack on a very broad front with limited objectives requiring a short advance and with hostile resistance expected along virtually the entire front, three rifle companies may be placed in the attacking echelon and one or two platoons, from one or two different companies, held in reserve.

h. Security.—(1) *Flank.*—(a) The battalion commander is responsible for the close-in protection of his flanks throughout the attack irrespective of any flank protective measures that may be taken by the regimental commander. Protection of an interior flank is usually provided by the presence of the adjacent unit if that unit is ahead or generally abreast; it is then sufficient to employ a connecting group to maintain contact with the adjacent unit and to report periodically the location of its nearest flank. A flank security patrol should be detailed for an exterior flank or for an interior flank where the location of the adjacent unit, or the nature of the intervening gap, would permit a hostile counterattack to

strike the flank of the battalion without coming under effective fire from the adjacent unit. The size of the security elements depends upon the terrain, distance to any adjacent unit, and probable number of messages to be sent back; for an interior flank the size will seldom exceed one rifle squad. (For the method of operation of connecting groups and flank security patrols, see FM 7-10.) All connecting groups and flank security patrols may be furnished by the reserve, or they may be furnished for one flank by the unit making the secondary attack. Preferably they operate directly under the battalion commander; however, the commander of a reserve company may be made responsible for flank security.

(b) Other measures for providing security on an exposed flank may include locating the reserve toward that flank and disposing heavy machine guns so that they can cover the exposed flank in addition to their other missions.

(2) *Antiaircraft*.—The battalion commander insures that each company details air-antitank guards. (For the standard warning signal, see par. 66b.) Security against air attack is also gained by dispersion of all units and vehicles and by concealment of all elements not yet engaged. The battalion commander's instructions must insure that fire is not opened on hostile airplanes by units or from vehicles whose concealment is essential and is believed to have been achieved. In case of air attack, subordinate leaders of other units (and drivers of vehicles) direct the fire of rifles, automatic rifles, and heavy machine guns at attacking airplanes when, in their opinion, the air attack is a more immediate threat than are available ground targets.

(3) *Antimechanized*.—(a) The battalion commander employs his antitank platoon for the protection of the front and flanks of the attacking echelon of the battalion; deeper protection to the flanks and rear is provided by the regimental commander. Usually the battalion commander directs that the platoon initially occupy a designated firing position area or that its sections occupy designated areas prepared to protect the attacking echelon by fire in specified directions of likely enemy mechanized attack. These directions are best defined by reference to prominent terrain features visible from the firing position area(s). (For conditions under

which fire should be opened, see par. 63.) The attack order should also prescribe at least the next position area(s) to which the platoon or its sections are to displace and the time at which the displacement is to be effected. The time is usually fixed by prescribing that displacement be made immediately upon the capture by the attacking echelon of certain specified terrain features. The mission(s) to be accomplished in the new location are included.

(b) When it is manifestly impossible to foresee the best employment of the platoon after displacement from initial positions, the battalion commander may direct the platoon leader to maintain the protection of the attacking echelon and leave to him both the selection of new firing position areas and decision as to the method of operation of the platoon.

(c) Exceptionally, the platoon or elements thereof may be attached to attacking rifle companies or be directed to follow and protect them.

(4) *Command post.*—The battalion commander must insure that the command post is provided with adequate local security against attack by hostile patrols or air-borne troops. For details, see paragraph 44.

i. Time of attack.—(1) The time of attack is usually prescribed by the regimental commander; depending on the instructions received from him, it may be announced as a definite hour or subordinate elements may be directed to commence the attack on a prescribed signal or at the time a prescribed tactical action occurs.

(2) When the time of attack must be determined by the battalion commander, he allows time for the movement of the battalion to its attack positions and also for the necessary reconnaissance, preparation of plans, and issuance of orders by himself and his subordinate leaders when these activities cannot be carried on concurrently with the movement.

(3) If the battalion commander prescribes a line (or areas) of departure in rear of the line of departure set by the regimental commander, he must advance the time of attack sufficiently to insure that his leading elements will cross the regimental line of departure at the time prescribed in the regimental order.

■ 132. PLAN OF SUPPORTING FIRES.—The plan of supporting fires must be designed to support the plan of maneuver and give maximum assistance to the advance of the main attack. Therefore the major portion of the available fire support is directed initially against the targets most likely to endanger the main attack, whether they are in its zone of action or in adjacent zones. The plan includes determination of the employment to be made of the fires of battalion supporting weapons and of the fires of attached or supporting artillery, cannon company weapons, chemical units, and combat aviation.

a. Fires of the heavy weapons company.—(1) Exceptionally, when the nature of the terrain makes control extremely difficult, heavy machine-gun and 81-mm mortar units may be attached to rifle companies of the attacking echelon. Ordinarily, however, the battalion commander retains control of these units and employs them through orders issued to the heavy weapons company commander. The battalion commander plans to employ their fires in coordination with, and to supplement the fires of, the artillery and the regimental canon company and those of any available chemical units. To effect coordination between the various units under his control the battalion commander designates the position area to be occupied by the heavy weapons company or, if practicable, by each of its platoons. These position areas and the initial fire missions of the company are announced in the battalion order. When fragmentary orders are issued to a rifle company commander, information of positions and missions of the heavy weapons company which will directly affect the rifle company's operations is included. (For suitable targets for the heavy machine gun and 81-mm mortar and for the characteristics of suitable position areas for heavy weapons units, see FM 7-15.)

(2) Heavy weapons are emplaced initially as close as practicable to the line of departure to delay forward displacement for the maximum time. It is desirable for the heavy weapons to be able to cover, from their initial positions, the advance of the attacking echelon to the initial battalion objective.

(3) Short preparatory machine-gun fires may be employed in conjunction with an artillery preparation. 81-mm mortars seldom fire prior to the time of the attack.

b. Artillery fires.—(1) An artillery battalion usually is placed in direct support of the infantry regiment. The infantry regimental commander and the artillery battalion commander prepare the general plan of artillery fire support. This includes the location and duration of any preparatory fires to be put down prior to the time of attack, the priority in which the artillery is to give support to the attacking battalions during the initial stages of the attack, and the pyrotechnic signals to be employed in calling for the placing or lifting of artillery fires.

(2) The supporting artillery sends a liaison detail, including a liaison officer, to each attacking infantry battalion (see par. 21). The infantry battalion commander and the artillery liaison officer prepare the detailed plan of close artillery fire support. In accordance with his plan of maneuver the battalion commander indicates to the liaison officer the exact locations on which he desires artillery fire to be placed or for which he desires the data to be prepared so that fires may be placed upon call. For each location where fire is to be placed, the battalion commander indicates the duration and density of fire desired and the purpose the fire is intended to accomplish. Where appropriate, he also indicates the sequence in which the targets are to be engaged. The liaison officer makes the necessary arrangements for securing the fires requested. For fires which are to be placed or lifted on call from attacking rifle company commanders the battalion commander and liaison officer mutually agree on at least one alternate means for the company commanders to employ in transmitting the request, to supplement the pyrotechnic signals prescribed by the regimental commander.

(3) When a rifle company is to attack through terrain which prevents effective observation from any point in rear, the artillery liaison officer will often be able to arrange for a battery forward observer to follow it; this will frequently be the only way of insuring effective artillery support to the company. For a discussion of the operations of battery forward observers, see paragraph 21*d*.

c. Cannon company fires.—(1) A 75-mm platoon of the regimental cannon company usually is placed in direct support of an attacking rifle battalion; occasionally it may be attached. When in direct support, any employment of the platoon in preparatory fires is directed by the regimental commander.

(2) The cannon platoon stations a representative with the battalion commander. He is equipped to communicate the battalion commander's requests for fire support to the supporting or attached platoon; radiotelephone is used when practicable.

(3) The battalion commander employs the cannon platoon as a highly mobile supporting unit to provide close support to the attacking echelon, often by direct fire. It supplements but does not replace the fires of the supporting artillery. Its primary use is promptly to neutralize or destroy hostile emplacements, pill boxes, machine guns, or forward cannon against which fires of the heavy weapons company are ineffective and on which the fire of the supporting artillery cannot be immediately secured. In case of hostile tank attack it is employed as a powerful reinforcement to the battalion antitank defense.

d. Chemical support.—The 81-mm mortars and supporting artillery may be employed to place smoke screens of limited extent and duration. When the need for an extensive smoke screen can be foreseen, the regimental commander should be requested to arrange for the placing of the screen by the division 155-mm howitzer battalion or by chemical troops. If available a chemical platoon may be attached to the battalion for such missions. A chemical platoon with normal organic ammunition loads is equipped to place a smoke screen 800 yards in length and to maintain it under average wind conditions for approximately 25 minutes.

e. Support of combat aviation.—For methods of obtaining support of combat aviation, appropriate missions, and prearranged means of identification, see FM 7-40 and 31-35.

■ 133. SUPPLY AND EVACUATION.—Before deciding on the supply and evacuation details of his plan, the battalion commander usually considers the recommendations of the battalion S-4 for the location of the battalion ammunition dis-

tributing point and route of ammunition advance, and the recommendations of the battalion surgeon regarding establishment of the battalion aid station. For further details, see chapters 4 and 5 and FM 7-30.

■ 134. SIGNAL COMMUNICATION.—*a.* The initial general location of the command post and the axis of its advance (axis of signal communication) normally are prescribed by the regimental commander. Otherwise they are determined by the battalion commander. The initial location of the command post should be as far forward as practicable. For details of the establishment and operation of command posts, see paragraphs 40 to 42, inclusive.

b. Communication between the command post and observation post ordinarily is established by radiotelephone and messenger, and, when practicable, by telephone. The command post of the heavy weapons company is located near the battalion command post. Communication between the battalion command post and the rifle companies is by messenger, radio, and visual signals. Between the battalion and regimental command posts communication is by radio, telephone, telegraph, and messenger (motor or foot). Communication between the battalion and aviation ordinarily is conducted through the regimental command post, but may be direct by means of radio, panels, dropped and picked-up messages, and pyrotechnic signals.

■ 135. ATTACK ORDERS.—*a.* It is essential in offensive situations that subordinates be informed without delay of plans for the employment of their units in order that they may have the maximum available time for reconnaissance and the preparation of their plans. For this purpose warning and fragmentary orders are used freely. (See par. 25.)

b. Battalion attack orders include—

(1) Pertinent information of the enemy which is not already known by the companies.

(2) Information relative to the situation and missions of the regiment, adjacent battalions, supporting artillery, tanks, aviation, and covering force, not already known by the companies and which have a direct bearing on the battalion's attack.

(3) Battalion mission, formation, objective, plan of maneuver, zone of action, line of departure, direction of attack, and hour of attack.

(4) Specific instructions to each rifle company in the attacking echelon, including its zone of action and objective(s) and any security mission assigned it.

(5) Instructions to the antitank platoon and the heavy weapons company, including general position areas, principal direction(s) of fire for antitank guns, targets or sectors of fire for heavy weapons, and conditions or time for opening fire and for forward displacement if that can be foreseen.

(6) Reserve; initial location; contemplated employment, if determined; security or other special missions.

(7) Instructions regarding any alterations or additions to standing operating procedure, or concerning security, secrecy, or other matters, which apply to more than one subordinate unit.

(8) Initial location of ammunition distributing point, route of advance of ammunition, and any alterations or additions to standing operating procedure.

(9) Instructions relative to company transport and the battalion train.

(10) Initial location of aid station.

(11) Any alterations or additions to signal operations instructions or standing operating procedure; special provisions for the use of radio or wire communication; initial location of battalion command post and observation post, and axis of signal communication.

c. For discussion of battalion field orders, see paragraph 25.

SECTION VI

CONDUCT OF THE ATTACK

■ 136. FLEXIBILITY.—*a.* An attack seldom progresses exactly as planned. The battalion commander should carry out his plan vigorously but not adhere to it blindly. He must be alert to exploit favorable developments and overcome unforeseen obstacles. He gives his main attack all the assistance at his command so long as it has a chance of success, but if enemy resistance blocks all its efforts to advance, he must be

prepared to shift his main attack to another part of his front where hostile weakness has been discovered.

b. For schematic representation of a battalion plan of attack and supporting fires, and for subsequent maneuver in the conduct of the attack, see figure 8.

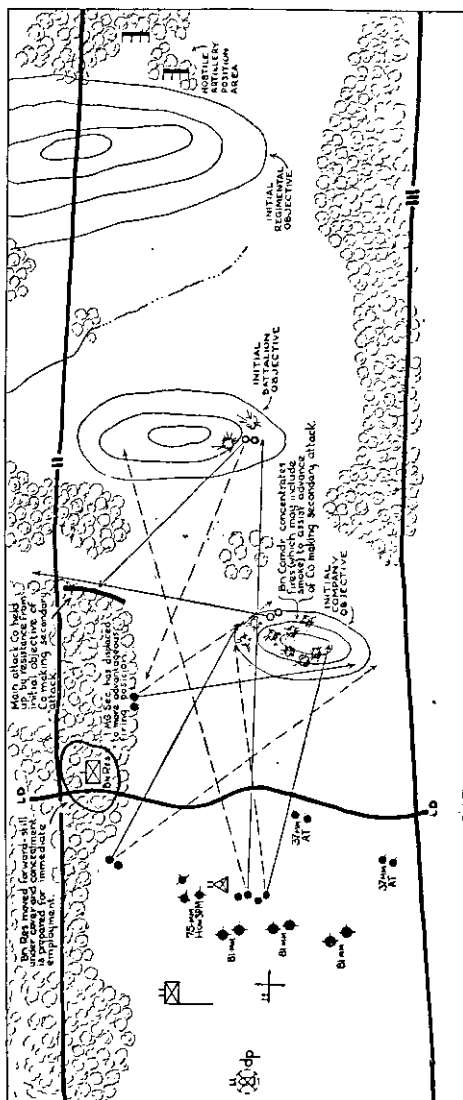
■ 137. LAUNCHING THE ATTACK.—*a. Without tank support.*—

(1) The attack begins when the leading elements of companies in the attacking echelon cross the line of departure. The battalion commander coordinates the forward movement of his units from the assembly area to insure that the leading rifle company elements cross the line of departure at the prescribed hour and that his supporting weapons occupy their initial positions in time to support the rifle elements. He also insures that the movement of the antitank platoon from position area(s) which were occupied to protect the battalion assembly area to position area(s) for the attack provides uninterrupted protection for the attacking echelon during its movement to its attack positions.

(2) The heavy weapons commence firing in accordance with the battalion plan of supporting fires. The attacking echelon crosses the line of departure in deployed formation; leading rifle units continue their deployed advance until forced to return the hostile fire. The supporting artillery, cannon company, and heavy weapons are relied upon initially to gain fire superiority. At ranges beyond 500 yards, rifle company weapons open fire only when other available fire support is inadequate.

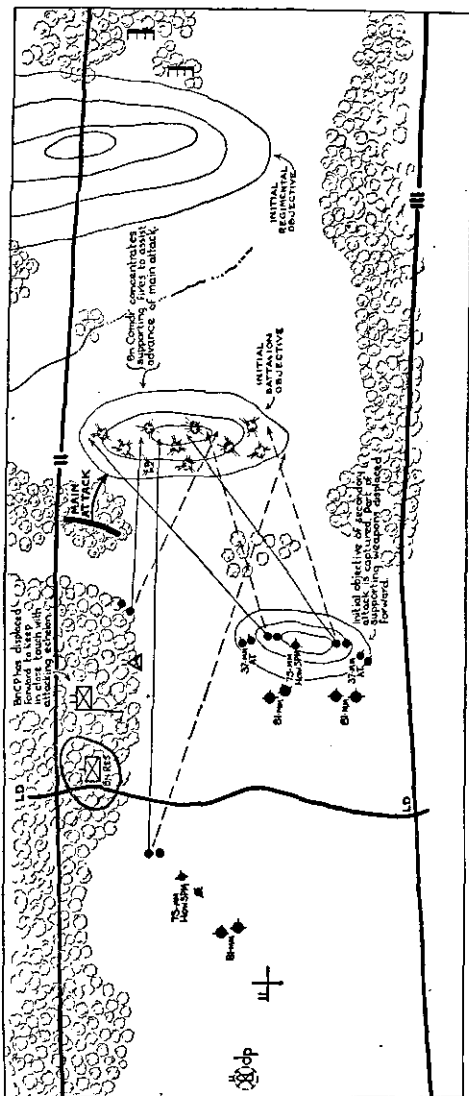
b. With tank support.—(1) When GHQ tanks are employed to assist the advance of infantry, an officer of the GHQ tank unit contacts the battalion or regimental commander prior to the attack and informs him of the detailed plan for the tank attack. Together they select passages for the tanks through the infantry; these passages are marked by tank personnel. The infantry commander promptly informs all infantry units, attached troops, and representatives of supporting units of the location of these passages and insures that the latter are cleared of friendly troops well in advance of the hour of attack.

(2) The infantry and supporting weapons support the tank attack by neutralizing or destroying hostile observation posts

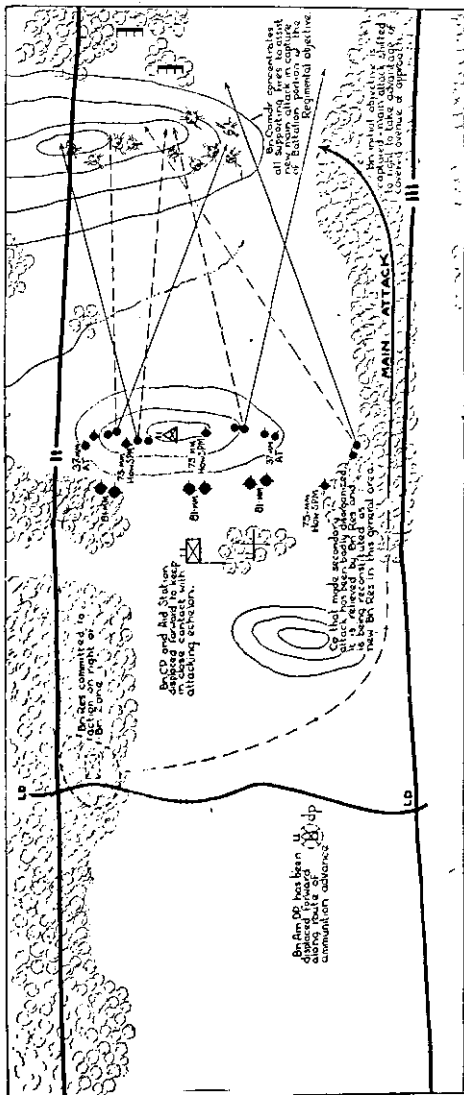


③ When the main attack is held up by fires from the initial objective of the secondary attack, the battalion commander concentrates his supporting fires to neutralize or assist in reducing the hostile elements which are holding up the main attack.

FIGURE 8.



- ③ As the attacking echelon advances, displacement of part of the battalion weapons becomes necessary in order that they may continue to give close support and protection to the attacking echelon. Forward displacement of the command post is completed and preparations commenced for early displacement of the aid station and ammunition distributing point.



④ In order to take advantage of more favorable routes of approach and less effective resistance, the main attack may be shifted from one flank to the other. The reserve may be committed to the main attack while a new reserve is organized. Supporting weapons are displaced when necessary to continue close support and protection of the attacking echelon.

FIGURE 8—Continued.

and antitank weapons which have survived preparatory fires and by firing in defense of tanks threatened by hostile infantry. Hostile antitank weapons are fired on as soon as they are revealed by flashes or movement.

(3) The tanks usually precede the leading infantry units and attack in two or more echelons. The leading echelon penetrates the hostile forward positions and attacks the hostile light artillery. The rear echelon dominates the hostile forward areas, destroys remaining automatic weapons, and is available to break up counterattacks.

(4) It is essential that the leading rifle companies arrive on the objective close behind the rear tank echelon.

(a) Where the line of departure is within 600 yards of the hostile position, the leading rifle companies support the attack by fire and advance as soon as the rear tank echelon reaches the hostile position. Supporting weapons are advanced by echelon in order to maintain continuous fire support of the tank attack; the leading echelon follows the riflemen as closely as possible.

(b) When the line of departure is beyond 600 yards from the hostile position and the tank formation does not have great depth, the infantry advances rapidly and occupies successive intermediate objectives not more than 600 yards apart. The advance to each successive objective is initiated as soon as it is reached by the rear tank echelon. Heavy weapons support the attack and displace in the same manner as outlined in (a) above.

(c) When the line of departure is beyond 600 yards from the hostile position and the tank dispositions are deep enough to cover the entire area between them, the infantry supports the leading echelon of tanks by fire and then advances rapidly close behind the last tank elements. Supporting weapons, while displacing, are prepared for immediate employment.

(5) For further details, see FM 7-40 and 17-10.

c. Location of commander.—During the attack the battalion commander spends much of his time at successive observation posts or with his subordinate units; he is seldom at his command post. He keeps his executive officer, who normally remains at the command post, informed of his location.

He must be able to communicate promptly with his command post, all company commanders, and supporting or attached units. When at an observation post, he usually communicates with the command post by telephone, radio, and messengers.

d. Command and staff visits.—Frequent visits to the attacking companies by the battalion commander and members of his staff, particularly during critical periods in their action, promote teamwork, coordination of effort, and confidence. During such visits full information of the situation is exchanged.

■ 138. CONDUCTING THE ATTACK.—For troop leading by the battalion commander, see paragraph 26. The battalion commander keeps himself informed of the situation by personal observation and reconnaissance, and by information received from his intelligence personnel and from subordinate, higher, and adjacent units. He requires special reports upon the capture of an objective or when a rifle company commits its support. Whenever necessary, he details a liaison officer to secure information from an adjacent battalion. He influences the action by shifting the fires of his heavy weapons and those of any *attached* cannon company weapons; by requesting that fires of *supporting* cannon company weapons, artillery, or chemical units either be shifted or render additional assistance; by arranging for mutual assistance between his attacking companies and for cooperative action between them and adjacent battalions; by coordinating the action of his units with that of any supporting combat aviation; and by the employment of his reserve.

a. Attacking echelon.—(1) The attacking echelon seldom encounters a uniformly held or continuous line of hostile resistance. Inequalities in the resistance encountered and in facilities for advance afforded by the terrain and by supporting fires result in the delay of some attacking units while other units are able to advance.

(2) When such action seems to promise attainment of his objective, the battalion commander may shift supporting fires from the main attack to assist the secondary attack (see fig. 8①) or may direct a more advanced company to assist by fire or flanking action an adjacent company that is held

up. However, he does not stop or delay the advance of a company which has outdistanced the units on its flanks merely to preserve a general alinement, or in order to adhere rigidly to his plan of attack. He protects an advanced company against counterattack or infiltration of the enemy into its rear by advancing his reserve and supporting weapons sufficiently close behind the exposed company to be able to render prompt support. (See fig. 8③.) As the attack progresses he may shoulder forward, shifting the weight of the attack from one flank to the other in order to take advantage of more favorable routes of approach or to avoid making his main effort frontally against known or suspected hostile strength. This is accomplished by shifting the bulk of his supporting fires and, when the situation warrants as indicated in *c* below, by committing the reserve.

(3) The battalion commander continues to press the advance of his attacking echelon to the final objective even though it outdistances the adjacent battalions. He keeps the regimental commander informed as to his situation. He makes prompt report should he lose contact with flank battalions. If such action would delay his advance he does not divert his reserve or the fire of his supporting weapons to assist a battalion held up on his flank unless directed to do so by the regimental commander. However, he assists adjacent battalions whenever such action will assist the advance of his unit or serve to protect an exposed flank. When he believes such action will further the regimental plan of attack, he asks that more advanced battalions assist his attack; otherwise he secures permission to cross the boundaries in rear of adjacent battalions whenever such action will enable him to employ flanking fires or to execute flank attacks.

b. Employment of supporting weapons.—(1) As the attack progresses the battalion commander assigns new position areas and missions to the heavy weapons company and anti-tank platoon in order to insure continuous close support and protection for his attacking echelon, and to adjust the plan of supporting fires in case he makes any changes in his initial plan of maneuver. He may delegate determination of the time and method of displacement to the commanders of the heavy weapons company and the antitank platoon. Dis-

placement of heavy weapons is ordinarily made by echelon to insure that at least part of the weapons are in position at all times to support the attacking echelon. (See fig. 8.)

(2) During the attack the battalion commander requests such fires of supporting cannon company weapons and artillery as are necessary to give prompt support to his attacking echelon. He coordinates these fires with those of the heavy weapons company. To give effective support the supporting artillery and cannon company elements must know at all times the location of the leading elements of the attacking echelon. Although the artillery liaison officer and representative of the cannon company are responsible for maintaining liaison and communication with the infantry battalion, the battalion commander must insure that these agents are kept informed of the situation of the attacking echelon and of his contemplated actions.

c. Employment of reserve.—(1) Usually the commander of the battalion reserve stays with the battalion commander or operates from the battalion command post prior to the employment of the reserve. The reserve moves only on orders of the battalion commander, except in emergencies so grave as to justify immediate movement on the initiative of its commander. As the attack progresses it must be kept within supporting distance of the attacking echelon; that is, it must be close enough to intervene before the attacking echelon can be overwhelmed by a hostile counterattack. The battalion commander must therefore issue timely orders for its advance to successive positions. (See fig. 8②.) To facilitate prompt movement he directs the reserve commander to reconnoiter and recommend suitable positions and routes to them; these positions should afford cover and concealment for the reserve in deployed formation. Usually the reserve is advanced initially in rear of the company making the main attack. Later it is advanced in rear of the company making the most rapid advance in order to protect that company against counterattack and infiltration into its rear.

(2) As the attack develops the battalion commander, assisted by his staff, considers tentative plans for possible employment of the reserve, indicates probable employment to the reserve company commander, and directs that he recon-

noiter in accordance with these plans so that he can act promptly when the decision is made to commit the reserve.

(3) The reserve should be employed to exploit success at points where the enemy is weakening rather than to redeem failure where he is offering stubborn resistance. Resistance holding up the attacking echelon should be enveloped or attacked in flank whenever possible. When the reserve is used to continue the action of a portion of the attacking echelon which is disorganized, depleted, or exhausted, it should, if practicable, be committed on the flank of the unit being relieved and attack in a new direction rather than pass through the unit being relieved and attempt to continue an unsuccessful attack. (See fig. 8⊙.)

(4) Choosing the proper time for committing the reserve to action is often the battalion commander's most difficult and important decision. The natural desire to retain control of this means of influencing the action must not be permitted to obscure the importance of maintaining the momentum of the advance. It should be committed without hesitation whenever the attacking echelon can no longer advance or the situation offers an opportunity to expedite capture of a battalion objective through its employment as a maneuvering unit. The battalion commander prescribes its objective and usually its direction of attack. If possible he prescribes its departure position. He informs other units of the battalion of its contemplated action and shifts supporting fires, as necessary, to assist it. The regimental commander is notified as soon as the decision to commit the battalion reserve has been reached.

d. Coordination with tank attack.—If an attack by GHQ tank units is to be initiated while the infantry is attacking an objective, tank routes and passages through the infantry are defined prior to the tank attack. Infantry units in or close to these passages must be fully informed of their location and the time of attack. Where practicable, infantry commanders keep their units clear of the passages.

■ 139. SECURITY.—Security measures planned on the initiation of the attack (see par. 131*h*) are continued in force or modified according to the progress of the attack.

■ 140. ASSAULT.—*a.* In the attack, hostile resistance is frequently reduced by a series of local assaults delivered at different times by rifle companies or platoons.

b. When the entire battalion is held up in front of a hostile position that cannot be outflanked, the battalion commander arranges for a prepared and coordinated assault by his attacking echelon, supported by the regimental cannon company, the artillery, and his heavy weapons. He either fixes a time for the lifting of supporting fires and delivery of the assault, or employs a prearranged signal for this purpose. When supporting fires are lifted, the attacking echelon delivers assault fire and closes with the bayonet. Supporting fires lift to targets on the flanks and in rear. (See FM 7-15.)

■ 141. ADVANCE THROUGH HOSTILE POSITION.—*a.* Ordinarily the battalion commander can make definite plans and issue orders only to cover the conduct of the attack as far as the initial objective assigned to the battalion. Until this point is reached, companies in the attacking echelon pause only long enough to accomplish any essential reorganization and immediately continue the attack (see par. 131*a*).

b. When companies in the attacking echelon have reached the last objective prescribed for them by the initial orders of the battalion commander, he must quickly reorganize his attack and issue additional orders for its continuance. Speed in reconnaissance and issuing of orders is vital in order to permit resumption of the advance in time to take advantage of the initial success.

c. The battalion commander insures timely displacement of battalion supporting weapons to each objective so that they can afford protection from possible hostile counterattack and prepare to support the continuation of the attack. The antitank platoon leader and heavy weapons company reconnaissance personnel must continuously reconnoiter close in rear of the attacking echelon. This insures that information of routes and of new firing position areas may be secured in time to permit rapid displacement.

d. During any pause on an objective the battalion commander insures that his advanced elements maintain contact with the enemy.

■ 142. SEIZURE OF FINAL OBJECTIVE AND CONSOLIDATION.—*a.* The action of the battalion upon attainment of its final objective usually will be prescribed by the regimental commander. In the absence of orders the battalion commander promptly takes steps to consolidate the position, reorganize, and be prepared either to defend the ground won or continue the attack, as the regimental commander may order. He provides for the security and defense of the position and for maintaining contact with the enemy. He reconstitutes a reserve if necessary. His orders include—

(1) Battalion area in which reorganization is to be accomplished.

(2) Measures for security.

(3) General location of the temporary line of resistance and the responsibility for its defense.

(4) Position areas and missions for the battalion supporting weapons.

(5) Defensive fires of artillery and other supporting units.

(6) Movement forward of ammunition vehicles to permit replenishment of supplies; and other administrative details such as assembling and disposition of stragglers and prisoners of war.

(7) Location of command post.

b. During the process of reorganization the battalion commander assisted by his staff visits each company, if the situation permits, to ascertain the relative strength and readiness for combat of the companies. He makes such transfers of officers, men, and ammunition between units as are necessary to obtain the desired strength in each and the presence with each unit of a suitable leader. The integrity of units is maintained as far as practicable.

c. If, because of hostile interference, it is both impossible to advance and impracticable to take methodical measures for reorganization and consolidation, troops dig in where they find themselves. The battalion commander subsequently fixes the main line of resistance to conform to orders of the regimental commander (see FM 7-40) and to make best use of the terrain held within the battalion zone of action. Readjustments may be made during darkness. The battalion

commander coordinates the fire of the heavy weapons company and weapons platoons of rifle companies and arranges for artillery support.

■ 143. PURSUIT.—*a. Battalion in direct pressure.*—(1) When the battalion reaches its final objective, the regimental commander is notified immediately. Pursuit is not commenced until ordered by him.

(2) When the battalion is ordered to pursue by direct pressure, it takes up the advance in deployed formation. Its action is similar to that of a leading battalion in the approach march. (See par. 119.) Company commanders are allowed maximum freedom of initiative. The battalion commander's orders, usually brief and fragmentary, give missions, departure positions, directions of advance, and objectives. Objectives usually are much more distant than in the attack. The advance is expedited by all practicable means. Elements of the heavy weapons company are usually attached by section or platoon to leading rifle companies.

(3) When the battalion reserve is intact at the time the final objective is captured, it may be used to begin the pursuit immediately. A new reserve is then constituted. During the pursuit the reserve is committed promptly whenever necessary to prevent the enemy from making a stand.

(4) The battalion commander calls for fires of supporting artillery and of the regimental cannon company, but does not delay his action awaiting artillery support when such delay can be avoided by use of the fires of his heavy weapons company or by maneuver.

(5) Pursuit is pushed to the limit of endurance. No opportunity is given the enemy to reorganize his forces or reconstitute his defense, even at night.

(6) If the pursuit has progressed without serious resistance the regimental commander may order continuation of the advance during the night. In this case full use is made of roads, trails, and open routes of march. If resistance has been more determined the regimental commander may order a series of limited objective night attacks. Prompt report is made on arrival at each objective. These night attacks are made in accordance with the general principles of section VIII, but the time for preparation is reduced to a minimum

and opportunities for daylight reconnaissance may be lacking.

b. Battalion in encircling force.—(1) The battalion may participate in an encircling maneuver as part of a larger force making an encirclement. Ordinarily the battalion will be provided with additional motor vehicles for the transportation of foot elements and will move by motor, detruck in an assembly position, and then attack.

(2) The battalion as the reserve of a regiment engaged in pursuit by direct pressure may be directed to envelop or encircle hostile forces holding up the regiment. The envelopment may be very wide; it will be characterized by rapid marching, hasty reconnaissance, prompt issuance of fragmentary orders, and all other possible steps to expedite action.

SECTION VII

RESERVE BATTALION

■ 144. GENERAL.—*a.* For an attack the regimental commander may initially hold one or two battalions in reserve (see FM 7-40). The regimental commander prescribes initial and subsequent locations of a reserve battalion so that it is afforded maximum protection from hostile observation and air and mechanized attack, can furnish flank security for the regiment, and will be able to move rapidly to possible points of employment. It is kept within supporting distance of the attacking echelon.

b. Initially and until committed to action a reserve battalion may be assigned missions to—

- (1) Protect the flank(s) of the regiment.
- (2) Maintain contact with adjacent units.
- (3) Protect the rear of the regiment.
- (4) Assist attacking battalion(s) by the fire of its heavy weapons.

c. During the attack a reserve battalion may be assigned missions to—

- (1) Exploit a success of the attacking echelon.
- (2) Exploit any hostile weakness developed by the attacking echelon.
- (3) Protect a flank exposed by the advance of the attacking echelon.

(4) Envelop or outflank resistance that is holding up the attacking echelon.

(5) 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 a flank of the unit relieved).

(6) Meet hostile counterattacks.

■ 145. MOVEMENT TO INITIAL AND SUBSEQUENT POSITIONS.— Upon receipt of the regimental order the battalion commander moves his battalion to the initial position designated. Extra ammunition is issued and individual rolls are stacked and concealed in an accessible location in the initial position, if these actions have not previously been accomplished. Except in grave emergency the reserve is moved only on order of the regimental commander. However, if the battalion falls behind the attacking battalions to the extent that it is beyond effective supporting distance, the battalion commander reports this fact to the regimental commander together with his recommendations for movement to a new position. Movement to and occupation of initial and subsequent positions in reserve is conducted as for an approach march and occupation of assembly areas. (See secs. II and III.)

■ 146. ACTIONS WHILE IN RESERVE.—*a.* In accordance with assigned missions the commander of a reserve battalion details the necessary patrols and connecting groups to protect the flanks and rear of the regiment and to maintain contact with adjacent units. He will usually detail these elements from one company of the battalion, preferably the company he contemplates placing initially in reserve should the battalion be committed to action. Patrols and connecting groups operate as prescribed in FM 7-10.

b. As directed by the regimental commander, the commander of a reserve battalion makes the necessary reconnaissance and prepares tentative plans for all possible missions for his battalion. To keep abreast of the situation and the regimental commander's plans, he or a member of his staff remains with the regimental commander or at the regimental command post. Assisted by his staff the battalion commander reconnoiters probable areas of employment for the

battalion and routes thereto in order that he may commit his battalion to action promptly when ordered to do so. His reconnaissance and plans and his attack orders when the battalion is directed to attack conform to those described in section V for a battalion in the attacking echelon.

c. The regimental commander may temporarily detach all or part of the heavy weapons company of a reserve battalion for use on special missions, such as to support the leading battalions of the regiment in the initial stages of an attack. Such detached elements are usually returned to the battalion when their fires from initial positions are masked or their special missions are completed. In any event they are returned before the battalion is committed to action.

■ 147. CONDUCT OF ATTACK.—When it is committed to action, the reserve battalion conducts the attack as described in section VI. When assigned the mission of attacking a hostile force making a counterattack, the battalion commander makes every effort to strike the hostile counterattack in the flank before it can disrupt the action of the attacking echelon.

■ 148. RESERVE FOR LARGER UNITS.—A battalion may be placed in division or army corps reserve. Its missions and employment then will be prescribed by the commander of the unit concerned and are generally similar to those for the battalion in regimental reserve. (See FM 100-5.) The battalion may be motorized by the higher commander.

■ 149. RELIEF TO CONTINUE THE ATTACK.—a. A reserve battalion may be employed to relieve a battalion engaged with the enemy in order to restore the momentum of the attack. When the relief is executed at night, the battalion relieved is withdrawn to its designated assembly position as soon as units of the relieving battalion are in position; however, it may be ordered to leave heavy weapons in position to support the attack initially until fires are masked. Conversely, when the relief is made in daylight, the battalion relieved or passed through remains in position and continues fire support of the relieving battalion until its fires are masked and until the new attack has progressed far enough for the battalion relieved to be assembled and reorganized without undue casualties.

b. The approach march and attack of the relieving battalion are conducted as described in sections II to VI, inclusive. When it passes through the battalion relieved, the line of departure will be the line held by the advanced elements of the battalion relieved or a covered position just in rear of that line.

c. Because a hostile air or artillery bombardment, while the relief is in progress, may result in heavy casualties, the utmost precautions are taken to preserve secrecy and to keep both battalions properly dispersed.

d. When time permits formal relief of one battalion by the other, as in a relief prior to a resumption of the attack at dawn, the battalion commanders of both the relieving battalion and the battalion to be relieved issue warning orders including approximate hour the movement for the relief is to begin, zone in which relieving battalion is to operate, and instructions for reconnaissance to include restrictions on size of parties, routes, and hours of operation. The commander and staff of the relieving battalion and those of the battalion to be relieved meet, if practicable, to arrange and agree upon the details of the relief. Detailed planning depends upon the time available. It may include—

- (1) Guides to be furnished by the relieved battalion.
- (2) Use of roads and routes.
- (3) Fire support to be furnished by the relieved battalion.
- (4) Security measures that will be provided by the relieved battalion for the incoming battalion.
- (5) Time command passes to the relieving battalion.

SECTION VIII

NIGHT ATTACK

■ 150. GENERAL.—a. For the general characteristics of night operations, see FM 100-5. For details of the rifle company and heavy weapons company in night attacks, see FM 7-10 and 7-15.

b. A battalion may be ordered to make a night attack to accomplish one or more of the following purposes:

- (1) To complete or exploit a success.

(2) To gain important terrain for future operations.

(3) To avoid heavy losses which would be incurred by attacks in daylight over open terrain.

(4) To deceive the enemy and cause him to hold forces in position or attract his reserves.

c. A night attack requires careful planning and preparation, special measures to preserve secrecy and secure surprise, and precision and cohesion in execution. A battalion should have a minimum of 3 hours for daylight preparation. If such time is not available the principles given hereafter are applied so far as practicable. Night attacks are seldom justified without ample time for daylight preparation.

d. Aimed fire during darkness is of little effect. The entrenched defender can cover his front with the fires of heavy weapons laid on specific lines or areas by day while the attacker's ability to neutralize the sources of these fires is greatly reduced by darkness. The attacking force must quietly approach its objective, close with the position before the defensive fixed fires can be brought down, and overcome the defenders by a bayonet assault. Hence, surprise is essential to success.

e. A night attack cannot be expected to progress through the depth of the hostile position because adjacent and rearward garrisons will be aroused and surprise lost when the assault is made. Therefore, the objective should be a specific area or terrain feature close to the hostile front which is of such width and depth that it can be captured in a single assault by the force detailed to make the night attack. It should be well defined and easily recognizable at night. The approaches to it should permit silent movement. Daylight observation of the objective and of the terrain leading to it must be practicable. The attack is facilitated if roads, fences, hedges, pole lines, or other directional aids exist.

f. The regimental commander in ordering that a night attack be made prescribes the objective, the support available from units outside the battalion, and the mission to be accomplished after capture of the objective. Usually his instructions also include the time of attack and whether the entire battalion or one rifle company of the battalion will

make the attack; exceptionally, these matters may be left to the discretion of the battalion commander.

■ 151. RECONNAISSANCE AND OTHER PREPARATORY ACTIONS.—

a. The preparations to be made by a battalion commander include—

(1) Prompt determination of the rifle strength to be employed in the attacking echelon and tentative time of attack (if not prescribed by the regimental commander).

(2) Selection of rear assembly area(s) and arranging for occupancy if participating units are improperly located for the attack.

(3) Prompt issuance of warning orders. The warning order should fix the time and place at which company commanders are to report for orders. The warning order to the heavy weapons company, the battalion antitank platoon, and any attached cannon company elements or artillery should include directions that each commander submit recommendations at an earlier hour for the employment of his unit.

(4) Determination by reconnaissance of the limits of the objective, the most suitable terrain over which to approach it, and the area from which the attack is to be made.

(5) When the attack is to be made by the entire battalion, determination of the formation of the attacking echelon and selection of forward assembly area(s), line of departure, exact lateral limits of each company's objective, limit of advance, and line or points for deployment of the attacking echelon. (See par. 153e.)

(6) Issuance of a fragmentary attack order and of instructions for night patrolling in time to permit subordinate leaders to make their reconnaissance before dark. When one rifle company is to make the attack, the order should be issued at least 2 hours before dark. It should include the objective, approximate time of attack, location of the rear assembly area, the forward assembly area, and the mission of the company after capture of the objective. Other details may be included. The recommendations of the company commander concerning the location of protective fires and other desired assistance may be called for.

(7) If the battalion is to move from the rear assembly area to the forward assembly area(s) under battalion control, reconnaissance and marking of the route(s) to be used.

(8) If necessary, issuance of instructions or completion of arrangements for coordination with any friendly troops occupying the selected forward assembly area(s) and for the creation of gaps in the front lines for passage of the attacking echelon and of other elements displacing to the objective.

(9) Completion of the plan of protective fires, of the plan for employment of the antitank platoon, and of other details of the attack.

(10) Issuance to subordinates of the final details of the attack order.

b. Daylight reconnaissance by the battalion commander and by all subordinate leaders including the leaders of patrols is essential. It is supplemented by additional reconnaissance during dusk and by the study of the most recent vertical and oblique aerial photographs. The battalion commander should secure sufficient aerial photographs of the area to permit distribution of at least one set to each company and to the antitank platoon. The battalion commander requires reconnaissance to be conducted with due regard to secrecy.

c. During daylight reconnaissance of terrain not held by friendly troops is usually limited to observation from points in rear of our front lines. Frequently the only means of securing detailed information of the terrain in the zone of action as well as of the location and strength of hostile outguards and listening posts is by night patrolling. These patrols may also be required to select and mark routes forward of the line of departure and to furnish guides for subordinate units. The battalion commander's instructions to rifle company commanders define the area each company is to patrol and the information required; the number of patrols, their size, and other details may also be prescribed.

■ 152. ORDERS.—*a.* The order for a night attack goes into much greater detail than a similar order for an attack by day. Provision is made for every eventuality that can reasonably be foreseen.

b. The outline below indicates the matter to be included in the order when the attack is to be made by the entire battalion. When one rifle company is to make the attack, the battalion attack order may contain only those items indicated by an asterisk (*); the battalion commander may include such additional details as he does not desire to leave to the judgment of the company commander.

* (1) Information of the enemy.

* (2) Information of friendly troops, including support by elements of the cannon company, artillery, and combat aviation, if made available.

(3) Mission and general plan of the battalion, including—
Objective.

Formation.

Direction of attack.

Boundaries of battalion zone of action and, when practicable, a boundary between companies.

*Line of departure.

*Time of attack.

Base unit.

(4) Specific mission for each rifle company in the attacking echelon to include—

Formation.

*Forward assembly area.

*Objective.

*Limit of advance.

Reorganization on the objective.

*Company mission upon capture of the objective and mission at daylight.

Security measures applicable to individual companies.

(5) Instructions for reserve, to include—

Initial location.

Any mission to be accomplished or movement to be made prior to capture of the objective.

Mission after capture of the objective.

(6) Mission of heavy weapons company, to include—

*Position areas and targets upon which the company is to be prepared to fire if it is to furnish protective fires (or its initial location and formation if all protective fires are to be furnished by other units).

*Designation of elements to displace to the objective after its capture, time and method of displacement, new position areas, and targets or sectors of fire after daylight.

Sector(s) of fire or target(s) to be fired on after daylight by any elements of the company not displacing to the objective.

(7) Mission of antitank platoon, to include—

*Initial firing position area(s) and principal direction(s) of fire, or location of position(s) in readiness.

*Designation of elements to displace to the objective after its capture, time and method of displacement, new position area(s), and new direction(s) of fire.

*Changes, if any, to be made prior to daylight by any elements not displacing to the objective.

* (8) Mission(s), if any, of ammunition and pioneer platoon, including attachment of elements to heavy weapons company or antitank platoon.

(9) Tactical instructions applicable to more than one subordinate unit, including—

Special measures for control and coordination.

*Means of identification.

Measures to maintain secrecy.

Security measures.

Method of advance.

Rate of advance.

Action when hostile security elements are encountered.

When to form in line of squad columns, if that formation is to be used.

When to deploy as skirmishers.

When to load rifles.

(10) Administrative instructions, to include—

*Arrangements, if any, for feeding.

*Use or disposition of weapon carriers.

*Location of battalion aid station(s).

*Location of battalion ammunition distributing point.

*Route of ammunition advance after daylight (where applicable).

*Amount of ammunition to be carried.

- *Instructions concerning tools, wire, antitank mines, or other special equipment when captured position is to be organized for defense.

(11) Instructions concerning signal communication, to include—

- *Pyrotechnic signals.
- *Special instructions for radio and wire communication.
- *Location of battalion command post prior to and during attack and after capture of objective.
- *Location of battalion commander.
- *Any special instructions concerning signal communication to be established at objective.

■ 153. PLAN OF ATTACK.—*a. General.*—(1) Maintenance of direction, of contact and communication between units, and of control over subordinate elements is difficult at night. These difficulties vary directly with the degree of visibility existing at the time of the attack and the methods used must be chosen accordingly. No set method can be followed.

(2) The added difficulties involved in any attempt to change direction at night and the possibility of mistakes in identity, should friendly forces converge, prohibit any maneuver other than a simple frontal attack by the battalion or by a rifle company.

b. Objective and strength of attacking echelon.—The objective is usually assigned by higher authority, but the battalion commander determines its exact lateral limits; when the attack is to be made by the entire battalion, he assigns specific portions to each leading rifle company. Since the riflemen of one company, when deployed at 2-yard intervals, cover a front of approximately 225 yards, each company objective ordinarily should have a maximum width which does not materially exceed this frontage. However, this limit may be increased if conditions of visibility permit the maintenance of control and cohesion. A minimum width of 100 yards may be assigned to a rifle company. The width of the objective, therefore, will usually determine the strength of the attacking echelon prescribed by the regimental or battalion commander. (See par. 150*f*.)

c. Time of attack.—When the attack is to be continued at daylight, a night attack usually is made late in the night in order to permit the enemy a minimum time to organize an effective counterattack under cover of darkness. However, the attack should begin early enough to complete the capture of the objective, displace heavy weapons, and allow at least ½-hour of darkness for reorganization and for hasty organization of the captured position. In determining when to begin the advance, the possibility of unforeseen delays, such as those involved in silencing hostile patrols and outguards or waiting for hostile illumination to die down, are taken into account. When the mission is to capture, organize, and defend an objective, the battalion (or rifle company) usually attacks as soon after dark as it can be made ready and information of hostile night dispositions can be obtained. No set rule can be followed; in order to obtain surprise, an attack may be made shortly after dark even though the battalion (or rifle company) is to continue the attack the following morning.

d. Battalion (or company) rear assembly area.—Troops should be rested and fed, extra ammunition issued, plans completed, and final orders issued prior to the movement of the attacking force to the vicinity of the line of departure. Whenever practicable, these actions are accomplished in a rear assembly area concealed from hostile air and ground observation and defiladed from small-arms fire.

e. Formation.—(1) For formation of the rifle company in night attack, see FM 7-10.

(2) When the attack is to be made by the entire battalion, the battalion commander prescribes the formations (dispositions) of the battalion as a whole and those of the leading rifle companies. Leading rifle companies usually cross the line of departure in line of platoon columns. However, if visibility permits control to be maintained, line of squad columns may be used initially. Intervals between columns are such that a skirmish line may be formed with approximately 2-yard intervals between men without overlapping of platoons. Weapons platoons of these companies, less transport, either follow rifle elements at a distance greater than the limit of visibility or advance by bounds in rear of

rifle elements upon orders of the respective company commanders. If the distance to the objective is not excessive they may be left in the forward assembly area to displace forward rapidly upon capture of the objective. The width of the company objective usually requires all rifle strength for the assault; hence leading rifle companies ordinarily do not hold out a support unit. When supports are held out, they ordinarily move with weapons platoons and are employed after the objective has been taken. With the exception of members of the weapons platoon, officers and men of a rifle company who are armed with the carbine and participate in the night attack may be furnished rifles and bayonets borrowed from members of the administration group.

(3) The battalion commander constitutes a reserve, usually at least one rifle company, for the primary purpose of providing a force with which to protect the flanks of the captured position against hostile counterattacks launched at or shortly after daylight. Unless the distance from the line of departure to the objective is over 1,000 yards the reserve is usually held in rear of the line of departure until after the objective has been captured. By daylight the reserve must be under cover within supporting distance of troops on the captured objective. At that time elements of the reserve may be employed to mop up any enemy groups left in rear of the attacking echelon.

(4) The attacking echelon usually retains its initial formation until it forms skirmish line for the assault. However, an initial formation of line of platoon columns may be changed to squad columns for crossing a level or evenly sloping intermediate area which might be subject to hostile grazing machine-gun fire; line of squad columns then is retained until skirmish line is formed prior to the assault.

(5) The battalion commander may direct that columns deploy as skirmishers for the assault upon arrival at a previously designated line (or series of terrain features) or that the assault be assumed upon his order transmitted as indicated in *r* below. Ordinarily, deployment as skirmishers should be effected when the attacking echelon is from 100 to 200 yards from the objective. Battalion orders must pro-

vide for immediate deployment on the initiative of company commanders following discovery by the enemy.

f. Line of departure.—The line of departure must be under control of friendly troops, easily and unmistakably identified at night, and approximately perpendicular to the direction of advance. If no terrain feature can be found which fulfills these requirements, the line may be indicated by tape. The ideal situation is found when the line of departure forms the forward edge of the forward assembly area(s).

g. Forward assembly area.—A forward assembly area is selected which can contain the attacking echelon in the exact formation to be employed for the advance across the line of departure. In this area control measures and directions are verified and security groups moved into position. The selected area should contain a minimum of obstacles and be situated on the axis of advance close to the line of departure. Defilade from flat-trajectory fire is desirable, but not essential, since darkness provides protection. When necessary, separate company-forward assembly areas are prescribed.

h. Limit of advance.—In order to retain control and cohesion and to prevent the attacking echelon from being endangered by friendly protective fires, the battalion commander establishes a limit of advance both in depth and to the flanks of the objective. To be effective this limit must be defined by relation to terrain features which can be identified at night.

i. Reorganization.—The battalion order prescribes that the attacking echelon (or the rifle company making the night attack) reorganize immediately upon capture of the objective. This reorganization is in the hands of each company commander and his subordinate leaders. The battalion commander, however, requires that he be notified immediately of the capture of the objective in order that fires may be brought down to protect the reorganizing units. (See FM 7-40.) To insure prompt notification, the commander of each leading rifle company uses a prearranged pyrotechnic signal or communicates the information by radiotelephone.

j. Action after objective is captured.—The missions to be accomplished by each subordinate unit and, as far as possible, the dispositions it is to assume upon capture of the objective

must be prescribed in the attack order of the battalion commander. Otherwise confusion, uncertainty, and loss of valuable time will result.

k. Employment of supporting weapons.—(1) Prearranged protective fires are planned by the battalion commander to protect the attacking echelon. The plan provides for their release, upon call, after the attack has been discovered or the objective captured. They include—

(a) Fires to box in the objective.

(b) Any additional fires needed to cover probable areas of departure or routes of approach for hostile counterattack against the captured objective.

(2) When the battalion heavy weapons company and anti-tank platoon are to participate in prearranged protective fires, the fires of heavy machine guns, 81-mm mortars, cannon company weapons, and artillery are fully coordinated so as to provide a complete system of protective fires. Anti-tank guns are located initially to cover roads or other likely avenues of approach for hostile armored reconnaissance vehicles. Positions for supporting heavy weapons, antitank guns, and cannon company weapons must be reconnoitered and marked, and firing data prepared during daylight. Weapons are emplaced under cover of darkness.

(3) Since secrecy is indispensable to the success of a night attack an artillery preparation is usually undesirable. However, for an attack against a strong position the battalion commander may arrange for a short, violent artillery preparation to be placed on the objective *immediately preceding the assault* and to be lifted on a time schedule.

(4) All or part of the heavy weapons company is displaced to the captured objective in time to be in firing positions by daybreak in order to assist in repelling counterattacks. When only a portion of the company is to displace, its firing positions are chosen with a view to facilitating prompt displacement. All or part of the antitank platoon is similarly displaced. Reconnaissance elements of the heavy weapons company and antitank platoon follow the attacking echelon of the battalion (or the rifle company making the attack) closely in order to select new firing areas and guide displacing elements to them.

(5) When the attack is to be made by the entire battalion, sufficient supporting weapons from units outside the battalion may be made available to furnish all the necessary protective fires. In this event the battalion commander has his own heavy weapons company follow the attacking echelon by bounds in time to occupy positions on the objective by daybreak.

(6) For details of employment of the heavy weapons company, see FM 7-15.

l. Other supporting arms.—(1) Observation aviation, if made available, may be used to reconnoiter by visual and photographic means prior to the attack and, exceptionally, may drop directional flares far behind the enemy lines during the actual advance. Such directional flares must shed no illumination on the area of attack. Flares may also be dropped after the captured position is organized for defense in order to illuminate areas of possible enemy troop movements or counterattacks. Air reconnaissance is continued at daylight. When sufficient illumination exists, combat aviation, if available, may be employed to bomb probable forming-up areas for hostile counterattack.

(2) Engineers may be attached to remove or demolish obstacles, repair routes of communication, and assist in the defensive organization of the objective after capture.

(3) Chemical troops, if attached, are employed after the capture of the objective to assist in its defense or in the continuation of the attack.

m. Employment of ammunition and pioneer platoon.—Elements of the ammunition and pioneer platoon are frequently attached to the heavy weapons company and to the antitank platoon in order to assist in hand-carrying of ammunition to the captured objective. (See FM 7-15.) When no engineers are available, elements of the platoon may be employed, if necessary, to accomplish the tasks given in *l*(2) above.

n. Control measures.—When the attack is made by the entire battalion, control will be facilitated by the designation of a base unit, by directing that column formations be maintained as long as practicable, and by the use of connecting groups when required by conditions of visibility. Roads,

fences, streams, and similar terrain features leading toward the objective may be used as boundaries between subordinate units as well as for directional guides. A magnetic azimuth and a rate of advance should be prescribed (see *r* below). Each column commander should be required to march at the head of his column and either an officer or a noncommissioned officer to march at the tail.

o. Identification measures.—Prescribed means of identification are usually both visual and oral. The former may consist of any available distinctive object, such as a handkerchief, underclothing, or a luminous disk which can be seen at close range during darkness. Oral identification is usually accomplished by means of passwords or the designation of a challenge and answer.

p. Secrecy.—Measures to secure secrecy are rigidly enforced. Bayonets are required to be fixed before leaving the forward assembly area and weapons are carried unloaded until after the capture of the objective. Lights of every kind are prohibited. Articles of equipment or clothing which make sound or are capable of reflecting light are securely wrapped, replaced, or eliminated. (Luminous dial compasses and watches are, however, expressly authorized.) Talking is forbidden; orders and reports are given in murmurs. Vehicles are left, under cover, sufficiently in rear of the forward assembly area to prevent their noise reaching the enemy.

q. Security.—Security during the advance is provided by means of patrols. When the attack is to be made by the entire battalion, elements of the battalion reserve are located so that they can protect the flanks of the attacking units. A small patrol precedes each advancing column at the limit of visibility in order that hostile elements encountered by the patrol may not also discover the column. Flank patrols operate at distances which do not materially exceed the limit of visibility from the element to be protected. If practicable, patrols include men who speak the hostile language in order that they may answer if the patrol is challenged.

r. Method and rate of advance.—(1) The method and rate of advance of the attacking echelon of the battalion is prescribed so as to cause a simultaneous assault by the leading

companies. The advance may be made as a continuous forward movement when the visibility is such as to permit control and contact to be maintained. Ordinarily, however, the advance is by bounds, with periodic halts for the purpose of checking on contact and on direction. The battalion commander may prescribe that such halts be made on arrival at designated well-defined terrain features, at prescribed time intervals, or after advancing a prescribed number of paces. He directs that columns, at each halt, verify or reestablish contact and alinement with adjacent columns in the direction of the base unit. He prescribes that the advance will be resumed only on his order, which may be transmitted from the base unit by messengers or passed from column to column.

(2) Forward of the line of departure the care necessary to preserve silence usually limits the rate of advance to approximately 100 yards in from 6 to 10 minutes, depending upon the degree of visibility and on the nature of terrain being traversed. In an attack made shortly before daylight the rate of advance is considered in determining the time of attack.

s. Signal communication, battalion in night attack.—(1) The battalion command post usually remains in rear of the friendly front lines until the objective is captured. The battalion commander, designated staff officers, and messengers usually follow the base unit of the attacking echelon closely.

(2) The battalion commander and the commanders of leading rifle companies are provided with radiotelephones. However, their use is prohibited until the enemy discovers the attack.

(3) To facilitate communication between the battalion commander and his command post a telephone line may be advanced at such distance in rear of the attacking echelon as to prevent the noise of wire laying reaching the enemy. Foot messengers may also be employed.

(4) Pyrotechnic signals, supplemented in emergencies by radiotelephones, are used to call for prearranged protective fires. Care is taken to select distinctive pyrotechnic signals or combinations thereof since the enemy may also employ various flares and rockets. The battalion commander retains these signals under his personal control or under the

control of the leading rifle company commanders in order to prevent their premature or unauthorized use.

(5) Telephone communication to the objective should be established promptly after its capture.

■ 154. CONDUCT OF BATTALION IN NIGHT ATTACK.—*a. Advance.* Prior to the jump-off for the attack the battalion commander insures that troops and leaders are in the prescribed formation and security patrols are posted. During the advance he constantly verifies that direction, contact, and cohesion are maintained. The advance is made stealthily and slowly in order to maintain silence, control, contact, and direction. When hostile listening posts or patrols are encountered, nearby columns halt and lie down while leading security groups promptly dispose of them with the bayonet. When the advance is made by bounds, scouts or patrols reconnoiter for the next advance at the end of each bound. Halts are as short as practicable. If the sound of discharge of hostile flares is detected, all troops quickly but quietly sink to the ground so as to be concealed when the flares burst into illumination. If the troops are caught unexpectedly by the illumination of a hostile flare, all men halt instantly and remain immobile until the flare dies out. Units which lose contact with adjacent units continue to press forward toward their own objectives. If the attack is discovered, the battalion commander may call for prearranged protective fires but, if practicable, he avoids their use until the objective is captured.

b. Assault.—Precautions must be taken to prevent desultory firing by the enemy from bringing on a premature assault and to avoid a prolonged pause for deployment as skirmishers. Upon deployment the advance is continued at a walk until hostile resistance is met, when the assault is delivered with the bayonet. Once the assault is launched, the morale of the troops, their individual initiative, and the quality of the leadership by junior officers and noncommissioned officers must be relied upon to decide the issue.

c. Action after capture of objective.—Reorganization begins as soon as the objective is captured. Officers and non-commissioned officers organize the men in their immediate

vicinity into groups and dispose them to resist hostile counter-attacks. All weapons are loaded. Rifle company weapons units move promptly to cover likely avenues of enemy approach. Heavy weapons and antitank guns which have been directed to move to the objective begin to displace forward at once. By daylight all elements should be in position and the battalion reserve should be within supporting distance of the objective. Final adjustments in machine-gun, mortar, and antitank-gun positions are made at dawn.

SECTION IX

ATTACK IN WOODS

■ 155. GENERAL.—*a.* For general characteristics of combat in woods, see FM 100-5. For a discussion of jungle warfare, see FM 31-20. For the regiment in an attack in woods, see FM 7-40.

b. The enemy is forced out of a position in woods by maneuver whenever the terrain permits such action. Situations where this is not practicable are considered here. The battalion commander must reduce a hostile defensive position by an attack through woods which extend generally across his zone of action. The phases of such an action are the attack against the near edge of the woods, the advance through the woods, and the exit from the woods.

c. Accurate information of the density of the woods and of roads, trails, streams, natural landmarks, and obstacles within the woods is of particular importance. Much of this information can be most readily obtained from the latest aerial photographs and by means of air reconnaissance. The battalion commander orders intensive ground patrolling to determine the location of hostile units defending the near edge of the woods.

d. When the near edge of the woods is captured, the attacking echelon must halt to reorganize. This usually involves a redistribution of smaller units in order to so reduce distances and intervals that cohesion can be maintained during the advance through the woods. Since the edge of woods is a favorable target for hostile artillery and aviation, the battalion commander must reduce to a minimum the

halt for reorganization and necessary repositions. Consequently he plans the reorganization and advance through the woods at the same time as he plans the initial attack.

■ 156. ATTACK AGAINST NEAR EDGE OF WOODS.—*a.* Plans for the advance to and capture of the near edge of the woods will usually conform to plans for any other attack. Salients of the woods may be assigned as initial objectives since they offer natural approaches into the hostile position and can be neutralized readily by supporting fires.

b. When the attack must be made over ground entirely exposed to observation and fire of a concealed enemy, it should be made under cover of smoke or darkness. (See sec. VIII.)

■ 157. ADVANCE THROUGH WOODS.—*a.* In his initial attack order issued prior to the attack against the near edge of the woods, the battalion commander includes provisions for reorganization and tentative instructions for the advance through the woods. The order includes—

(1) *Assignment of rifle companies to attacking echelon and reserve.*—Frequently the width of the battalion zone will require the battalion to attack with two companies abreast. When feasible, a wedge formation (see par. 113*a*) offers the greatest degree of flank security.

(2) *Instructions to attacking echelon concerning formations, frontages, and maintenance of contact and direction.*—*(a)* Within each company of the attacking echelon the formation usually adopted will be small columns with reduced distances and intervals. Patrols and scouts precede the leading elements. Supports follow the leading elements more closely than in attack in terrain affording more visibility. Each leading rifle company is assigned a magnetic azimuth.

(b) The frontage assigned a leading company should not require it to employ a large percentage of its strength in connecting groups in order to maintain contact between its subordinate units and with adjacent companies. If woods are dense and the battalion frontage cannot adequately be covered by two leading companies strong flank patrols from the battalion reserve should be employed to cover the intervals between the attacking echelon and adjacent battalions.

(3) *Missions for battalion heavy weapons.*—When visibility is restricted and fields of fire are short, heavy machine-gun elements may be designated to follow and support certain specified rifle units; it may be necessary to attach elements to rifle companies. If a lateral edge of the woods is within or near the battalion zone of action heavy machine guns may advance by bounds near the edge to cover the flank and provide anti-aircraft security. The heavy weapons company less elements directed to support specific rifle units or to furnish flank protection is ordered to follow the attacking echelon closely, generally in the center of the battalion zone.

(4) *Missions for battalion antitank platoon.*—In dense woods antitank guns are advanced by bounds, usually by individual guns or sections, to cover successive possible avenues of approach for armored vehicles. In fairly open woods one section is usually directed to follow each flank of the attacking echelon and provide protection against attack from the front and flank.

(5) *Instructions to the reserve.*—Depending on the visibility within the woods the reserve is kept within 300 to 500 yards of the leading rifle elements.

(6) *Instructions for patrolling.*—Instructions to the attacking echelon should provide for the establishment and maintenance of contact with the enemy by intensive patrolling during reorganization in the near edge of the woods.

(7) *Instructions for flank and rear protection.*—Protection of the flanks and the rear of the battalion is essential, since the concealment afforded by the woods offers opportunity for surprise attacks by hostile patrols or by hostile elements by-passed by leading rifle units. It is also frequently necessary to provide close-in rifle protection to antitank gun and mortar sections by the attachment of small rifle elements from the reserve.

b. (1) While reorganization is being effected the battalion commander confirms or modifies the tentative instructions he issued before the attack against the near edge; he starts the advance as soon as the reorganization is completed. Short halts are employed to check direction and contact and to restore control. These halts are preferably made at well-defined lines or areas, such as cross trails, streams, or near the edge of clearings. If satisfactory areas or lines are not found

in the woods, halts on a time schedule may be prescribed. For the advance of the leading rifle companies in woods, see FM 7-10.

(2) Observers from supporting heavy weapons units, cannon company elements, and artillery accompany the attacking echelon. The battalion commander accompanied by members of his staff and communication personnel follows the attacking echelon closely and checks constantly the maintenance of direction and contact. Ordinarily a liaison detail consisting of a designated officer and intelligence personnel, messengers, and a radiotelephone operator follows each flank of the attacking echelon. Instructions to these details should require them to report to the battalion commander at frequent intervals the location and situation of all units near which they are located and, when hostile resistance is met, to reconnoiter immediately and report the best method of employing the battalion reserve on their respective flanks.

c. Heavy machine guns are employed to cover roads, trails, and clearings, particularly during halts. When hostile resistance is encountered, the attacking echelon employs frontal and flanking action to overcome it. Machine guns fire from positions near and through gaps between rifle units. For further details, see FM 7-15. Assistance from 81-mm mortars and artillery usually is limited by lack of observation and the difficulty of defining targets. The battalion commander, however, employs his mortars whenever overhead clearance permits them to fire and their fire can be observed and adjusted. Support from artillery and cannon company weapons is requested whenever necessary and practicable. Based on his own reconnaissance and that of his liaison details, the battalion commander commits the reserve to envelop hostile resistance or to meet hostile counterattacks. When required, elements of the reserve may be used to mop up areas passed through by the attacking echelon.

■ 158. EXIT FROM WOODS.—The battalion commander reorganizes his battalion short of the far edge of the woods. The attacking echelon is held deep enough within the woods to avoid hostile fires directed at the far edge, while scouts and patrols are pushed forward to reconnoiter the terrain,

determine hostile dispositions, and protect the reorganization. The next objective of the battalion is selected; if possible, it should include terrain masking the far edge of the woods from hostile observation and small-arms fire. Orders for the continuation of the attack are then promptly issued. If hostile artillery fire is expected on the edge of the woods, leading elements of the attacking echelon may be directed to debouch in a single rush; if the danger from small-arms fire is greater than from artillery fire, the debouchment may be by infiltration. Heavy weapons and antitank guns are brought up and placed in position to support and protect the attacking echelon during the debouchment. Any necessary arrangements for fire support are made with the artillery liaison officer and cannon company representative. (See FM 7-40.) When preparations are complete, the advance is resumed and is conducted as in any other attack.

SECTION X

ATTACK OF TOWNS

■ 159. GENERAL.—*a.* When practicable, the populated area of a town is avoided; the defenders are blinded by smoke and neutralized by artillery and mortar fire while the attacking troops advance on one or both sides to seize the exits. In towns which cannot be avoided but are lightly defended, leading battalions advance rapidly through the town and seize the exits; the defense within the town is then mopped up by units following in rear. (See FM 100-5.) Attack by a leading battalion against a strongly held town which cannot be reduced by either of these methods is described here.

b. Attack through towns, particularly those in which the houses are close together, is generally similar to attack in woods and the phases of the action are the same (see sec. IX). As in the case of an attack in woods the battalion commander issues tentative orders for reorganization and the advance through the town at the time he issues instructions for the attack of the near edge. Aerial photographs of the town should be made available and detailed advance planning is ordinarily practicable.

c. When a town is so small as to be entirely within the battalion zone of action, the attack of a portion of the battalion

should be directed to secure positions outside the town from which it can command the line of communication and retreat of the defenders and prevent their reinforcement.

■ 160. **ATTACK OF NEAR EDGE.**—The attack against a large town whose near edge or perimeter is not wholly within the battalion zone of action is similar to the attack against the near edge of woods.

■ 161. **ATTACK WITHIN A TOWN.**—*a.* For attack within a town, companies in the attacking echelon are assigned zones of action which make them responsible for one or two streets and the buildings on each side. (See fig. 9.) Direction is easier to maintain than in woods, but contact and control are frequently more difficult to maintain. Cross streets provide definite objectives near which halts can be made to restore contact and control.

b. Companies in the attacking echelon advance by bounds from street to street or from house to house. The leading elements may move on the streets or through buildings and their adjoining yards. Movement along the streets generally is more rapid, but presents a more favorable target to snipers; movement through buildings and yards increases the difficulties of control. When the roofs of adjoining buildings are of such type as to permit free movement, detachments may be advanced along the roofs on each side of the street to prevent sniping from windows or housetops. Upon reaching each cross street the old roof detachment covers the advance from roofs or commanding windows on the near side and then rejoins its unit. New roof detachments may be sent out at each cross street. Hostile resistance bypassed by the leading echelon must be promptly mopped up. The battalion commander either furnishes parties from his reserve to assist company supports in mopping up or directs companies to report any hostile groups they are unable to mop up without undue delay, and then uses his reserve to reduce these groups. The battalion commander also employs elements of his reserve for close protection of his flanks and rear and for protection of supporting heavy weapons as for an attack in woods.

c. (1) Heavy machine guns are usually advanced by bounds behind the leading rifle units. They may be em-

ployed to sweep main thoroughfares at the principal intersections and to fire on any remunerative hostile targets encountered, particularly hostile firing from doors and windows or from apertures in barricades.

(2) In a town mortars are not hampered by lack of overhead clearance and targets for artillery and mortars can

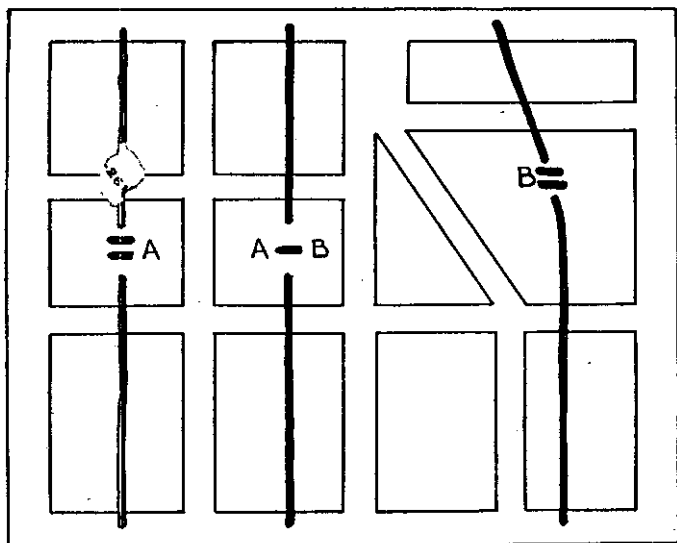


FIGURE 9.—Company zones of action within a town.

usually be described with exactness. Consequently these weapons can ordinarily render effective support. Mortars are displaced as in any attack. Artillery and mortar observation is obtained from house tops, windows, and forward positions in streets.

(3) Elements of the regimental cannon company, attached or in close support, may be employed for direct fire against buildings and barricades held by hostile elements.

(4) Antitank guns are displaced by short bounds to give close protection to the front and flanks of the attacking echelon; they may be employed for direct fire against build-

ings and barricades when no cannon company weapons are available.

■ 162. EXIT FROM A TOWN.—The battalion makes its exit from a town in a similar manner to its exit from woods. Machine guns may support the attack from firing positions located in buildings.

SECTION XI

ATTACK OF A RIVER LINE

■ 163. GENERAL.—*a.* For general principles governing operations at river lines, see FM 100-5. For technical details of stream crossing equipment and the use of assault boats, see TM 5-270. For the regiment in attack of a river line, see FM 7-40.

b. When the enemy does not actively hold the river line or when our mobile ground forces have previously seized the far bank, a leading battalion is not actively employed until after reaching the far side of the river. In the usual case this is also true for a reserve battalion in an opposed crossing. After crossing, the operations of the battalion are identical with those for any attack except that, at least initially, ammunition may have to be brought across the river by boats or rafts and then hand-carried to weapon position.

c. When the far bank of the river is held by the enemy, a battalion usually attacks the river line as part of its regiment operating in conjunction with other forces. The battalion may constitute a bridgehead force or it may cross as a subordinate unit of a larger bridgehead force. The mission of such a force is to effect a crossing and seize a bridgehead in order to protect the subsequent crossing of other troops.

d. The regimental attack order usually includes the following information and instructions:

(1) Information of the enemy and information of terrain within the area of crossing operations.

(2) Mission, hour of crossing, zone of action, and objectives of the battalion.

(3) Plan for the employment of the regimental cannon company, artillery, aviation, and other supporting troops.

(4) Engineer matériel and personnel which will assist in the crossing, including where and when they will be available.

■ 164. RECONNAISSANCE.—*a.* Preparations for the crossing include the search for all obtainable information, both of the enemy and the terrain, in the area where the battalion is to operate. Whenever practicable, ample time is allowed for daylight reconnaissance by all subordinate leaders. If the attack is to be launched on the following day, small patrols are sent under cover of darkness to the enemy side of the river for information of hostile strength, composition, and dispositions. These patrols must return to their units several hours before daylight in order that effective use may be made of the information obtained.

b. Personal reconnaissance of the battalion commander supplemented by other sources of information should develop all obtainable data concerning the following points:

(1) Composition and distribution of hostile forces, including the location of enemy weapons, defensive works, and undefended or weakly defended crossing points.

(2) Well-defined terrain features suitable as company objectives.

(3) Suitable locations for subordinate unit assembly areas on the hostile shore.

(4) Road and trail net on the enemy side of the river.

(5) Favorable routes of approach through the enemy position.

(6) Suitable terrain features on the near side of the river for observation posts and for position areas for supporting weapons.

(7) Location of favorable crossing points in the battalion zone of action, largely determined by—

(*a.*) Width, depth, and current of the river.

(*b.*) Existence of sand bars, reefs, islands, dams, or artificial obstructions placed by the enemy.

(*c.*) Steepness and height above water of both river banks.

(*d.*) Approaches to both river banks.

(*e.*) Existence of fords, ferries, bridges, and old bridge sites.

(8) Exact location of concealed final assembly areas on the near side of the river. These should readily be identified at night and accessible to trucks.

(9) Concealed routes which lead directly from final assembly areas to the crossing points on the near bank.

(10) Initial (or rear) assembly area prescribed by the regiment.

(11) Routes from the initial assembly area to the final assembly areas. For daylight movement concealed routes are selected. For movement during darkness, well-defined and easily traversed routes are selected.

■ 165. PLANS.—Based on the regimental commander's order and on the additional information secured through reconnaissance, the battalion commander prepares as detailed a plan as time permits. The details of the plan include—

a. Coordination with supporting and adjacent units.

b. Determination of width of crossing front, when not prescribed by the regimental commander.

c. Formation for the crossing; in particular, the number of companies to cross in the leading wave and the designation and initial location of reserve units.

d. Allotment of assault boats to units and assignment of other means of crossing.

e. Zones or frontages and initial objectives of leading rifle companies and determination of unit crossing points.

f. Establishment of local security on the far bank to protect the construction of foot bridges.

g. Formation for the advance to initial objectives.

h. Missions, firing position areas, and targets (or sectors of fire) and principal directions of fire for the heavy weapons company units and antitank platoon in support of the initial crossing, including the conditions under which fire will be opened.

i. Time of crossing of battalion supporting weapons and their employment after crossing.

j. Antiaircraft security during and after the crossing.

k. Antitank defense on the hostile shore.

l. Provisions for the early crossing of artillery and cannon company liason details and reconnaissance details of the heavy weapons company and antitank platoon.

m. Secrecy measures.

n. Designation of final assembly areas with routes thereto and the hour of arrival of each unit.

o. Provisions for guides to lead units to their final assembly areas.

p. The place and time of contact between subordinate unit commanders and the engineer in charge of each group of assault boats or other material means of crossing.

q. Disposition of motor vehicles.

r. Ammunition supply, including necessary special measures.

s. Establishment of aid stations and method of evacuation.

t. Communication measures within the battalion and between it and the next higher unit.

u. Axis of signal communication and command posts.

v. Any special information concerning the initial location of the battalion commander, his time of crossing, and his location just after crossing.

■ 166. ORDERS.—In order to afford subordinate leaders the maximum time for reconnaissance and planning the battalion commander issues appropriate warning orders as soon as practicable. The attack order is usually issued in fragmentary form and covers the movement from rear assembly areas on the near side to the initial battalion objective on the enemy side of the river. The order should be specific and as detailed as practicable. At the initial objective the battalion commander usually must issue additional orders for the continuation of the attack.

■ 167. WIDTH OF CROSSING FRONT.—a. The crossing front is usually prescribed by higher authority by means of boundary lines or frontages or by designating limiting points on the river between which the battalion is to cross.

b. The crossing is habitually made on a broad front. For protection during the crossing and ease of deployment after landing, intervals between assault boats during the crossing should roughly approximate the intervals between squad columns on land.

c. The following frontages may be employed as guides in river crossing operations:

<i>Unit</i>	<i>Frontage in yards</i>
Platoon	200 to 300
Company	300 to 1,200
Battalion	600 to 2,400

■ 168. FORMATION.—The determination of the rifle strength to participate in the initial crossing depends upon the width of the prescribed zone of action, number of available assault boats or other crossing means, and the enemy situation. Rifle companies in the attacking echelon usually cross with three rifle platoons abreast. The battalion commander usually holds at least one rifle company or the bulk of it in reserve.

■ 169. ASSIGNMENT OF CROSSING MEANS.—*a.* Sufficient assault boats should be provided to accommodate the leading wave of the battalion; these boats are available for continued ferrying operations until the completion of foot bridges. Ponton equipment may also be made available for ferrying. One or more foot bridges are usually provided.

b. Tactical unity is maintained as far as possible in assigning personnel to boats and other crossing expedients. If the above means are available one satisfactory method of distributing them is as follows:

In assault boats:	Leading wave: Attacking rifle companies (less (transport) and artillery forward observers.
	Second wave: Heavy weapons company (less transport), first echelon of the battalion command post, and artillery and attached (or supporting) cannon platoon liaison details.
On improvised rafts (or ferried in pontoons):	Antitank platoon.
On foot bridge (or ferried in pontoons):	Battalion reserve, battalion headquarters company (less detachments), and medical section (less detachments).
By ponton-raft ferry (or ponton bridge):	All motor transport.

■ 170. OBJECTIVES.—*a.* The initial battalion objective assigned is usually a terrain feature the capture of which pre-

vents hostile direct small-arms fire on the crossing points. Leading rifle companies are assigned portions of this objective as their initial objectives. Every effort is made to delimit these company objectives by clearly defined, easily recognizable terrain features.

b. The second objective of the battalion is usually an area the capture of which prevents hostile ground-observed artillery fire on the bridge sites in the river-crossing area and which can be supported by light artillery located on the attacker's side of the river.

c. The final objective is usually an area the capture of which prevents all artillery fire on the bridge sites and provides adequate maneuver space for further operations of the entire attacking force on the enemy side of the river.

■ 171. ASSEMBLY AREAS.—*a. Initial assembly area.*—The initial assembly area, normally prescribed by higher authority, is usually within easy night marching distance of the river line and beyond hostile light artillery range.

b. Final assembly area.—(1) The battalion commander selects final assembly areas for rifle companies and firing position areas for the heavy weapons company and antitank platoon. The final assembly areas of units in the leading wave are the localities where engineer troops distribute the boats along the foot routes to the river so that they can be readily picked up by infantry carrying parties.

(2) The chief attributes sought for final assembly areas are—

(a) Ease of identification at night.

(b) Accessibility to trucks or carrying parties which transport the assault boats to the final assembly areas.

(c) Concealment from hostile ground and air observation.

(d) Proximity to easily identified and concealed foot routes to the river.

(e) Proximity to the actual crossing fronts.

(f) Terrain suitable for distribution of troops parallel to the front. This distribution allows troops to proceed directly and without delay to embarkation points and permits them to cross the river simultaneously along the entire front.

(g) Cover from hostile artillery and small-arms fire.

■ 172. MOVEMENT TO RIVER.—*a. Movement from initial assembly area to final assembly area.*—(1) The battalion commander causes guides from each subordinate unit to make daylight reconnaissance of their respective final assembly areas and of routes leading thereto from the initial assembly area. These routes are marked.

(2) Before the battalion leaves the initial assembly area the following actions are taken:

(a) The orders of all subordinate units are completed.

(b) Personnel are divided into boat groups (each consisting of the infantrymen who are to cross in a designated assault boat) or are assigned other specific crossing means.

(3) When practicable, the troops move forward under centralized control until such time as subordinate units must diverge toward their respective final assembly areas. Company commanders adopt march dispositions which permit boat groups to move into their final assembly areas prepared to pick up their assault boats without reorganization or delay and carry them promptly to the river.

b. Movement from final assembly area to river.—Upon arrival in final assembly areas, units of the leading wave are met by engineer guides and conducted silently to boat locations. Engineer leaders time the departure of the boat groups from the several final assembly areas so that assault boats of the leading wave are launched at approximately the same time. The boat groups carry their assault boats to the river guided and supervised by two engineers assigned as crew to each boat. All suitable forward routes from the final assembly area are used in order to avoid congestion and bunching on the more easily traversed routes.

■ 173. CROSSING THE WATER.—Under command of an engineer, each boat starts across as soon as loaded and proceeds as rapidly as possible by the most direct route to the opposite bank. No attempt is made to maintain formation of any kind while on the water, although intervals between boats should be preserved. Neither is any effort made to counteract drift by paddling upstream unless the relative positions of landing and embarkation points and the nature of the current have led the battalion commander to issue prior specific orders to that effect. Firing from the boat is rarely attempted in

daylight; at night it is expressly prohibited. On reaching the hostile shore troops disembark rapidly. The engineer boat crews then return the assault boats to the friendly shore and continue ferrying operations.

■ 174. **ATTACK AFTER CROSSING.**—*a.* The river bank is promptly cleared and the boatloads of men rally at prominent terrain features selected by their platoon leaders. Rifle platoons, followed by weapons platoons, then push forward to the initial objective, where company commanders reestablish control over their companies.

b. The battalion commander sends his heavy weapons forward to reinforce his leading elements and personally crosses the river as soon as he observes or is notified that any of his leading units have seized their initial objectives. Upon arrival at the initial battalion objective the battalion commander organizes the attack against his second objective. This attack is pushed home without delay, employing those rifle elements over which he is able rapidly to regain control. Capture of the second objective is promptly reported to the regimental commander on whose order the attack against the final objective is launched.

■ 175. **SUPPORT OF INITIAL CROSSING.**—*a.* Artillery and combat aviation support is arranged by the higher commander. He may place rifle and heavy weapons companies of reserve units and units not engaged in the initial crossing in positions from which they may fire on the hostile river bank in support of the initial crossing wave. For a daylight crossing, chemical troops are often made available to the bridgehead force, in which case the crossing is usually effected under cover of a smoke screen laid on the hostile river bank.

b. (1) The heavy weapons of the battalion are initially emplaced in positions from which they are prepared to cover the crossing of the leading wave by fire. (See FM 7-15.)

(2) Usually the thick woods often found along a river line together with the wide crossing front compel the wide separation of heavy machine-gun platoons. Mission type orders to support a particular rifle company during and after the crossing are then given to each platoon.

(3) When practicable, the 81-mm mortars are emplaced in positions from which they can fire upon any hostile resistances, especially automatic weapons, located on the crossing front of the battalion.

(4) All heavy weapons (less transport) are crossed without delay to the hostile shore in assault boats when the opposite river bank is secured by the leading wave.

c. If suitable firing positions are available, the 37-mm anti-tank guns are placed on the near bank so as to provide initial antitank protection to the leading wave on the hostile shore. If no such firing positions are available on the near bank, antitank guns are held under cover near the river. All guns cross in the second wave as soon as the hostile bank is secured by the leading wave. They usually cross the river in pontons or by means of improvised raft ferries prepared by the engineers.

d. If the crossing is to be forced against a strongly held river line during daylight the leading wave usually crosses under the cover of all available supporting fires. Otherwise the supporting artillery, infantry cannon, and heavy weapons remain silent until the crossing is discovered by the enemy.

■ 176. SECURITY.—After effecting a river crossing, elements of the battalion promptly establish security measures as for any daylight attack. Vigorous patrolling, especially on the flanks to secure early information of hostile counterattacks, is essential.

a. *Antiaircraft security.*—The neutralization of all hostile air operations over the crossing area after the crossing is discovered is vital. Higher authority usually provides aviation and antiaircraft units for antiaircraft security. A part of the heavy machine guns of the battalion may assist antiaircraft units or may be employed in lieu thereof in antiaircraft missions.

b. *Antimechanized defense.*—After crossing the river, anti-mechanized defense must be promptly established. Organic and attached antitank guns, and antitank mines if available, are employed in the same manner as for any daylight attack.

■ 177. SUPPLY AND EVACUATION.—In river crossing operations the problems of supply and evacuation differ from normal only between the time of landing of the leading wave and the subsequent crossing of motor transport.

a. Supply.—(1) Individuals who participate in the initial crossing operations are usually provided with one or more individual reserve rations.

(2) Ammunition required in the initial phase of operations on the hostile shore is carried on the person and in assault boats. Some ammunition may be dropped on the far side of the river by parachute when airplanes therefor are available. Ordinarily, however, the replenishment of ammunition for heavy weapons and antitank guns must be accomplished by hand-carry, via assault boats and footbridges, and is a serious problem. The battalion commander facilitates this supply by the following methods, either singly or in combination:

(a) He may set up an advanced ammunition distributing point on the hostile shore close to the route of ammunition advance. By means of carrying parties especially detailed for the purpose, and by using boats, rafts, or footbridges, ammunition is moved from the battalion ammunition distributing point on the near side to the advanced ammunition distributing point. Ammunition is accumulated there and carried by hand to the using units on call, or is issued to carrying parties from front-line units.

(b) He may attach additional personnel to the heavy weapons company and the antitank platoon. These men assist the organic ammunition bearers to move ammunition from the ammunition distributing point on the near side of the river direct to the using units.

b. Evacuation.—(1) Casualties occurring on the near bank are usually evacuated to the regimental aid station or aid stations of reserve units if they are in the vicinity. If not, the battalion aid station is set up on the near side of the river.

(2) The surgeon crosses with the battalion command group. The bulk of the battalion medical section usually crosses behind the battalion reserve. It establishes the aid station on the far side of the river without delay. The evacuation

of casualties to the rear from this aid station is limited to those who can be transported in returning assault boats until such time as footbridges are completed.

■ 178. SIGNAL COMMUNICATION.—*a.* (1) The first echelon of the command post of the battalion usually crosses in the second wave of assault boats. The remainder of the command post personnel and equipment crosses not later than the capture of the initial objective; usually it displaces forward to the far side behind the reserve. Wide latitude is accorded the battalion commander in the selection of command posts.

(2) Due to the difficulties of control the prompt and accurate reporting of company command post locations is emphasized.

b. (1) Prior to the departure of the leading wave from the near river bank, the usual communication agencies are normally employed except that radios remain silent in the interest of secrecy.

(2) With the crossing of the leading wave the ban on the use of radio is usually lifted. The radiotelephone then becomes the chief means of communication between the battalion commander and his forward elements.

(3) Higher headquarters may furnish additional radio-telephone sets to the battalion.

(4) Communication to the front and rear is maintained initially by radio, visual signals, and messengers. When available, pigeons and airplanes may be used for communication to the rear.

(5) Wire lines are usually extended across the river on foot or ponton bridges. They can rarely be strung over the river unless the stream is very narrow.

■ 179. IMPROVISED MEANS OF CROSSING.—*a.* Improvised means of crossing a stream are employed by the battalion when standard crossing facilities are not available in sufficient quantity, or when the situation demands an attack of the river line before engineer crossing means can be procured.

b. (1) The principles and technique of crossing with improvised means are the same as for crossing with standard equipment and are applied as completely as time and facili-

ties permit. The means employed to cross may consist primarily of swimming supplemented by the use of boats, logs, rafts, and any other suitable material found in the neighborhood.

(2) The shelter tent float, which can be prepared by two riflemen in 7 minutes, is one improvised means of ferrying rifle company combat equipment. For details of construction, see FM 7-10. Ammunition and other supplies vital to the initial stage of the operation on the enemy side are apportioned to the two-man teams and ferried across.

(3) As soon as the hostile bank has been secured by the leading echelon antitank guns and heavy weapons are ferried across promptly by means of improvised pontons, brush rafts, and other expedients. (See FM 7-35 and 5-10.)

c. (1) If the ammunition train and kitchen and baggage train are released to the battalion, the canvas covers of the 2½-ton trucks are available for use in floating ¼-ton trucks as described in FM 5-10. Box frames and outriggers also may be used for ferrying ¼-ton trucks.

(2) Other transport is usually left under cover on the near side of the river until such time as bridges or heavy rafts can be constructed.

SECTION XII

ATTACK OF A FORTIFIED POSITION

■ 180. CHARACTERISTICS.—For a general discussion of the employment of infantry in an attack against a fortified position, see FM 100-5. For the rifle company in such an attack, see FM 7-10. The general characteristics of this operation pertaining to the battalion are as follows:

a. Usually a wide continuous antitank and antipersonnel obstacle must be breached to reach the hostile position. The position itself will be organized in great depth.

b. Due to the completeness of the defensive preparations, powerfully supported counterattacks must be expected after the obstacle is crossed.

c. Thorough reconnaissance is required; detailed information of the enemy is essential.

d. Ordinarily a relatively long time is available for preparations, and rehearsals are practicable.

e. Stringent measures must be taken to insure secrecy.

f. Initially the attack is methodical and according to detailed plans. In the later stages coordination by higher commanders will be reduced, and initiative and bold action by subordinate commanders will be required.

g. For the initial phase of the attack, plans as well as orders to subordinate units must be in great detail.

■ 181. PLAN OF ATTACK.—The battalion plan of attack must be based upon careful reconnaissance, including a thorough study of aerial photographs and of the reports of visual air reconnaissance. It must be coordinated with the plans for the employment of aviation and supporting weapons which are controlled by higher commanders.

a. *Attachments.*—Units of other arms and services may be attached. These units may include engineers with demolition equipment, additional antitank guns, antiaircraft guns, regimental cannon company elements, chemical units, and tanks.

b. *Attacking echelon.*—(1) The battalion commander directs the organization of assault detachments composed of infantry and attached engineers (or other specially trained troops), which are employed to create gaps in obstacles and to capture fortified works. Each rifle company in the attacking echelon furnishes the infantry component of the assault detachment(s) operating on its immediate front. The detachments may operate directly under the battalion commander or under company control. Companies in the attacking echelon support the action of assault detachments by neutralizing hostile elements able to interfere with them and, if necessary, by capturing intrenchments supporting the fortifications. They rapidly occupy and hold all ground gained. They replace casualties in assault detachments or send out new detachments.

(2) Tasks assigned assault detachments may include preparation of crossings through wire entanglements and tank obstacles, clearing paths through mine fields, and reducing pillboxes or other fortifications. The attached engineers (or other specially trained troops) locate and destroy mines and execute demolitions. Infantrymen usually perform all other tasks, including placing and firing Bangalore torpedoes under wire obstacles, placing wire netting over barbed wire en-

tanglements, marking routes through gaps in obstacles, using flame throwers and grenades, and producing local smoke screens with candles or smoke pots.

(3) Each assault detachment includes a small support element to protect it from hostile patrols and to provide replacements for men assigned key tasks. The detailed organization of the detachments will vary. Each man must be provided with the clothing and equipment necessary for his particular task. The personnel assigned this duty must be carefully selected; physical fitness and agility, mental alertness, courage, and determination are requisites.

c. *Reserve*.—The reserve usually consists of at least one rifle company. (See par. 131f.)

d. *Battalion supporting weapons*.—Employment of the battalion heavy weapons and antitank guns and of supporting (or attached) cannon company weapons, chemical units, and artillery, is similar to that for any attack. Principal differences are as follows:

(1) Planning for their use in the initial attack will be more detailed.

(2) Antitank guns may execute direct fire on loopholes and openings in hostile fortifications.

(3) Mortars will fire a large proportion of smoke and heavy shell.

(4) Machine guns and mortars will frequently participate in preparatory fires.

■ 182. PREPARATIONS.—Preparations include thorough training of all personnel in their assigned duties and training of replacements for key members of assault detachments. The battalion commander arranges for a rehearsal of the initial phases of the attack. Because of the difficulties of blinding or neutralizing all hostile observation, the preparation of gaps through the obstacle in front of the hostile position will usually be made at night or under a dense smoke screen. Therefore rehearsals of assault detachments charged with preparing these gaps should be conducted under similar conditions. All personnel must be cautioned against picking up souvenirs, stumbling over wires, or handling enemy materials after the enemy position is gained lest they fall victims to booby traps.

■ 183. CONDUCT OF ATTACK.—*a.* Assault detachments create and mark gaps in the obstacle in front of the position. The battalion commander employs his supporting weapons to assist in neutralizing hostile positions capable of placing fire on the detachments. The attacking echelon followed by the battalion reserve moves promptly through gaps as soon as created. Inside the obstacle the battalion reserve prepares to meet hostile counterattacks.

b. As soon as the obstacle is passed, assault detachments proceed to reduce fortified points. Hostile intrenchments supporting the fortified points are attacked by the leading rifle companies only when necessary to assist the assault detachments or to permit their own advance. Otherwise intrenchments are by-passed and left to be mopped up by the battalion reserve. The battalion commander employs his supporting weapons to give prompt and continuous support to his attacking echelon. He is alert to take immediate advantage of destruction of hostile resistance by assault detachments and to act quickly when unexpected obstacles are encountered within the position. When necessary, he promptly employs his reserve to keep his attack moving and to meet hostile counterattacks.

c. As the attack progresses and control becomes more difficult, the battalion commander frequently attaches supporting weapons to attacking rifle companies.

■ 184. ATTACK OF A WELL-ORGANIZED POSITION.—An attack against a position which the enemy has held over a considerable period of time, but on which he has not built permanent fortifications, closely resembles an attack against a fortified position. Similar care is required in planning and in organization, but usually there will be no time for rehearsals since the longer the attack is delayed the more time the enemy will have to prepare his defense. The same constant alertness and timely action to defeat counterattack is required.

SECTION XIII

RAIDS

■ 185. GENERAL.—*a. Purpose.*—Raids are made to capture prisoners; to capture or destroy matériel; to obtain informa-

tion of hostile dispositions, strength, works, intentions, or methods of defense; and to inspire confidence and aggressiveness in the raiding troops and harass the enemy.

b. Characteristics.—A raid is an attack followed by an instant withdrawal upon accomplishment of the mission. Unless carefully planned and executed the withdrawal is the most difficult and costly part of the operation. Flank security is of vital importance, since both flanks of the raiding force are exposed.

c. Initiation.—Unless the battalion is detached, raids are usually ordered or permitted by the regimental commander. When he orders a raid, the regimental commander issues instructions covering its purpose and the fire support to be furnished the battalion. Frequently he will also prescribe the area to be raided, the size of the force to be employed, and the date and hour of the raid.

d. Classes.—(1) Raids are classified as supported and unsupported.

(2) Supported raids may be made in daylight or darkness. They depend for protection on surprise and the fires of supporting weapons.

(3) Unsupported raids are conducted without the fires of supporting weapons and depend primarily on surprise and on darkness, fog, or smoke, for protection.

(4) When the mission requires the capture of a few prisoners, followed by immediate withdrawal, an unsupported raid by a small force is preferable. When the mission requires the use of a larger force, or that the raiding force remain in the hostile position for any length of time, the fires of supporting weapons will usually be required for adequate protection, particularly during the withdrawal.

e. Organization of raiding force.—The raiding force is subdivided into smaller task forces, each organized and equipped to accomplish a specific purpose. Task forces may include assault parties for accomplishing missions within the hostile position, parties to provide security for the assault parties, parties for handling prisoners or removing captured matériel, and a reserve party for use in emergency. Advance and flank security parties are provided to deal with hostile patrols to the front and protect the flank. The exact organization

varies with each situation. Tactical unity is maintained as far as practicable; however, each party should be organized for the specific mission which it is expected to accomplish.

■ 186. SELECTION OF AREA TO BE RAIDED.—*a.* The area to be raided should be one which is lightly defended, or one which is difficult for the enemy to defend because of restricted fields of fire. In daylight raids, covered routes of approach and withdrawal are desirable.

b. The selected area should give reasonable promise that the purpose of the raid can be accomplished.

c. The selection of an area close to our front lines and the absence of serious obstacles or difficult ground to traverse speeds up the raid and facilitates the withdrawal. In the case of a supported raid it also facilitates fire support.

d. If the raid is to be supported the area should be so located that it can be isolated by placing fires to neutralize adjacent and rearward hostile positions without endangering the raiding force.

■ 187. SIZE OF RAIDING FORCE.—The size of the raiding force should be kept to the minimum which can reasonably be expected to accomplish the purpose of the raid. As the size of the raiding force increases so do the difficulties of achieving surprise, control, and speed of execution.

■ 188. RAIDS BY THE BATTALION.—The battalion as a unit engages only in supported raids. Each plan must be devised to fit the existing terrain and situation. A simple plan, thoroughly understood by all the raiding troops, and thorough reconnaissance are essential. Subordinate commanders should make at least one night reconnaissance in addition to that made in daylight.

a. Date and hour of raid.—The maximum amount of time should be allowed for reconnaissance, planning, registration of supporting fires, and rehearsals. At least one night should intervene between the receipt of orders for the raid and its execution. Supported raids are preferably carried out at dawn, twilight, or under similar conditions of low visibility, in order to limit hostile observation and yet have enough light for close combat purposes. However, supported raids

have been successfully executed both in broad daylight and in full darkness. Successful execution of a raid in broad daylight is usually dependent on the ability to blind all artillery observation posts with smoke.

b. Routes of advance and withdrawal.—(1) Unless the raid is to be conducted under cover of full darkness, fog, or smoke, a covered route (or routes) of approach should be utilized and the raid launched from the last covered position. Under conditions of reduced visibility, flank and advance security parties precede the battalion in ample time to clear hostile patrols from the area and prevent premature discovery of the raid.

(2) Whenever practicable, the withdrawal is made by route(s) other than those used in the advance. In any case, the route(s) of withdrawal must avoid the known or suspected location of all hostile defensive barrages, as the enemy is certain to put down these defensive fires before the raid can be completed. Similarly, road intersections or other prominent landmarks are avoided.

c. Rallying points.—The battalion commander prescribes a rallying point for each rifle company. It should be a concealed and defiladed locality within our own lines. Its purpose is to enable units to be promptly reassembled and to facilitate the prompt collection and transmission to higher headquarters of all matériel, prisoners, and information gathered in the course of the raid.

d. Passage of enemy wire.—A raid against a well-organized position must usually overcome enemy barbed wire entanglements. Barbed wire is usually cut by leading elements with wire cutters in accordance with prearranged plans. If the wire is too extensive for this to be done rapidly, surprise may have to be forfeited by employing artillery to destroy the entanglements or by using Bangalore torpedoes to blow out sections of the wire. Some types of wire may be crossed without cutting by using chicken wire rolls.

e. Training.—Time is often available for rehearsals, particularly in a stabilized situation. At least one daylight rehearsal and, for night raids, an additional night rehearsal should be held whenever possible. These rehearsals should be conducted on ground that is similar to the area to be raided.

f. Equipment.—(1) The battalion commander prescribes the equipment to be carried. The only insignia worn are insignia of rank. For night raids similar equipment and means of identification to those for night attacks are prescribed. (See par. 153o and p.)

(2) Measures are frequently taken to make the appearance of the troops blend with the terrain. For example, white cloth may be worn over the uniform to match snow; at other times both the clothing and the hands and faces may be smeared with mud, pot black, or charcoal.

(3) If the purpose of the raid includes the capture of heavy or cumbersome matériel, some improvised means of towing or carrying this equipment may have to be prepared in advance.

(4) Rehearsals should be conducted with the troops carrying the exact equipment prescribed for the raid.

g. Supporting fires.—(1) Supporting fires should neutralize all hostile positions within effective radius of the area to be raided and box in the area so as to isolate the defending troops. These fires must be precisely prearranged as to targets and as to signals to be used. Supporting fires may begin either at a specified time or upon call (by prearranged pyrotechnic signal and radiotelephone) of the raid commander. Signals are also used for shifting or lifting fires.

(2) Since the prescribed fires must be accurately placed under any conditions of visibility, they should be registered in advance. In order to preserve secrecy, registration should cover a considerable number of points in addition to those for which data are desired and, if possible, should be spread out over a period of more than 1 day.

(3) Artillery may be employed to box in the objective by fire on adjacent and rearward hostile positions and on avenues of enemy approach both during the raid and to cover the withdrawal. Supporting fires prior to the raid may sacrifice secrecy and surprise; however, the strength of the position may require that a short preparation be placed on the area to be raided.

(4) Mortars extend or fill gaps in the fires of the artillery. Heavy machine guns place bands of fire near the flanks of the

area; they may also be employed to thicken the artillery preparation by firing barrages.

(5) If certain weapons are to fire on more than one target during the raid, specific instructions as to when their fire is to be shifted are included in the order.

h. Withdrawal.—The time when the various elements of the raiding force start back to their own lines is either made at a prearranged time or announced by a prearranged sound or pyrotechnic signal.

i. Conduct.—(1) If made at night or under conditions of reduced visibility the raid is conducted in a similar manner to a night attack (see sec. VIII); if conducted in daylight it will differ from any other daylight attack only in the rapidity with which it is carried to a conclusion. The withdrawal of the assault parties is covered by the advance and flank security parties.

(2) The principal duties of the battalion commander during the raid will be to decide when to call for, shift, or lift supporting fires, to be constantly on the alert for unexpected hostile reactions, to take prompt and adequate measures to meet any unforeseen emergency, and to decide when to order the withdrawal.

■ 189. RAIDS BY ELEMENTS OF THE BATTALION.—For a further discussion of the rifle company in supported and unsupported raids, see FM 7-10.

a. Supported raids.—The battalion commander designates the officer to command the raiding force and, taking into account his recommendations, prescribes the composition of the force and arranges for the necessary supporting fires. He prescribes the mission, time, objective, route of advance, route of withdrawal, and rallying point for the raid. He insures that ample opportunity is allowed for day and night reconnaissance and arranges for rehearsals if these are contemplated. The organization of the raiding force and the detailed instructions for its conduct are usually left to the discretion of the commander of the raiding force. Adjacent and supporting units are informed of the raid.

b. Unsupported raids.—The battalion commander selects the rifle company to furnish the raiding force. He assigns

the mission, approximate time, and objective of the raid; he usually leaves other details to the rifle company commander and the commander of the raiding force. He insures that all adjacent troops are informed of the raid and of the route of advance and withdrawal.

CHAPTER 9

THE DEFENSE-

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SECTION I

GENERAL

■ 190. REFERENCES.—For fundamental doctrines of defensive combat, see FM 100-5. For principles governing defensive combat of the infantry regiment, see FM 7-40. For measures to be taken for individual protection and concealment and for types of emplacements for weapons, see FM 7-10, 7-15, 5-35, and 21-45. For tactics of the battalion antitank platoon and details of antimechanized defense, see FM 7-35 and 5-30.

■ 191. REGIMENTAL DISPOSITIONS ON BATTLE POSITION.—*a.* A regiment assigned to the defense of a sector of the battle position distributes its elements in three echelons: security forces, holding garrisons, and a reserve. It usually assigns two battalions to the defense of the main line of resistance (holding garrisons) and holds one battalion in reserve. The reserve battalion may be assigned an initial mission in the security echelon.

b. The regimental commander assigns defense areas to the holding garrisons by designating boundaries and limiting points. He may include further detailed instructions concerning the course of the main line of resistance. Boundaries define the lateral limits of responsibility. They extend forward as far as the range of the weapons with which the battalion is equipped and include the combat outpost line to fix the responsibility for its defense. They extend rearward at least as far as the rear limits of the battalion defense area.

Easily recognizable terrain features are designated as limiting points, where commanders arrange to meet, or send representatives to meet, to coordinate their defensive dispositions and insure mutual-fire support. (See par. 207a.)

SECTION II

FRONT-LINE BATTALION

■ 192. **FRONTAGE AND DEPTH.**—A battalion occupying a defense area on the main line of resistance will usually be assigned a frontage of 1,000 to 2,000 yards, depending on the defensive strength of the terrain. In open terrain affording long fields of flanking fire or where obstacles in front of the position, such as swamps or streams, preclude the possibility of strong attack against the area, a wider frontage may be assigned. The depth of the defense area may vary from 800 to 1,400 yards. The regimental commander may indicate the depth of the area by the rearward extent of the battalion boundary or by the designation of a terrain feature. The battalion is responsible for the defense of its assigned area. All installations of the battalion are contained within the area with the exception of administrative installations such as the battalion ammunition distributing point. Regimental approval is obtained before any such installations are located in rear of the assigned defense area.

■ 193. **MOVEMENT TO BATTLE POSITION.**—The battalion commander places his unit in the area which it is to defend without loss of time in order to afford the maximum time for the construction of defensive works. As soon as the battalion defense area is designated by the regimental commander and before beginning his reconnaissance, the battalion commander provides for the resumption or continuation of the movement of his battalion toward the assigned area. He arranges for subordinate commanders to precede their units and furnishes them with transportation where practicable. He will usually designate assembly area(s) within the defense area toward which the battalion under command of the executive officer is to move. However, when practicable, the battalion commander makes timely decisions which will enable subordinate units to move directly to their assigned defense areas

without halting in assembly area(s) and begin the work of organization. The battalion is responsible for its local security during the movement to the position and throughout its organization.

■ 194. RECONNAISSANCE.—*a.* The reconnaissance of the battalion commander will be as detailed as the time permits. In the hasty assumption of the defensive the reconnaissance may consist solely of a map study.

b. When the defense is assumed out of contact with the enemy, the battalion commander may instruct S-3, the heavy weapons company commander, and the artillery liaison officer to accompany him. Other personnel may be directed to make detailed reconnaissance and report on specified areas or to reconnoiter and recommend locations for installations, weapons, and mine fields.

c. The battalion commander first identifies the area the battalion is to occupy and selects covered approaches into the area. His further reconnaissance determines the following:

(1) The most likely avenues of approach for hostile foot troops and armored forces.

(2) Localities to be occupied by security forces in order to screen the position from close hostile observation. (See par. 205.)

(3) Any natural obstacles in the foreground or terrain features that can be readily converted into obstacles.

(4) Areas in the foreground to be contaminated and demolitions to be executed.

(5) Key points within the battalion area, the retention of which by the battalion and subordinate units is vital to the defense.

(6) The trace of the main line of resistance.

(7) Boundary and limiting point between companies.

(8) General locations for machine guns in close support of the main line of resistance.

(9) General locations for 81-mm mortars and areas to be covered by their fires; areas into which supporting cannon company elements are to be prepared to fire.

(10) Details of defensive fires and barrages to be requested from the supporting artillery. (See FM 7-40.)

(11) General locations for antitank weapons and mines.

(12) General locations for rear machine guns. (See par. 199a(2).)

(13) Locations to be organized by the battalion reserve; its assembly area, if one is to be occupied (par. 198b(2)); and its direction(s) of counterattack.

(14) Location of observation post(s) from which the battalion area and its surroundings can be viewed.

(15) Location of the aid station, ammunition distributing point, command post, and alternate command post.

■ 195. PLANS.—*a.* The defense plan includes security, distribution, and missions of rifle companies and battalion supporting weapons, coordination of fire, use of the reserve (to include counterattack), ground organization, communication, and administration.

b. If the defense is assumed in contact with the enemy and the situation does not permit a complete reconnaissance and coordinated plan of defense, the battalion commander indicates the general trace of the main line of resistance and may initially attach heavy machine guns to rifle companies for their immediate protection. As soon as practicable these initial measures are readjusted into a coordinated defense of the battalion area.

■ 196. SELECTION OF MAIN LINE OF RESISTANCE.—*a.* The main line of resistance is located to protect vital terrain. It is traced to provide as many as practicable of the following advantages:

(1) Retention of essential observation of front and flanks.

(2) Denial of close hostile observation into the position.

(3) Good fields for grazing and flanking fire of automatic weapons.

(4) Best possible use of natural obstacles, particularly antitank obstacles.

(5) Concealment of defensive works from air and ground observation.

b. The trace of the main line of resistance will be irregular and contain minor salients and reentrants to facilitate the development of flanking fire. The formation of large salients and reentrants is avoided.

■ 197. BOUNDARIES AND LIMITING POINTS.—The front-line company defense areas are assigned by indicating the main line of resistance and designating a boundary between companies and a limiting point on the boundary where the front-line company commanders are to coordinate their defenses. The boundary is fixed, so far as practicable, to avoid dividing responsibility for the defense of key terrain or a critical avenue of approach. If practicable, one company is assigned the defense of the approach and the terrain which dominates it. Company boundaries are extended forward for at least 500 yards and to the rear to the limit of the company defense areas.

■ 198. DISTRIBUTION OF RIFLE COMPANIES.—The battalion commander usually places two rifle companies on the main line of resistance and holds one in reserve. (See fig. 10.) He assigns frontages to the front-line rifle companies in accordance with the defensive strength of the terrain and the amount of supporting fires allocated to the support of the area. In close, broken terrain with short fields of fire a rifle company can defend a width of about 500 yards. In more open terrain it may be assigned a frontage of 1,000 yards or more. The depth of the defense area assigned to a rifle company usually does not exceed 700 yards.

a. Organization of front-line companies.—Front-line rifle companies distribute their rifle platoons in width and depth; usually two platoons are assigned defense areas on the main line of resistance and one platoon is in support. The rifle platoons physically occupy the important terrain features and hold the intervals by fire. They are located to be mutually supporting and capable of all around defense; they afford close rifle protection for supporting weapons placed in the company area.

b. Battalion reserve.—(1) *Missions.*—The battalion reserve usually consists of one rifle company. It may be assigned the following missions:

(*a*) *Extend in depth the organized resistance of the battalion.*—The reserve company usually organizes its position with three platoons abreast. (See fig. 10.) Platoon defense areas are located within supporting distance (500 yards) of the support elements of the front-line rifle companies. These

areas should be sufficiently far to the rear (150 yards) so that they will not be included in the dispersion of fire directed at the preceding echelon. Platoons are located to be mutually supporting and capable of all around defense.

(b) *Protect the flanks of the battalion.*—In order to be prepared to block a penetration in an adjacent defense area the reserve company organizes additional platoon defense areas on each flank and toward the rear of the battalion defense area. These defense areas are so located as to prevent the widening of the penetration and the envelopment of the flank and rear of the battalion.

(c) *Counterattack.*—A counterattack is launched usually against the shoulder of a penetration to regain lost portions of the main line of resistance. Except on regimental order the battalion reserve does not counterattack against an objective outside the battalion defense area. However, the route to the location from which the counterattack is to be made may cross into an adjacent battalion area if such maneuver has been coordinated with the commander of that area. The enemy is pursued beyond the main line of resistance by fire alone. The counterattack is supported by all available supporting weapons. The battalion order lists the assumed penetrations against which counterattacks are to be planned and states the priority in which the plans will be prepared. The reserve company commander prepares the details of the plans and submits them to the battalion commander for his approval and for the coordination of supporting fires.

(2) *Location and employment of reserve.*—(a) Where the situation indicates attack by infantry supported by artillery, the reserve company, after completing the organization of assigned defense areas, should be hastily intrenched in a concealed and defiladed assembly area, if such an area exists within the rear limits of the battalion defense area. The location of such an assembly area should facilitate the entry of the reserve into combat, provide sufficient dispersion for the protection of all elements against artillery fire, and take advantage of any natural obstacles for protection against armored attack. If no such area exists, the reserve occupies the defense areas that extend the depth of the battalion.

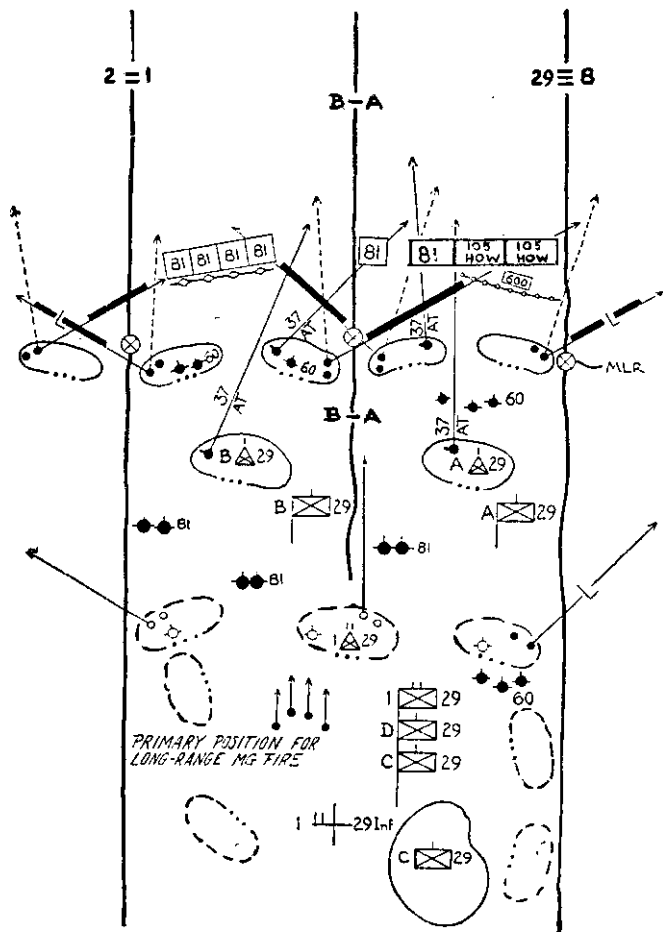


FIGURE 10.—Schematic diagram of organization and plan of close defensive fires of front-line battalions.

NOTE.—For considerations involved in locating machine guns on the MLR , see paragraph 199a. The distribution of light machine guns shown above is not invariable.

(b) Where the situation indicates the likelihood of intensive bombardment by hostile aviation or armored attack which might initially immobilize the reserve company, it occupies its defense areas that extend in depth the organized resistance of the battalion. From those areas it is prepared to support the front-line companies by fire; to defend in place; move to counterattack; or to move to its prepared positions and protect a threatened flank.

■ 199. DISTRIBUTION AND MISSIONS OF SUPPORTING WEAPONS.—

a. (1) The battalion order assigns general locations and missions for both the heavy and light machine guns. Usually one platoon of heavy machine guns and the light machine guns of forward rifle companies are assigned missions in close support of the main line of resistance. If additional machine guns are required for this mission, the light machine guns of the reserve company are employed in preference to the remaining heavy machine guns. Locations are assigned so as to emplace the light machine guns (except those of the reserve company, if employed in close support of the main line of resistance) within the areas of their respective companies and to facilitate control of heavy machine guns by their platoon leader. These guns are assigned sectors of fire and final protective lines. Final protective lines are planned to present as nearly as possible a continuous interlocking band of grazing fire across the front of the battalion.

(2) The remaining heavy machine guns and the light machine guns of the reserve company (unless employed in close support of the main line of resistance) are assigned rear locations which will enable them to execute a primary mission of long-range fire in support of that line and supplementary missions for limitation of penetration, flank protection, and support of counterattacks. They may be located *initially* with the combat outpost and later withdrawn. (For antiaircraft missions for heavy machine guns, see par. 205c.)

(3) Unless employed in close support of the main line of resistance the light machine guns of the reserve company are assigned locations from which they can be readily

released to company control in case the company is employed in counterattack.

b. The 81-mm mortars are usually distributed by section in width and depth. They occupy positions in defilade within communicating distance of observation posts which afford a view over the foreground of the battalion area. They are located generally in rear of the support platoons of the front-line companies so that minor penetrations will not force them to displace. They should not be located in the more likely areas of hostile penetration. Supplementary firing positions to the rear are assigned to permit continuous fire against deep penetrations within the battalion area. The battalion order assigns areas in which mortars are to be prepared to mass their fires, specific areas to be covered as secondary targets, and one primary target area to each mortar.

c. The 37-mm guns of the antitank platoon are assigned firing positions from which they are able to fire in support of the main line of resistance. If practicable, they are emplaced near the first crest to the rear of the main line of resistance, provided that from such locations they can cover the most likely avenues of mechanized approach and fire on each hostile tank before it can reach the main line of resistance. Guns may be emplaced within forward platoon defense areas if fire support of the main line of resistance can be gained only from such positions. The guns are emplaced to be mutually supporting so that when a hostile tank attempts to overrun one gun position it will be engaged in flank by another gun. The guns of the antitank company may reinforce these fires; they add depth to the anti-tank defense of the forward battalions and protect their flanks.

■ 200. SUPPORTING ARTILLERY AND CANNON COMPANY.—a. (1) Normally one battalion of light artillery is allotted to support an infantry regiment. This battalion can fire only three normal barrages for the close defense of the main line of resistance and the regimental commander allots these barrages to the battalions occupying that line. The responsibility for locating the allotted normal barrage(s) on the ground is delegated to the infantry battalion commander.

(2) Other artillery fires which should be requested from the supporting artillery include—

(a) Fires covering avenues of approach, probable hostile assembly areas, and observation post.

(b) Fires in support of the combat outpost.

(c) Fires within the battle position to repel or stop a hostile penetration and in support of counterattacks.

(3) With the assistance of the artillery liaison officer the battalion commander plans all supporting artillery fires. He coordinates them with the fires of his own weapons.

b. One 75-mm platoon of the cannon company is usually placed in direct support of each front-line battalion, and in addition the 105-mm platoon may be placed in direct support of one of those battalions. Initially, if covered routes of withdrawal are available, elements of the cannon company may be located in front of the main line of resistance for long-range fires; when so located, rifle protection against hostile patrols must be provided. From positions within the battalion defense area, cannon platoon(s) are used for long-range fires against observed targets and also for fires, by direct laying, in close support of the main line of resistance and in support of counterattacks.

■ 201. FIRE PLAN.—a. The battalion fire plan seeks to take the enemy under fire from the time he enters the zone of surveillance of the combat outpost, hold him under an increasingly heavy volume of fire as he approaches the battle position, stop his assault by a dense band of closely coordinated fires immediately in front of the battle position, limit his penetration of the position by prepared interior fires, and eject him from the position by a combination of prearranged fire and counterattack. (See fig. 10.) The fire plan provides for the opening of fires, signals for close defensive fires, rates of fire, mutual support of adjacent units, and fires to be delivered under conditions of reduced visibility.

b. Long-range interdiction fires by the supporting artillery are normally a function of regimental planning, as such fires must be coordinated with the location and withdrawal of the general outpost. Long-range artillery, cannon, and mortar fires to be observed from the combat outpost line are included in the battalion plan. Such fires, and fires in close

support of the combat outpost are accomplished by locating observers for these weapons with the combat outpost.

c. The withdrawal of the combat outpost is supported by prearranged artillery, cannon, long-range machine-gun, and mortar fires. Machine-gun fire support may be delivered by rear guns or, if these guns are attached to the combat outpost, by guns assigned missions in close support of the main line of resistance and sited in temporary positions sufficiently in front of or in rear of the main line of resistance so that their fires will not disclose the location of that line. Upon withdrawal of the combat outpost, fires against targets of opportunity are usually opened upon the individual initiative of weapon commanders or observers. The heavy weapons commander, the artillery liaison officer, and the representative of the cannon company usually are with the battalion commander at the battalion observation post. Through these individuals, the battalion commander is able to concentrate artillery, cannon, or mortar fire on any desired area.

d. Fires from the main line of resistance ordinarily are withheld until the enemy has approached within 500 yards of the position. (See FM 7-40.) The battalion fire plan may prescribe the withholding of these fires in certain areas until the hostile attack is more definitely committed. Where the front of the position is divided by cross compartments, with intervening areas of dead space which afford the attacker defilade from his own artillery and bombers, fires may be withheld until the hostile attack has arrived at the nearest ridge line.

e. (1) Close, defensive fires are planned to place a dense curtain of fire across the battalion front just in front of the main line of resistance. These fires are a combination of machine-gun final protective fires, fires on primary target areas of 81-mm and 60-mm mortars, and the barrages of the supporting artillery. Elements of the cannon company supporting the battalion usually will not be assigned barrage missions; when the terrain permits, they may fire through gaps by direct-fire, hit-and-run tactics.

(2) The battalion fire plan provides for the release of close defensive fires across the entire front or in front of any threatened locality. Each front-line rifle company is usually authorized to call for barrage fire. Close, defensive fires

which support adjacent units may also be opened upon call from either adjacent battalion. The battalion order includes all necessary provisions for calling for these fires by ground signals prescribed by the signal operation instructions of the division and also by at least one nonvisual means of communication. It also states the localities from which such signals will be fired, those weapons which will open fire on any given signal, the rates of fire for use under conditions of reduced visibility, and the duration of fires. Only those fires should be opened which protect the area calling for them.

(3) Rates of fire usually prescribed are heavy machine gun section, 250 rounds per minute for 2 minutes, and 125 rounds per minute thereafter; light machine-gun section, 125 rounds per minute for 2 minutes, and 60 rounds per minute thereafter; 81-mm mortar, 9 rounds per minute for 2 minutes and 6 rounds per minute thereafter. Rates of fire for the supporting artillery will usually be prescribed by higher headquarters.

(4) Fire may be continued until the locality calling for such fire signals or orders firing to cease, or the battalion order may prescribe a time length for each call. In prescribing time lengths of fire, ammunition supply must be considered. Each fire usually should not exceed 10 minutes. If additional fire is needed the call may be repeated. Visual signals for cessation of fire should be used sparingly and time length of fire should be varied in order that a routine of fire will not be disclosed to the enemy.

(5) While fires of the 60-mm mortars of front-line rifle companies are included in the close, defensive fires of the battalion, the battalion commander does not prescribe their locations, target areas, or rates of fire. These matters are prescribed by their respective company commanders.

(6) The 60-mm mortars of the reserve company may be emplaced to deliver close, defensive fires; when these fires cannot be observed, such employment is practicable only where prior registration is possible. When so employed, these mortars should be so located as to permit their release to the reserve company upon its commitment to action.

f. Fires within the position to limit penetrations and support counterattacks by the reserve company are planned for all

supporting weapons except those whose primary mission is close support of the main line of resistance.

g. The battalion commander prescribes the conditions under which the battalion antitank guns open fire. His defense order should assign not more than one gun per section to fire on hostile vehicles or tanks apparently engaged in reconnaissance. *Fire of other antitank guns should be withheld until the hostile tank attack has been definitely committed.* Terrain features usually are designated which armored vehicles are to cross (or pass) before antitank guns open fire; different terrain features may be prescribed for different types of armored vehicles. These designated features should place the hostile vehicles in such position that there is a reasonable expectation of obtaining direct hits.

■ 202. ORGANIZATION OF GROUND.—Immediately upon the occupation of a position, steps are taken to strengthen the defenses by clearing fields of fire and by the construction of individual shelters, emplacements for weapons, and obstacles. Measures for concealment and camouflage are carried out concurrently with construction tasks. The sequence in which these various tasks are to be accomplished is expressed in orders in the form of priorities.

a. Planning and supervision.—(1) The battalion commander's plan for the organization of the ground should prepare the battalion for combat in the shortest practicable time. Tools and materials made available by the regimental commander are allotted in accordance with the amount and urgency of the work to be done by the various subordinate units. The battalion commander and his staff supervise the work to insure that the terrain is used to the best advantage, that concealment and camouflage measures are carried out, and that the work on the position progresses without loss of time or wasted effort.

(2) If the defense area must be occupied under hostile artillery fire or air attack, concealed positions may initially be selected and occupied, and organization of exposed positions either postponed until dark or accomplished piecemeal by the infiltration of small groups.

b. Priorities.—(1) The normal order of priority of work is indicated below; depending on the situation some or all of these tasks are carried out concurrently.

(a) Clearing fields of fire.

(b) Laying of antitank mine fields and execution of demolitions.

(c) Providing adequate signal communication and observation systems.

(d) Preparing emplacements for weapons and individual shelter.

(e) Preparing obstacles (other than mine fields).

(f) Preparing routes for movement of reserves and for supply and evacuation.

(2) *Priorities for front-line companies.*—So far as possible, front-line companies are assigned no initial tasks other than the organization of their defense areas. Clearing of the necessary fields of fire, digging of individual shelters, and emplacement of their crew-served weapons receive first priority.

(3) *Priorities for heavy weapons company.*—First considerations for the heavy weapons company include clearing fields of fire, emplacement of weapons, establishment of observation and communication, and digging individual shelters.

(4) *Priorities for the reserve company.*—Elements of the reserve company not assigned to security missions may initially be ordered to assist the front-line companies in the organization of the ground. Such tasks may include laying of antitank mine fields, preparation of obstacles, and assisting in the clearing of fields of fire. When the reserve company is to prepare flank positions in the battalion reserve area, the priority of the organization of such positions is stated in orders. Work on these positions may be postponed until the organization of the forward areas is well under way.

c. Tasks for the battalion headquarters company.—The installation of the signal communication and observation systems, execution of demolitions, and preparation of routes within the position are normal tasks for the elements of the battalion headquarters company.

d. Missions for engineers.—Engineers will usually be assigned special construction missions by higher headquarters.

When made available to the battalion, they can best be employed to construct obstacles and other works requiring special equipment and specialized training, and to execute demolitions.

e. Construction and location of works.—For detailed information on types and methods of construction of various field works, see FM 7-10, 7-15, and 7-35. All works are located to take advantage of natural concealment so far as their tactical use permits. Where concealment cannot be obtained they are camouflaged. (See FM 5-20.)

f. Obstacles.—(1) Tactical obstacles are located to stop or divert the hostile approach. Barbed wire entanglements and antimechanized obstacles are placed, or natural obstacles are improved, to break up the enemy's attack formations and hold him in areas which are covered by intense defensive fires, particularly those of automatic weapons and antitank guns. They are so placed that their removal or neutralization by the enemy can be prevented by rifle or machine-gun fire and where they will be inconspicuous both from the ground and from the air. (See FM 5-15 and 5-30.)

(2) Protective obstacles are located to prevent the enemy from delivering a surprise assault from areas close to each defense area. Such obstacles should be near enough to the defense area for adequate surveillance by day and night and far enough away to prevent the enemy from lying beyond the obstacle and employing hand grenades. Skillful location may permit an obstacle to serve both tactical and protective missions. Barbed wire is generally used for protective obstacles.

g. Individual shelter and emplacements.—Riflemen and personnel not manning crew-served weapons dig standing type one-man fox holes. Men who work in pairs, such as an automatic rifleman and his assistant, may dig two-man fox holes. Primary and alternate emplacements are dug for weapons. Such supplementary positions are dug as are necessary for the all-around protection of each defense area. Whenever possible, natural cover, drainage lines, ditches, and other defilade are used for movement within the defense areas. When such defilade is insufficient to permit covered movement of machine guns and 60-mm mortars from their

primary to their alternate or supplementary emplacements, narrow crawl trenches are dug. They should be dug, where practicable, in areas (under the limbs and foliage of trees and bushes) concealed from air observation; if this is impracticable they should be extended at least 100 yards beyond each emplacement.

h. Dummy works.—When time permits their construction, dummy works may be used to mislead the enemy. They are prepared concurrently with work on the true position. They should closely resemble genuine works, be constructed where true works might reasonably be located, and bear evidence of an attempt at camouflage. They should be located at least 150 yards from any true position so that fire directed at them will not include occupied localities. To further deceive the enemy, dummy works may be manned with small groups during preliminary phases when the enemy is seeking to locate defensive works by active air reconnaissance and ground patrolling.

■ 203. ORDERS.—*a.* If practicable, the battalion commander issues a complete oral defense order to his subordinate commanders and staff. However, if such procedure will delay the occupation and organization of the position, fragmentary orders are issued. The commander of the heavy weapons company should have sufficient information to place his company in position by the time he has completed the reconnaissance with the battalion commander. Other commanders are given sufficient details of the battalion plan to place their troops on the position and commence its organization. Complete details of the defense plan are transmitted later.

b. The battalion field order includes—

(1) Information of the enemy and of friendly troops, including mission of the regiment, units on the flanks of the battalion, covering forces, supporting artillery, supporting elements of the cannon company, and antitank weapons of higher units.

(2) General plan of defense; boundaries of the battalion defense area; general course of the main line of resistance; limiting points; and distribution of rifle companies.

(3) Missions for rifle companies.

(4) Missions and distribution of machine guns, both heavy and light.

(5) General firing positions and missions for 81-mm mortars; primary target areas and areas for the massing of fires.

(6) General locations and principal direction of fire for antitank guns; conditions for and restrictions on opening fire; location of mine fields and obstacles.

(7) Organization of the ground, to include priorities.

(8) Composition, location, and mission of the combat outpost.

(9) Location of battalion ammunition distributing point; arrangements for distribution of ammunition, including the amount to be placed on the position; disposition of company transport and battalion train.

(10) Location of the battalion aid station.

(11) Means of signal communication to be employed; locations of battalion command post, alternate command post, and observation posts.

■ **204. CONTROL OF MOTOR VEHICLES.**—Upon occupation of the position, weapon carriers and ammunition train vehicles are unloaded in covered and concealed locations as close as practicable to localities where their loads are to be used. (See FM 7-10 and 7-15.) As soon as the position has been supplied, all vehicles except those necessary for command and communication are withdrawn to the rear and held under battalion or regimental control, usually in the vicinity of the regimental train bivouac. Replenishment of ammunition on the position will usually be effected under cover of darkness. Movement of vehicles at night is made without lights. Supply vehicles are returned to the rear area prior to daylight.

■ **205. SECURITY.**—Covering forces of higher units usually provide distant security for the battalion during the initial phases of a defensive operation. These covering forces may include armored and motorized forces under army corps or division control and a general outpost under division or regimental control.

a. Combat outpost.—(1) 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, or when battle is interrupted by nightfall, each front

line battalion will establish a combat outpost. (See FM 7-10.)

(2) The combat outpost line will usually be designated by the regimental commander. It is located to provide observation over the foreground, deny enemy observation of the battle position, and prevent direct hostile machine-gun fire against the position.

(3) The combat outpost usually consists of one or more rifle platoons deployed as a series of outguards in a single echelon. Usually the rifle units for the combat outpost and its commander are detailed from the battalion reserve. However, if the combat outpost line is close to the battle position front-line companies may be required to outpost their respective fronts. As long as the general outpost is in position the combat outpost consists chiefly of observers and small patrols who keep the foreground of the position under observation. When there are no friendly troops in front of it, the combat outpost maintains contact with the enemy by patrolling, delays the hostile advance by fire from its position, and seeks to deceive the enemy as to where the principal resistance will be encountered. If the combat outpost position affords good fields of fire and covered routes of withdrawal, battalion supporting weapons and elements of the cannon company may be attached. (For details of employment of heavy weapons with the combat outpost, see FM 7-15.)

(4) Communication may be maintained with the combat outpost by wire, radiotelephone, and visual signaling.

(5) Wide latitude is given to the combat outpost commander in conduct of the action. The combat outpost withdraws by predetermined routes, either upon the initiative of its commander or upon order of the battalion commander. Subordinate units and adjacent battalions are immediately notified of the initiation of the withdrawal.

b. Flank security.—(1) Information of the situation in adjacent sectors is essential. This information is obtained by observers who keep the flanks under constant observation and from liaison personnel. Lateral wire communication (from right to left) is established between battalions. (See FM 7-40.)

(2) Exposed flanks may be secured by patrols and by detached posts located to block the principal approaches. Use

is made of demolitions, obstacles, and contaminations in accordance with directives from higher headquarters.

c. Antiaircraft security.—(1) Security against aircraft is obtained by the protective measures of warning, concealment, dispersion, intrenchment, and fire.

(2) The warning system is fully organized in a defensive situation and is part of any aircraft warning service organized by higher headquarters. Air observers are placed within the battalion area and in the area of the combat outpost to give warning to all troops within hearing by sounding a prearranged signal by whistle, bugle, or other device. (See par. 66.) Warnings received by radio or wire are immediately relayed to the troops and higher headquarters. The air warning system includes an "all clear" signal which is sounded promptly when airplanes have passed so that the troops may resume their normal activities.

(3) Measures taken for concealment aim to defeat both visual reconnaissance and air photography. Fox holes, emplacements, and obstacles are carefully sited to utilize concealment afforded by nearby banks, buildings, brush, hedges, ditches, and cuts. Earth spoil from fox holes and other ground works must be camouflaged or removed concurrently with digging to avoid disclosure of the position to air observers or by aerial photographs. Wheel and foot tracks must be concealed, obliterated, or extended beyond the installation to which they lead. White articles such as maps and clothing carelessly exposed to air observation may disclose the location of a unit otherwise concealed. At night, blackout affords effective concealment.

(4) When concealment is not essential or obviously does not exist, all suitable weapons are employed against low-flying hostile aircraft. Weapons on or near the main line of resistance will *not* fire at hostile aircraft until it is obvious that the location of that line is known to the enemy. Such weapons may be located initially in supplementary positions to permit them to fire antiaircraft missions. (See FM 7-10 and 7-15.) Weapons of reserve units conform to this doctrine.

(5) When both air and ground targets exist, rifles, automatic rifles, and heavy machine guns are employed against

whichever target appears to offer the greatest threat to the accomplishment of the mission of the unit to which the weapon belongs.

d. Antimechanized defense.—(1) Measures for antimechanized defense are developed concurrently with other defensive measures. They consist of a coordinated combination of obstacles, both natural and artificial, and the fire of antitank guns and antitank grenades. Natural obstacles are strengthened. Artificial obstacles are constructed; these consist primarily of such antitank traps or ditches as can quickly be dug. Antitank mine fields are laid to deny an area or to canalize the hostile tank approach into areas more effectively covered by antitank gun fire. However, some antitank guns should be sited to cover the mine fields and obstacles in order to destroy hostile armored vehicles disabled or slowed down by them.

(2) All combat troops should be proficient in the construction of antimechanized obstacles and in the technique of planting mines. Any antitank mine fields laid by the battalion are reported to the regimental commander; the regimental antitank mine platoon then records their location. Until the need therefor no longer exists the battalion maintains a traffic guard over mine fields laid in the battalion area in order to protect friendly troops against accidental detonation.

(3) During a hostile tank attack, individuals not equipped with antitank weapons take cover in their fox holes or emplacements in time to prevent being crushed. Personnel armed with antitank grenades employ them within effective range (75 yards). As soon as the tanks have passed, weapons are mounted and all individuals resume their firing positions. They are alert to prevent crews of hostile tanks from opening doors to throw grenades into their fox holes or emplacements, and to engage infantry following the tanks.

■ 206. NIGHT DISPOSITIONS.—*a.* The defender must be prepared at night or under other conditions of reduced visibility to repel a hostile attack or prevent small groups from infiltrating into the position. Consideration should be given to moving machine guns and mortars whose positions have been disclosed by daylight firing to alternate or supplementary night

positions where this can be done without disrupting the system of close defensive fires.

b. (1) Defense at night depends upon prearranged fires, fires with artificial illumination, and hand-to-hand combat. Early information of hostile movement is essential. Listening posts are established to cover trails or other avenues of approach to the defense area from all directions. Patrols, moving stealthily, cover the front and the intervals between units. Where necessary, readjustments are made in the forward areas to fill gaps that would be covered by fire during daylight. Elements of support platoons may be used to fill such gaps, or front-line platoons may be extended to the flanks. If practicable, such supplementary positions are dug in and camouflaged. Elements of the battalion reserve may be placed to protect an exposed flank.

(2) An attacking force that succeeds in gaining a foothold within the position during the night can best be ejected by a counterattack launched by the reserve during the half-light of early dawn before the hostile force has had an opportunity to observe its area and surroundings and plan its defense. Patrols locate the hostile position during the night. As soon as it is sufficiently light to see, patrols search possible hide-outs to mop up hostile groups which may have been overlooked during the counterattack.

c. Fog and smoke create conditions similar to night. The battalion commander decides to what extent night dispositions will be adopted.

■ 207. CONDUCT OF THE DEFENSE.—*a. General.*—(1) The integrity of the battalion defense area is maintained by a combination of fire, hand-to-hand combat, and counterattack. Fires are released in accordance with the battalion fire plan. (See par. 201.) The attacker is held under an increasing volume of fire as he approaches the position. As he closes with the position, machine guns are switched to their final protective lines; close defensive artillery and primary mortar fires are laid down, either on call from their observers or on prearranged signal. The hostile assault is met successively by rifle fire and the fire of supporting weapons, grenades, the bayonet, and other forms of hand-to-hand combat.

(2) The success of the defense depends upon the holding of its assigned area by each unit down to and including the rifle squad. Each unit entrusted with the defense of a tactical locality must defend it to the last man, unless otherwise authorized by higher authority. Local commanders rectify gaps in their dispositions or fires by the use of their supports. Troops must be impressed with the fact that hostile groups will work to their rear; that consequently they must be prepared to fight in any direction; and that successful holding of their positions forms the basis for successful counterattacks by supports and reserves to their rear. (See FM 100-5.)

b. Counterattack.—Should the enemy succeed in penetrating the battalion defense area the battalion commander first seeks through fire to cause the immediate destruction or withdrawal of the hostile force. If fire alone is not successful the battalion commander must decide whether to counterattack, to have the reserve hold its prepared positions to block the penetration, or to order a combination of these actions. A counterattack is launched if vital terrain is lost or threatened unless an attacking armored force remains in the area in which the reserve is to operate. When the entire reserve counterattacks, a new reserve is constituted from whatever troops are available. The regimental commander is notified immediately when the decision to commit the reserve has been made.

c. Penetrations in adjacent areas.—Penetrations in adjacent areas are opposed by committing all or part of the reserve to flank positions in order to prevent the widening of the penetration and the envelopment of the battalion flank.

d. Closing gaps.—Gaps created in the main line of resistance by armored attack must be filled promptly by the movement of supports or reserves.

e. Defense against infiltration.—Constant vigilance is maintained against small groups infiltrating into the battalion area. During daylight, observers are posted within each subordinate defense area to keep the ground between defense areas under constant surveillance; areas that can-

not be observed are searched by roving combat patrols. (For dispositions at night or under conditions of reduced visibility, see par. 206.)

■ 208. RELIEF.—*a.* The relief of a battalion on the battle position is preceded by a detailed reconnaissance of the area by officers of the relieving unit. If time permits, all commanders down to and including platoon leaders visit the position prior to execution of the relief. Company officers familiarize themselves not only with the disposition of the defending force but also with the known hostile dispositions on their part of the front. Arrangements are completed for the transfer of supplies and special equipment to be left on the position by the battalion being relieved. Usually the battalion being relieved takes with it only the ammunition prescribed in the relief order together with all individual and organizational equipment. Special equipment and ammunition stores are left. The commander of each relieving unit assures himself that the arms, clothing, and equipment of his men are in proper condition and that each man has the prescribed ammunition, reserve rations, and equipment. Sufficient guides are detailed from the relieved unit to meet each platoon of the relieving battalion and conduct it to its position.

b. The commander of the relieving battalion should acquaint himself with the artillery fire plan for the support of the battalion being relieved and, in planning his own defense, should request that any necessary changes be made.

c. Secrecy in planning and conducting the relief is essential. The relief should be accomplished during darkness and in time to permit the relieved unit to be beyond artillery range prior to daylight. Incoming leaders inspect the position of each subordinate element as soon as occupation is completed to insure their readiness for defensive action. The commander of the relieving battalion reports to his regimental commander as soon as the battalion is in position.

d. The execution of the relief takes place under direction of the battalion commander being relieved; he remains responsible for the defense of his battalion area until the relief has been completed.

SECTION III

RESERVE BATTALION

■ 209. MISSIONS DURING ORGANIZATION OF REGIMENTAL SECTOR.—*a.* Initially the regimental commander may employ the reserve battalion, in whole or in part, on security missions, to assist the front-line battalions (holding garrison) in the organization of their areas, or to execute other construction tasks. (See FM 7-40.) Construction tasks may include clearing fields of fire, developing natural obstacles, laying mine fields, clearing routes for its own movement and for supply and evacuation, and construction of dummy works.

b. Positions to deepen the defense, block penetrations from the flanks, and provide all around protection are designated for organization by the reserve battalion in the regimental defense order (see fig. 11). The first positions reconnoitered and prepared are those from which the reserve can best protect the flanks and rear of the front-line battalions and from which it can block the most probable penetrations of the regimental sector.

c. The battalion executes its construction tasks and prepares its positions in accordance with priorities expressed in the regimental defense order.

■ 210. INITIAL MISSIONS FOR THE HEAVY WEAPONS COMPANY.—The regimental order usually assigns initial locations and missions for long-range fires in support of the main line of resistance to the heavy machine guns and 81-mm mortars of the reserve battalion. These weapons, protected where necessary by small rifle detachments, will usually be located in the rear areas of the front-line battalions. Upon commitment of the reserve battalion these weapons are released to it. (For subsequent fire missions, see FM 7-15.)

■ 211. ASSEMBLY AREA FOR THE RESERVE.—Where the terrain within the area of the reserve affords a concealed, deflated position which is readily accessible to the defense areas and to areas from which to counterattack, and which is of sufficient size to permit the necessary dispersion of troops, it may be assigned as an assembly area for occupancy by the

reserve (less heavy weapons emplaced for long-range fires). For conditions governing its use see paragraph 213b. The regimental order will designate its location. The assembly area should be protected by natural obstacles. Mine fields are laid and antitank obstacles are constructed as time permits.

■ 212. COUNTERATTACK PLANS.—*a.* The regimental order announces the assumed penetrations against which counterattack plans will be prepared. The commander of the reserve battalion prepares the plans, effects the necessary coordination with supporting units, and submits the plans to the regimental commander for approval.

b. Unless specifically ordered by higher authority the counterattack is not directed against an objective outside the regimental sector. However, adjacent commanders collaborate in plans to eject penetrations which compromise the integrity of both areas and the higher commander is informed of such plans.

c. A counterattack plan includes the route to the line of departure; the line of departure; formation; direction of counterattack; objective; initial missions for heavy weapons, cannon company, and artillery, together with time or signal to lift fires and subsequent fire missions; and tank support, if provided. (For counterattack with tanks, see FM 7-40.) If the route to the location from which the counterattack is to be made crosses into the sector of an adjacent regiment, the movement is coordinated with its commander.

d. Subordinate commanders are fully acquainted with counterattack plans. They are given opportunity to reconnoiter the ground and familiarize their troops with the details of execution. If practicable, counterattacks are rehearsed.

e. Each counterattack is planned to strike a single fully coordinated blow, supported by all available fires, to regain a lost portion of the main line of resistance. It is usually directed against the shoulder of the penetration. Little or no reserve is held out. Artillery and mortar fires may be used to soften up the penetration or to prevent the entrance of additional hostile troops into the penetrated area. If the route of advance of the counterattacking force is exposed.

smoke is freely used to blind the hostile observation. Usually the cannon company will be placed in direct support of the battalion for its counterattack; normally it executes direct fire missions. The antitank platoon is employed as in an attack.

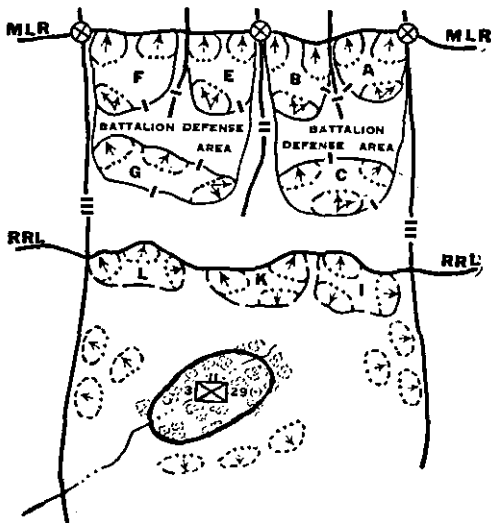


FIGURE 11.—Schematic organization of regimental battle position.

NOTES

1. Within each platoon defense area, arrow points in principal direction of fire.
2. Positions organized by the regimental reserve to block penetrations from the flank(s) and to deepen the defense are indicated by broken lines.
3. Where the situation indicates the likelihood of intensive bombardment by hostile combat aviation or armored attack, the regimental reserve occupies selected defense areas prepared to—
 - a. Support forward battalions by the fire of its heavy weapons.
 - b. Defend in place.
 - c. Move to counterattack.
4. Where the situation indicates attack by infantry supported by artillery, the heavy weapons of the regimental reserve, protected by small rifle detachments, are emplaced for the execution of prepared defensive fires. That part of the reserve not so engaged is hastily entrenched, if practicable, in a concealed, defiladed area within the area of the reserve, prepared to occupy its selected defense areas or move to counterattack. (See FM 7-40.)

f. If the counterattack succeeds in driving out the penetrating forces they are pursued by fire. The battalion then occupies the recaptured area and organizes its position as for defense of the main line of resistance. If the counterattack is stopped short of its objective, units dig in and hold the areas they occupy.

■ 213. MISSIONS OF THE RESERVE DURING COMBAT.—*a.* Where the situation indicates the likelihood of intensive bombardment by hostile combat aviation or attack by armored forces which initially might immobilize the regimental reserve, it is directed by the regimental commander to occupy selected defense areas that it has previously organized. From these positions it is prepared to support front-line battalions by the fires of its heavy weapons (after their release by regiment from initial missions), defend in place, move to counterattack, or move to flank or rear positions for all around defense.

b. (1) Where the situation indicates attack by infantry supported by artillery, heavy weapons are emplaced for the execution of the initial missions prescribed by the regiment. If an assembly area has been designated, that part of the reserve not so employed is directed by the regimental commander to occupy it, prepared to move to selected defense areas or counterattack. Otherwise it occupies defense areas designated by the regimental commander.

(2) When the reserve occupies an assembly area, units are dispersed and individuals dig fox holes for protection against air and tank attacks. The battalion antitank platoon is disposed to protect the assembly area.

c. In either case given above, plans are formulated against attempted landings from the air. Air-antitank guards are assigned. Small combat groups and security patrols are employed for protection against enemy infiltration, particularly at night. The regimental order defines the area of responsibility for such action.

■ 214. CONTROL OF MOTOR TRANSPORT.—If the contemplated movement of the battalion justifies their use and adequate defilade exists, sufficient weapon carriers may be retained with the battalion to move weapons and ammunition. Prime movers for antitank guns are retained under platoon control.

■ 215. ACTIONS OF RESERVE COMMANDER DURING COMBAT.—When the enemy launches his attack, the commander of the reserve battalion keeps himself informed of the situation by personal reconnaissance and by the use of observers and officers detailed to effect liaison. He must be in constant touch with his command post and with the regimental commander. He usually remains with the regimental commander at the regimental observation post until his battalion is committed to action.

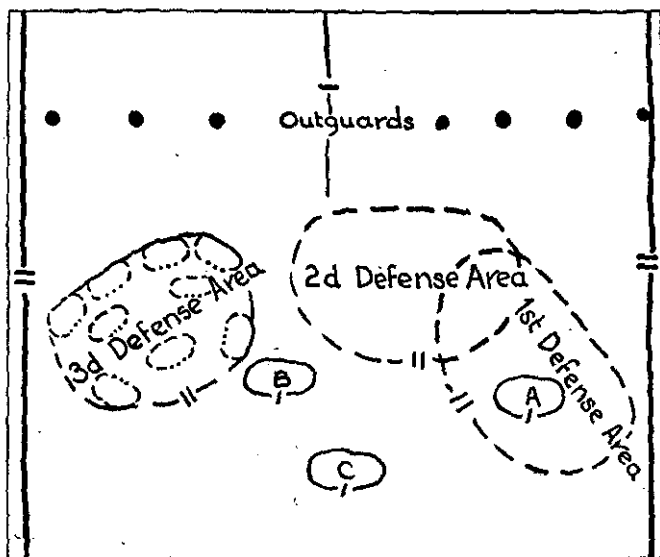


FIGURE 12.—Battalion defending a wide front (schematic).

SECTION IV

DEFENSE ON A WIDE FRONT, IN WOODS, IN TOWNS, AND OF A RIVER LINE

■ 216. DEFENSE ON A WIDE FRONT.—a. When the battalion is assigned a frontage of such width that mutual support between front-line units would be impracticable if one de-

fensive position were organized in the normal manner, flexibility in defense is essential. Plans must be prearranged so that the battalion can shift its defensive weight rapidly to meet the main attack of the enemy as it develops, and constitute an island of resistance capable of all around defense. If time permits, several battalion defense areas are prepared. (See fig. 12.)

b. The frontage of the battalion is normally divided between two rifle companies, each of which covers its frontage with a series of outguards and holds the bulk of its strength mobile in a concealed assembly area. The reserve company is similarly held mobile. Elements held mobile dig individual shelters in their assembly areas.

c. If covered lateral routes permit the shifting of light and heavy machine guns, the bulk of these weapons may initially be located well forward where their fire power will delay the hostile advance while the rifle companies (less their light machine guns) are being shifted to meet the main attack. If the terrain does not readily permit such forward use, machine guns are distributed in depth. 81-mm mortars are located to cover the principal avenues of hostile approach and are prepared to move rapidly to supplementary positions. Antitank guns may be initially emplaced on the more likely avenues of mechanized advance, with their prime movers nearby, prepared to move to a threatened area. Cannon company weapons are usually held under regimental control; if attached or in direct support of the battalion they are held mobile in a central location prepared to move to previously selected firing positions. Artillery concentrations and normal barrages are planned to cover the front and flanks of each battalion defense area that is organized.

d. Early information of the direction of the hostile advance is essential. Patrols furnished with rapid means of communication, including portable radiotelephones, are pushed well to the front and flanks.

■ 217. DEFENSE IN WOODS.—a. Defense in woods is characterized by short fields of fire, lack of observation, and difficulties of communication. To compensate for these weaknesses, reliance must be placed on a linear defense by riflemen, closely coordinated defensive fires, constant patrolling, exten-

sive use of local security groups, and the preparation of routes for rapid shifting of reserves.

b. Limited fields of fire within the position necessitate reduction of distances between units, mobility, and preparation of counterattack plans for company supports and the battalion reserve. Forward platoons also may hold a squad or half-squad mobile for local counterattack or to deal with infiltrating groups.

c. There will be little or no opportunity for long-range machine-gun fires. Guns whose mission is not close support of the main line of resistance are, therefore, initially sited well forward to limit penetrations and protect the flanks of the forward elements of the battalion. Supplementary positions are prepared. Fire lanes are cut to lay down bands of machine-gun fire along the front and flanks of organized areas. (See FM 7-15.) The 81-mm mortars are emplaced in openings in the woods or openings are cut to make firing possible. Every opportunity is taken to register fires before contact.

d. Antitank guns cover roads or other likely avenues of armored advance.

e. Elements of the cannon company supporting the battalion are held in readiness where they can move forward to fire through openings or prepared lanes against penetrations and in support of counterattacks.

f. Plans should be made for the supporting artillery to cover avenues of approach by defensive concentrations which can be fired without observation.

g. Constant patrolling is maintained to the front, flanks, and within the position. Local security groups are equipped with rapid means of communication, including portable radiotelephones, in order to give immediate warning of hostile advance.

h. Successful defense depends upon vigilance, accurate surveillance of hostile movements, close defensive fires, hand-to-hand combat, rapid counterattack, and the mopping up of groups which infiltrate into the position.

■ 218. DEFENSE IN TOWNS.—a. The built-up portions of towns canalize the hostile attack along the streets approaching the

position but permit small enemy groups to work unobserved through or over buildings.

b. If the main line of resistance is along a street, close defensive fires are coordinated on that street. Barricades for machine guns are constructed in entrances to buildings or other localities sufficiently removed from street intersections to be out of the line of fire directed down the approaches. Mortar and artillery fires cover approaches to the position. Long-range machine-gun fires are obtained from elevated positions in buildings. Antitank guns are sited to cover street intersections.

c. The bulk of the troops on the main line of resistance occupy positions on the ground or lower floors of buildings. Snipers are posted in upper stories. To provide adequate fields of fire, open areas within the town are defended from the near side. Reserves organize rear positions across lateral streets parallel to the main line of resistance to add depth to the position and provide flank protection. Concealed routes for counterattack are obtained by cutting passageways through buildings, where necessary.

■ 219. DEFENSE OF A RIVER LINE.—*a. General.*—(1) *Battalion defending a normal frontage.*—(a) Where the river is an effective barrier and the terrain is suitable for the development of close defensive fires, the main line of resistance is placed on the near bank of the river and the defense is organized as in any other comparable terrain.

(b) If the banks of the river are heavily wooded and time does not permit extensive clearing of fields of fire, or if the terrain at the river bank is otherwise unsuited for close defensive fires, the main line of resistance may be withdrawn from the river in order to obtain improved fields of grazing fire. The line must be close enough to the river (500 yards) so that the near bank can be adequately covered by rifle and machine-gun fire.

(2) *Battalion defending a wide frontage.*—The defense of a river line where extremely wide frontages have been assigned, corresponds to the defense on a wide front on other similar terrain. The near bank of the river is lightly held by outguards equipped with automatic weapons. The battalion, less detachments, is held mobile prepared to occupy

previously prepared positions to block the most likely hostile crossing points. The battalion reserve is prepared to counter-attack to deny the enemy a foothold on the near bank.

b. Antitank defense.—The antitank platoon is usually held mobile in the rear area of the battalion. Unless the enemy is known to possess amphibian tanks, no antitank guns are emplaced on the river bank, since tanks will usually not be ferried until other hostile troops establish a bridgehead.

c. Covering forces.—If the main line of resistance is on the near bank the combat outpost is located across the river. If the main line of resistance is withdrawn from the near bank the combat outpost may be located on the near bank and send its patrols across the river.

d. Demolitions.—All means of crossing the river are destroyed. Bridges are completely demolished so that a crossing cannot be made on the wreckage. Fords are destroyed or rendered impassable with obstacles. The withdrawal of covering forces is carefully coordinated with the work of demolition crews.

e. Signal communication.—Rapid dissemination of information and transmission of orders is essential to successful defense. Reliance is not placed upon any one means of communication to the exclusion of others. Combat outposts and patrols should be provided with radiotelephones.

f. Fires.—In addition to its defensive fires the supporting artillery should be requested to prepare fires on portions of the river that are suitable for ferrying operations and bridge construction.

SECTION V

DEFENSE AGAINST AIR-BORNE OPERATIONS

■ 220. NATURE OF ATTACK BY AIR-BORNE TROOPS.—*a. General.*—(1) Small groups of parachute troops may be used by the enemy in any theater of operations to paralyze communication, disrupt traffic, seize bridges or other defiles, destroy supplies, and conduct "fifth column" activities. For local security of the command post of a front-line battalion against such operations see paragraph 44; similar measures should be employed for the protection of administrative installations

such as the battalion ammunition distributing point and to protect the command post of the reserve battalion.

(2) Troops landed by parachute and glider cannot long sustain combat unaided because of the nature of their equipment and the limited supplies initially landed with them. Large-scale attacks by such troops will usually be made to seize control of a bridgehead, local airfield, beachhead, or other locality whose seizure will permit the rapid landing of reinforcements. This section deals with defense against this type of operation.

b. Conduct of the attack.—(1) The air attack may be divided into four phases:

(a) Air reconnaissance.

(b) Aerial bombardment.

(c) Attack by parachute troops and personnel in gliders.

(d) Reinforcement.

(2) The attacker seeks to locate the areas favorable for parachute or glider landings and to determine the defense of those areas. Troops can be landed by parachute or glider in any small open area. It is to be expected that extensive aerial photographs of the area will be taken prior to the attack. After locating the organized positions of the defender the attack may be preceded by intense bombardment to soften up or destroy the defenses. The air-borne attack may be concentrated in one or more areas or it may be scattered in small groups over a wide area and an attempt made to converge against the objective. As soon as a base has been captured the enemy may be expected to push in reserves by all available means. If reinforcement is attempted by airplane the arrival of transport planes may be expected to follow closely the initial attack. A few minutes only may elapse between the parachute attack and the arrival of air-landing troops.

■ 221. PRINCIPLES GOVERNING THE DEFENSE.—*a. During hostile reconnaissance.*—In order to defeat air reconnaissance, concealment and camouflage are perfected to the highest degree. Alternate positions for weapons and men are dug so that the defense is flexible and elements can be shifted without loss of effectiveness. The ideal to be attained is never to be in the

same exact location on two successive days. Extensive dummy positions are constructed for deception.

b. During aerial bombardment.—During the bombardment phase troops take cover in their positions prepared to meet the attack as soon as the bombardment ceases. Rifles, automatic rifles, and machine guns are used against dive bombing attack.

c. During hostile landings.—(1) The defenders endeavor to destroy parachutists or personnel in gliders as they descend and immediately upon landing. The defenders act promptly and aggressively to destroy individuals and groups who succeed in landing during the short period which will ensue before they can reach their weapons, organize, and effect any concerted action. Groups who escape destruction must be searched out unhesitatingly. The defending commander must guard against having his mobile forces lured too far away from the objective by landings spaced and timed for that purpose.

(2) The attacker's aircraft can render but slight close support to his landing groups until these have effected a considerable degree of reorganization and assembly, since their exact dispositions will not be known to his air units. During this period, unarmored vehicles can be used without hesitation to move troops within the threatened area.

d. Counterattack.—Should the attacker succeed in gaining his objective and in landing reinforcements the defender must drive him out and regain the lost area. Depending upon the situation and the size and composition of the defending force, the local battalion commander may either launch an immediate counterattack or occupy a defensive position to block the hostile advance and form a base for counterattack by a larger force charged with the defense of the area.

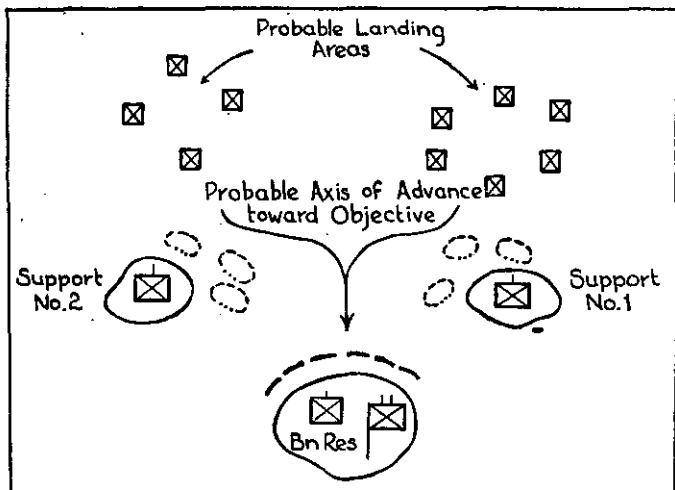
e. Armored vehicles.—Armored vehicles, to include elements of the cannon company, may be used during the landing stage of the attack to destroy hostile gliders or other aircraft as they land, to patrol and quickly mop up landing groups, or in conjunction with the counterattack.

■ 222. ORGANIZATION OF BATTALION DEFENSE AREA.—*a. General.*—(1) The battalion commander must so dispose his com-

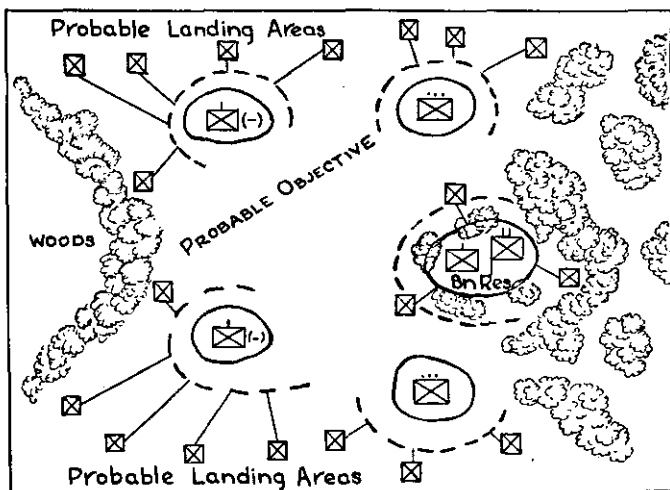
mand and subordinate commanders must so employ their personnel and weapons that any attempted parachute landing will be surprised by the maximum amount of coordinated fire. Plans must provide for immediate counterattack to destroy hostile groups which succeed in forming after they reach the ground. Distribution of troops to provide elements for fixed defense and a mobile reserve, alternate positions to permit all around fire, careful concealment and camouflage of all defensive works, and provisions for rapidly alerting all personnel are essential. *It is particularly important that plans of fire and movement be prepared and executed so that different friendly elements do not fire into each other.*

(2) Depending upon the size of the area to be defended against air attack, its vegetation, and accidents of the terrain, an infantry battalion may organize its position as shown in figure 13. The landing area may be divided into two or more support areas and a reserve area. The reserve area should control the observation and block the most likely axis of hostile advance from the landing area toward the probable enemy objective. The reserve is held mobile in this locality prepared for immediate counterattack into any of the support areas. Attached artillery is located to fire on hostile groups or aircraft while landing and to support counterattack of the battalion reserve. Attached elements of the cannon company initially occupy positions dominating possible landing areas for hostile aircraft and subsequently operate as assault artillery with the reserve.

b. Supporting weapons of the battalion.—One platoon of heavy machine guns will generally be retained with the reserve for antiaircraft protection and support of a counterattack. The remaining heavy machine guns may be attached, by section, to the supports. If fires over the entire landing area can be observed from a central location, the 81-mm mortars may be retained under company control. Otherwise elements of the mortar platoon may be attached to the supports. They are particularly valuable in supporting local counterattacks and in preventing hostile groups from forming or reorganizing. The 37-mm antitank guns are located to take hostile gliders and airplanes under fire as they attempt to land. They may be attached to the supports.



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FIGURE 13.—Defense against air-borne operations (schematic organization).

Supporting weapons must have close rifle protection and be prepared for all around defense. (For details of employment of heavy weapons, see FM 7-15.)

c. Supports.—Each support prepares one or more positions on terrain which dominates its assigned area and is held mobile, prepared for immediate attack. Outguards are posted to cover each likely landing area. Each outguard is assigned an area of responsibility for fire and local combat. The support commander employs his force aggressively to destroy any troops that land within his area.

d. Motor transport.—Motor transport is essential for the reserve and the supports and in some cases for outguards. Vehicles should not be pooled; they should be distributed and concealed near each major element.

e. Signal communication.—Rapid communication between elements of the battalion is essential. Wire communication is maintained to the supports, in addition to radio, motor messengers, and pyrotechnic and other visual signals.

f. Alertness.—Alertness is required in all echelons. Observers in each unit are constantly on duty to give warning of air or ground attack from any direction. *It must be impressed upon each subordinate element that there is no "front" and that each unit must be prepared to strike swiftly and in any direction.*

CHAPTER 10

RETROGRADE MOVEMENTS

	Paragraphs
SECTION I. General	223
II. Daylight withdrawal	224-228
III. Night withdrawal	229-236
IV. Delaying action	237-242

SECTION I

GENERAL

■ 223. REFERENCES.—For the fundamental doctrines covering retrograde movements, see FM 100-5. For principles governing retrograde movements of the infantry regiment and its smaller units, see FM 7-10, 7-15, and 7-40.

SECTION II

DAYLIGHT WITHDRAWAL

■ 224. GENERAL.—*a.* The regiment may be required to break contact with the enemy and withdraw, protected by a general covering force detailed by the higher commander (in addition to its own covering force), or it may be required to withdraw protected solely by elements of the regiment designated to cover the withdrawal. (For composition, placing, and conduct of the regimental covering force, see FM 7-40.)

b. A front-line battalion executes a daylight withdrawal from action by withdrawing each echelon under the protection of the next unit to its rear. (See fig. 14.) Each front-line company withdraws its forward platoons under cover of its support platoon. The front-line platoons execute their withdrawal by a thinning out of their lines while protecting themselves by the fire of automatic weapons left in position to be withdrawn with the last elements. These platoons will usually be assembled in rear of the battalion reserve (battalion covering force). The support platoons of front-line companies withdraw under the protection of the battalion reserve in the same manner as do the front-line platoons and

rejoin their companies. If a regimental covering force is established to the rear the battalion reserve withdraws under its protection. If no covering force has been established by higher headquarters, elements of the front-line companies may be placed temporarily in position to cover the withdrawal of the reserve company; otherwise front-line companies move to a battalion assembly area (or initial phase line) as soon as assembled. Thus the battalion shoulders its way to the rear until contact is broken and the battalion can be re-formed.

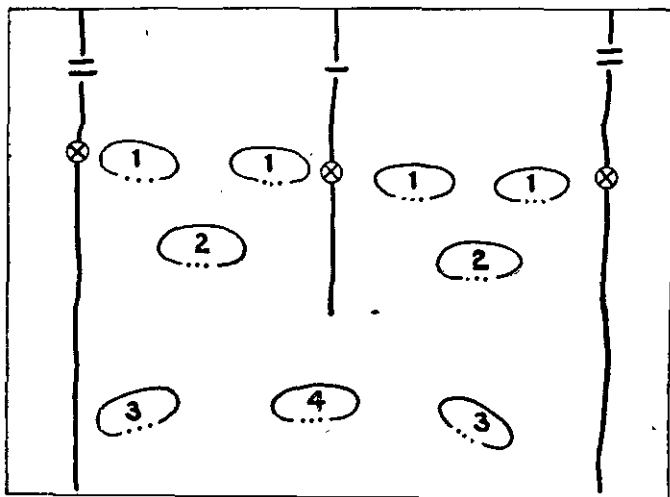


FIGURE 14.—Front-line battalion in daylight withdrawal (showing schematically the sequence of withdrawal of units).

c. In order to control the withdrawal of the forward battalions, the regimental commander may assign zones of withdrawal and phase lines. When phase lines have been designated, the battalion commander designates the first phase line as the battalion assembly area; otherwise he designates the first suitable delaying position in rear of the regimental covering force as the assembly area. Subordinate units move directly to it and occupy it as for delaying action. Further movement to the rear is executed as directed by the regimental commander.

■ 225. PLANS AND ORDERS OF A FRONT-LINE BATTALION.—*a. Reconnaissance.*—The nature of the action usually precludes extensive reconnaissance by all echelons. If practicable, a battalion staff officer reconnoiters and posts guides to direct the withdrawing elements to the battalion assembly area (or initial phase line). Subordinate units conduct such reconnaissance of routes as time permits.

b. Orders.—The withdrawal orders of the battalion commander are brief, fragmentary, and oral. Such orders are usually transmitted by staff officers in order to avoid summoning the lower commanders whose units are engaged with the enemy. The battalion order includes the following:

(1) Composition and location of the battalion covering force.

(2) Attachment of elements of the heavy weapons company and antitank platoon to front-line companies.

(3) Time of withdrawal of each echelon.

(4) Zones or routes of withdrawal for each company.

(5) Location of battalion assembly area (or initial phase line).

(6) Route of withdrawal of battalion command post and successive locations.

c. Sequence of withdrawal.—The sequence of a daylight withdrawal is usually the aid station group, headquarters company (less antitank platoon), front-line rifle companies, reserve company. The front-line rifle companies may be echeloned in their withdrawal, beginning with the least closely engaged; however, they are usually withdrawn simultaneously.

d. Battalion supporting weapons.—Supporting weapons located in the areas of the forward rifle companies are attached to those companies for the initial phase of the withdrawal. Rear heavy machine guns may be retained under company control or attached to the battalion covering force; if necessary, the forward guns may also be attached to the battalion covering force as they reach the area it occupies. The 81-mm mortars are withdrawn to the rear of the battalion covering the withdrawal of the forward elements of the battalion. One or more sections may be attached to the covering force. The battalion antitank guns are withdrawn

with the forward companies and are then usually attached to the battalion covering force. Weapon carriers and anti-tank-gun prime movers are brought as far forward as practicable by infiltration.

e. Attached elements of cannon company.—The regimental commander will usually attach to forward battalions any elements of the cannon company which are located in the areas of those battalions at the time the withdrawal is to be executed. Such elements are ordinarily attached to the battalion reserve and withdraw with it. Regimental orders usually terminate the attachment of these elements to the battalion when the latter passes the area occupied by the regimental covering force.

f. Supporting artillery.—When centralized control of the supporting artillery battalion is impracticable, a part (usually one light battery per infantry battalion) of this artillery is attached to each withdrawing infantry battalion. Whether attached or in support, the mission of the artillery is to insure the withdrawal of the unit it supports by remaining in position and continuing its fire support as long as possible.

■ 226. CONDUCT OF THE WITHDRAWAL.—Once begun, the withdrawal of a front-line battalion is conducted with all practicable speed to prevent the enemy from taking advantage of the situation. Fires of supporting elements of the cannon company and artillery and those of battalion supporting weapons are directed to interdict hostile movement into the gaps created by the withdrawal of elements of the forward companies and employed to cover the withdrawal of those elements still in close contact. Smoke fired by these weapons or by supporting chemical troops is freely used to obscure certain phases of the withdrawal.

■ 227. SIGNAL COMMUNICATION.—The battalion command post, operated by a skeleton crew, remains open in the old location until the forward rifle companies have passed the area of the battalion covering force. All other command post personnel and communication equipment move to the battalion assembly area with the first echelon of the battalion to withdraw, prepared to open upon battalion order. Wire communication is not established to the rear.

■ 228. BATTALION AS A COVERING FORCE.—When the battalion acts as the covering force of a larger unit, it has the mission of stopping, delaying, or diverting the advance of the enemy in order to permit the troops in contact with the enemy to disengage, assemble, and move to the rear. Its initial position and the time this position is to be held are prescribed by the higher commander.

a. *Supporting arms.*—Elements of the regimental antitank and cannon companies ordinarily are attached to the battalion. Units of the regimental intelligence and reconnaissance platoon, artillery, engineers, antiaircraft automatic weapons, antitank weapons, and chemical troops also may be attached.

b. *Conduct.*—(1) The battalion organizes and defends the covering position in a manner similar to that employed in a delaying action. (See sec. IV.) The battalion commander coordinates the long-range fires of his supporting weapons with those of any larger general covering force established by higher authority.

(2) When its mission is accomplished, the covering force withdraws under cover of the fires of its own supporting weapons and reserve. It then forms the rear guard for the retiring force or, if aggressive hostile pursuit makes it necessary, occupies successive delaying positions to the rear.

SECTION III

NIGHT WITHDRAWAL

■ 229. GENERAL.—a. A front-line battalion executes a night withdrawal by the simultaneous withdrawal of all elements of the battalion less troops left in place as a covering force. The success of the withdrawal depends upon careful coordination and secrecy. The movement of troops and weapons out of position and their assembly are conducted as quietly as possible. Troops of the covering force by their fires and patrolling simulate the normal activities of the battalion.

b. The regimental commander will usually attach to a front-line battalion all elements of supporting units located in its area for withdrawal to the battalion assembly area. Their further withdrawal will be as directed by regimental order.

■ 230. COVERING FORCE.—*a.* The strength and composition of the battalion covering force may be designated by the regimental commander. The covering force usually consists of not more than one-third of the rifle strength of the battalion and such supporting weapons as are required.

b. Normally, one rifle squad is left in place in the defense area of each platoon of the forward rifle companies. (See fig. 15.) As soon as the platoons have been withdrawn, personnel of the squad left in place by each front-line platoon distribute themselves to cover the platoon area and afford close protection to supporting weapons. The support squad of each front-line company is kept intact to eject hostile patrols attempting to enter the position and for local patrolling. One rifle platoon is usually left in place in the battalion reserve area. It is responsible for patrolling, for protecting the covering-force command post, and for blocking the more likely avenues of hostile approach into the position.

c. One gun of each section of light or heavy machine guns emplaced in close support of the main line of resistance is attached to the covering force. If the terrain permits the firing of long-range fire missions by rear guns, one section of these guns may also be attached. Not to exceed one-half of the 81-mm mortars and of the 60-mm mortars of front-line companies are left in position to fire normal night missions.

d. One or more antitank guns may be left in position to cover those avenues of approach that can be traversed by hostile armored vehicles at night; however, such approaches may be defended by personnel equipped with M1903 rifles and antitank rifle grenades, thus permitting the antitank guns to be withdrawn with the battalion.

e. The covering force commander (usually the battalion executive officer) takes over the battalion command post with a skeleton operating crew, messengers, and the necessary wire and radio communication facilities. The regimental order will specify the medical personnel to remain with the covering force; each battalion may be required to leave part of its aid station group in place, or the regimental aid station may supply all medical facilities.

■ 231. RECONNAISSANCE.—If practicable, all units reconnoiter routes to their assembly areas during daylight. If the battalion is to organize and occupy a rear position following the withdrawal, the reconnaissance includes the rear position: Necessary guides are posted from each company. Reconnaissance groups are limited as to number and size, in order to preserve secrecy.

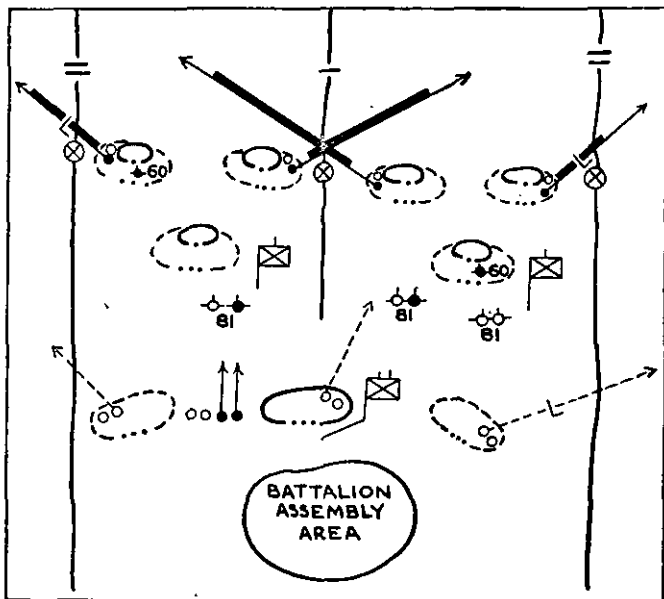


FIGURE 15.—Front-line battalion in night withdrawal (schematic). (Elements shown by solid symbols constitute the battalion covering force.)

■ 232. ORDERS.—Warning orders are issued to company commanders as soon as the decision to withdraw is known. Such orders, as well as the details of the orders to be issued later, are transmitted by messengers, staff officers, or by the battalion commander in person. Company commanders whose units are in contact with the enemy are not assembled to receive orders. If wire communication has been established

to companies, orders are not transmitted by wire if there is any possibility of hostile wire tapping. The battalion order includes—

a. Location of battalion assembly area (usually designated by the regimental commander) and the forward assembly area of each company.

b. Routes and time of withdrawal for rifle companies and supporting elements of the cannon company.

c. Composition of the battalion covering force to be left in position.

d. Designation of the covering force commander and the time he assumes command (usually just prior to the time the front-line companies initiate their withdrawal).

e. Attachment of elements of the heavy weapons company and battalion antitank platoon to rifle companies for their withdrawal.

f. Use of motor transport.

g. Ammunition supply for the covering force; for the withdrawing force en route, if necessary; and on any rear position.

h. Signal communication measures, including steps to deceive the enemy and provisions for movement of the command post.

■ 233. EXECUTION OF THE WITHDRAWAL.—*a.* Front-line platoons withdraw to the rear under cover where they are assembled and moved to their company assembly areas. Upon assembly each company moves directly to the battalion assembly area. The movement should be so timed and coordinated that there is no appreciable waiting in forward assembly areas.

b. The regimental order may designate the forward limit of movement for motor vehicles, usually no farther forward than the first crest in rear of the main line of resistance. Vehicles are moved singly or in small groups and all movement is made without lights. Weapons emplaced in the areas of the forward rifle companies are attached to those companies for withdrawal to the location of the weapon carriers, where they are dispatched singly to the battalion assembly area. Sufficient motor transport is left with the covering force to move its supporting weapons.

c. All elements of the battalion (less the covering force) should arrive at the battalion assembly area in time for the battalion to move to the new position area in accordance with the regimental order.

■ 234. SECURITY.—The covering force provides the primary security for the withdrawal of the battalion. The battalion commander provides additional close-in security for its movement to the rear position it is to occupy or to the regimental assembly area. After reaching its position or rejoining the regiment, security measures are taken as directed by the higher commander.

■ 235. SIGNAL COMMUNICATION.—a. The battalion command post remains open in its old location until the battalion (less covering force) leaves the assembly area. The time of displacement, route of movement, and new location of the battalion command post are announced in the battalion order. If the assembly area is inconveniently located with respect to the command post, a local line may be run to the assembly area to provide rapid communication with the covering force and with the regimental command post.

b. The covering force uses any wire lines already established in the old position. A skeleton crew remains at the old command post to operate it as the command post of the covering force. For purposes of deception the covering force maintains normal radio traffic. It employs pyrotechnics as prearranged signals and as an aid in simulating normal activity. Upon its withdrawal the covering force cuts wire circuits and removes some of the wire to prevent use by the enemy.

c. During the movement of the battalion from the battalion assembly area to the rear the battalion command post (less personnel remaining with the covering force) marches at the head of the column. Radio is silenced during this movement and in any new position the battalion is to occupy. Wire is not laid to the rear.

■ 236. WITHDRAWAL OF COVERING FORCE.—The regimental order specifies the time and route of withdrawal of the covering force. If a rear position is to be occupied the covering force is usually withdrawn in time to be brought under the protec-

tion of the outpost covering the rear position by daylight. The battalion covering force may be withdrawn simultaneously to an assembly area. The battalion covering force commander protects his movement to the rear by detailing necessary security groups. He is responsible for the protection of his assembly area or of an entrucking area if motor transportation is furnished for movement to the new position area.

SECTION IV

DELAYING ACTION

■ 237. GENERAL.—*a.* The purpose of delaying action is to gain time while avoiding decisive action. Delay of an advancing enemy may be accomplished by offensive action, by defensive action in one position, by delaying action in successive positions, or by a combination of these methods. (See FM 100-5.)

b. This section treats principally with the battalion in delaying action in successive positions.

■ 238. IN SUCCESSIVE POSITIONS AS PART OF LARGER FORCE IN OPEN TERRAIN.—When operating as a part of the regiment or larger force, the battalion is assigned a sector on the initial delaying position and a zone or route(s) of withdrawal.

a. Frontages.—Units may be expected to conduct delaying action on frontages twice as great as in defense. The battalion may be required to occupy a front of from 2,000 to 4,000 yards.

b. Distribution of rifle companies.—(1) The battalion occupies the extended frontage by placing a greater number of rifle companies and platoons on the line of resistance than in a sustained defense on similar terrain and by allowing greater intervals between platoons. (See fig. 16.) If their flanks are secure, rifle companies assigned to the line of resistance may occupy their defense areas with three platoons abreast. Intervals between individuals and squads are not increased. Intervals between adjacent units must permit mutual support by flanking fire.

(2) Whenever practicable, the line of resistance is located near a topographical crest to facilitate long-range fire and

provide immediate defilade for withdrawal to the next delaying position.

(3) The size of the battalion reserve (battalion covering force) varies with the necessity for flank protection. It may consist only of part of a rifle company when the flanks are relatively secure and a daylight withdrawal is not contemplated. If the battalion has an exposed flank or is to withdraw during daylight the reserve is made relatively strong and may consist of a rifle company; for a daylight withdrawal it should be reinforced by infantry supporting weapons.

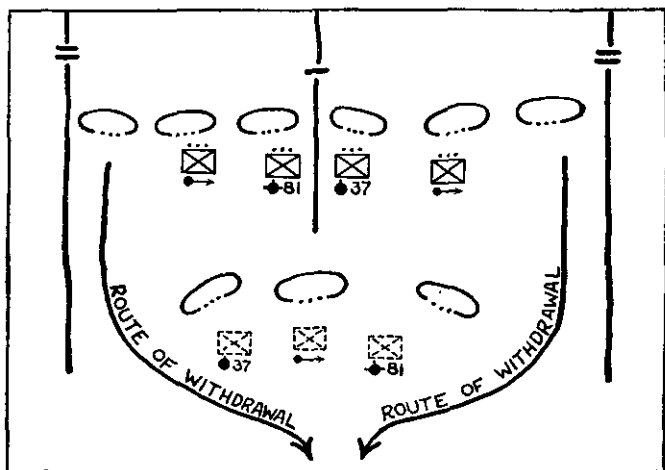


FIGURE 16.—Battalion in delaying action (schematic).

c. Distribution of supporting weapons.—All supporting weapons are initially placed well forward. Heavy machine guns and antitank guns may be located on the line of resistance; 81-mm mortars and elements of the cannon company may be assigned position areas behind the first crest in rear of the line of resistance. Antitank guns and guns of the cannon company are prepared to move laterally to threatened areas. Weapons that are to be withdrawn with rifle units are attached to those units. All weapon carriers are

retained as close as practicable to the weapons in order to facilitate the withdrawal. Ammunition is kept on trucks; only those amounts estimated to be required for immediate missions are placed at the gun positions.

d. Battalion covering force.—The reserve constitutes the covering force and is placed in position to facilitate its employment for flank protection, to assist in extricating forward units, and to act as a buffer to cover the withdrawal. Once the withdrawal of the battalion is successfully under way, the reserve becomes the rear guard for the battalion; if the enemy fails to maintain direct pressure, it then constitutes the outpost for the next delaying position.

e. Conduct of delaying action.—The battalion commander seeks to force the enemy off roads and slow down his advance by the use of obstacles and long-range fires; stop the advance of his security elements by a heavy volume of fire; and force him into time-consuming preparations for attack. Supporting weapons (machine guns, mortars, cannon, and artillery) open fire at maximum effective ranges; riflemen and automatic riflemen open fire on hostile security elements at extreme ranges (1,200 to 800 yards). Heavy weapons on the line of resistance frequently open long-range fire from primary positions, since the location of the line of resistance near a topographical crest usually does not permit the use of supplementary positions removed from that line and concealment of positions of weapons is less important than in defense.

f. Withdrawal.—The withdrawal of the battalion may be commenced on order of the delaying force commander or on prearranged signal; it is coordinated with the withdrawal of the other elements of the delaying force by the delaying force commander. The delaying force commander orders the withdrawal before the enemy approaches a position from which he can launch his assault. Forward units withdraw on designated and previously reconnoitered routes to company assembly areas. The withdrawal to the next delaying position may be by battalion or companies may be withdrawn by separate routes if the road net is adequate. Intermediate positions covering defiles, road blocks and demolitions, or other terrain permitting delay by small units are desig-

nated by the battalion commander and occupied by machine guns protected by small rifle groups. Such groups withdraw in time to avoid capture. The reserve covers the initial withdrawal of the battalion. It counterattacks when necessary to disengage the forward companies. It then secures the movement of the battalion to the next delaying position.

g. Action on rear delaying positions.—The battalion commander initiates early reconnaissance of successive delaying positions and routes of withdrawal. The occupation of successive positions and the action on those positions is similar to the occupation of and action on the first delaying position.

h. Supply and evacuation.—Arrangements are made for replenishment of ammunition at each successive delaying position. The aid station is evacuated prior to withdrawal.

i. Signal communication.—The battalion command post is assigned an initial location similar to that of a front-line battalion in defense. (See par. 39b.) The command post remains open until the forward units have initiated their withdrawal. It then marches with the battalion or with one of its elements if companies are ordered to withdraw by separate routes.

■ 239. INDEPENDENT DELAYING ACTION IN SUCCESSIVE POSITIONS IN OPEN TERRAIN.—When the battalion conducts delaying action independently, its action is similar to that of a regiment operating as an independent delaying force. (See FM 7-40.) Rifle companies and supporting weapons are distributed, a covering force is constituted, and withdrawal is executed as indicated in paragraph 238. The battalion ordinarily withdraws without accepting close combat when the enemy launches his coordinated attack in superior strength. The withdrawal to the next delaying position should be started before enemy rifle fire becomes effective, usually at about 500 yards. However, when the mission and situation permit, defense of the initial position (or defense of any successive position) is prolonged in order to take advantage of darkness to cover the withdrawal.

■ 240. IN SUCCESSIVE POSITIONS IN CLOSE TERRAIN.—*a.* When operating as a part of the regiment or larger force in delaying action in close terrain, the battalion is usually assigned the

mission of delaying on one or more avenues of hostile advance. (See FM 7-40.) Successive positions to the rear to be reached at stated times are prescribed by the regiment to assure coordination and periodic resumption of control of the regiment. In other respects the action of the battalion is independent.

b. In close terrain, lack of observation increases the difficulties of coordination and control by all units but facilitates surprise. In densely wooded areas the action will be executed principally on or near trails. Delay is effected by surprise fire from concealed riflemen and automatic weapons placed to sweep trails or roads or to deliver flanking fire upon them, preferably in areas which make it difficult for the enemy to leave the roads or trails and which force him to make time-consuming detours to outflank the defenders. Local attacks against the hostile flanks may also be employed where conditions are favorable.

c. The battalion does not accept close combat; the withdrawal is so executed as to avoid being outflanked or enveloped and in time to reach the next delaying position by the time prescribed by the regimental commander.

d. For delaying action in jungle warfare, see FM 31-20.

■ 241. ARTILLERY AND CANNON COMPANY WEAPONS.—a. When the battalion is operating as part of the regiment in open terrain, the cannon company is retained under regimental control whenever practicable. When frontages are very wide, however, a platoon may be placed in direct support of the battalion as in defense. The fires of artillery in direct support of the regiment are made available to the battalion commander through the artillery liaison officer in accordance with the priorities established by the regimental commander.

b. When the battalion is operating as an independent delaying force, or when it is operating as part of the regiment but under conditions which would make close support by artillery or cannon company weapons held under regimental control impracticable, one or more batteries of light artillery and one or more cannon platoons may be attached to the battalion. These units should be emplaced well forward so as to take maximum advantage of their range.

c. The battalion commander employs the fires of these weapons, whether attached or in direct support, to assist in delaying the enemy by long-range fires and to provide close support during the withdrawal of all elements of the battalion.

■ 242. DELAY IN ONE POSITION.—The proximity of the enemy may require delay in one position for a predetermined length of time. The line of resistance is selected, the position is organized, and the action is conducted as in defense on the corresponding type of terrain. If the situation requires the withdrawal of the battalion with the enemy in close contact, the withdrawal is conducted according to the principles of withdrawal of a front-line battalion given in paragraphs 226 and 233.

APPENDIX

DIRECTIVES FOR TACTICAL TRAINING OF RIFLE BATTALION AND ANTITANK PLATOON OF BATTALION HEADQUARTERS COMPANY

■ 1. GENERAL.—*a.* The directives which follow are designed to assist the battalion commander, the platoon leader of the battalion antitank platoon, and others in the preparation and conduct of tactical exercises and field maneuvers in which the battalion as a whole, or the battalion antitank platoon alone, will participate as a part of their field training. The directives are based on the tactics prescribed for the battalion in this manual and for the battalion antitank platoon in FM 7-35, and cover most of the actions in which these units will be involved during their approach to the battlefield and during combat. They are to be considered as guides only and may be expanded or modified as local situations and the particular needs of individual units may warrant. However, units will not be considered as being fully trained prior to their participation in exercises covering all phases of each type of operation outlined in the directives.

b. In addition to serving as guides for the tactical training of units, the directives cover essential items that should be covered by superior commanders in testing the tactical efficiency of the battalion or its antitank platoon.

■ 2. PREPARATION.—*a.* For a general discussion of the preparation of field exercises and field maneuvers, see paragraph 118, FM 21-5. The directives in this appendix show the definite phases of combat to be covered in each exercise. Thus an officer drawing up an exercise need only find terrain suitable for the operation outlined in the directive. In doing so he visits the terrain under consideration, where he makes a detailed reconnaissance by actually going over the ground and studying it from the point of view of the participants in the exercise. Having decided on the location the officer con-

ducting the exercise formulates a situation which will confront the unit at the beginning of its participation. He also determines the actions he will require of those elements which are to represent the enemy and the control measures and safety precautions that are essential. All of the above should be simple. A unit should be told no more than would be known in similar situations in actual combat. An elaborate background of events leading up to the initial situation is unnecessary.

b. Prior to the actual conduct of the exercise it should be played in unit schools either as a map exercise, a sand table exercise, or a tactical walk, thereby giving subordinate officers and noncommissioned officers a clear understanding of what is expected of the unit. In addition this preliminary study of the problem will probably result in less stringent control measures during the actual conduct of the exercise on the ground. At the time when the directives are actually being used to test the tactical efficiency of the unit, this preliminary study will not be made.

■ 3. CONDUCT.—a. For the control and conduct of field exercises and maneuvers, see paragraphs 119 and 120, FM 21-5. The unit should be allowed to solve the problem as its commander sees fit. The officer conducting the exercises should have in mind solutions to the various situations that will confront the unit, but he does not force the unit or any parts of it to follow his preconceived ideas as to what actions should be taken. Umpires may assess penalties or inject events which will cause the units to act in a suitable manner should the need arise. These control measures, however, must be logical and appropriate.

b. The umpire must strive to make the exercise as realistic as possible and to provide impressions similar to those actually experienced on the battlefield. For the duties and operations of the umpire, see appendix II, FM 7-10, and FM 105-5.

c. Full use should be made of noncommissioned officers as umpires.

■ 4. CRITIQUE.—For a discussion of the critique, which is always a part of each exercise, see paragraph 121, FM 21-5.

Should the need arise, critiques may be held at any stage of the exercise. However, it is usually best for the chief umpire and his assistants to make notes to be used at the termination of the exercise.

■ 5. TIME ALLOWED.—Ample time should be given each unit to solve its problems logically. Reconnaissance must be made and orders issued. Full use must be made of such cover as the terrain provides. If troops are rushed through preparatory measures and move freely over terrain under hostile observation they will acquire unnatural impressions which later may be disastrous.

■ 6. ANTITANK PLATOON, BATTALION HEADQUARTERS COMPANY.

a. *With an advance guard battalion on a route march* (see FM 7-20 and 7-35).

Scope

Execution

A problem involving the employment of the 37-mm antitank platoon of an advance guard battalion during route march in one column, when there is a hostile mechanized threat.

Situation to be based on the battalion march order and be drawn so as to require—

(1) Recommendations to the battalion commander and orders of the platoon leader for the employment of the platoon over varied terrain—

(a) Where occupation of successive positions along the route of march is practicable.

(b) Where movement outside the column is impossible.

(2) Reconnaissance along the route of march.

Under direction of the battalion commander the platoon leader should dispose his platoon so that guns occupy successive positions along the route of march when practicable; otherwise they should be distributed throughout the column. His orders to his section leaders should be brief, clear, and concise.

The platoon leader should reconnoiter the route of march for the most likely avenues of hostile tank approach and for actual or possible uncoupling, cover, and firing positions.

The platoon leader should insure that air-antitank guards are designated.

During short halts observers should be posted and the

(3) Security against attack by mechanized or other ground forces and by aviation.

(4) Communication and liaison.

guns prepared for immediate employment.

The agent corporal should assist in maintaining liaison with the battalion commander. The two messengers should operate radiotelephones or assist in maintaining contact with the elements of the platoon.

b. Approach march.

A problem involving the 37-mm antitank platoon of a leading battalion in daylight approach march.

Situation to be based on the battalion development order which should assign the platoon the mission of providing frontal and flank antitank protection to the battalion.

Situation to be drawn so as to require—

(1) The development order of the platoon leader.

(2) Movement on an extended front with both flanks exposed to tank attack.

(3) Air-antitank defense.

(4) Communication.

(5) Prompt occupation of assigned position area(s) to provide antimechanized protection for the battalion assembly area.

Orders of the platoon leader to the section leaders should be brief and definite. They should direct that sections move separately in rear of the leading echelon and should assign a definite area of responsibility to each section.

Assisted by available members of his command group the platoon leader should reconnoiter for favorable routes of advance, the best method of crossing or avoiding dangerously exposed areas, and possible uncoupling, cover, and firing positions. Similar reconnaissance should be made by section leaders. The platoon leader should closely supervise the conduct of the sections and promptly issue any necessary instructions for changes in their dispositions or conduct.

The platoon leader insures that maximum use is made of available cover and concealment.

The platoon leader should maintain contact with the battalion commander through his agent corporal. He should utilize all available means to communicate with the battalion commander and section leaders. Rapid reconnaissance of the position area(s) assigned by the battalion commander is essential. If large, the area(s) to be reconnoitered should be subdivided among selected leaders. Observers should be posted, cover positions occupied, firing positions selected, and ammunition placed at firing positions without loss of time.

c. Security.

A problem involving the use of the 37-mm antitank platoon of a battalion on combat outpost.

Situation to be based on the battalion order attaching the antitank platoon to the outpost and to be drawn so as to require—

(1) Reconnaissance of an assigned area by the antitank platoon leader in company with the combat outpost commander for the purpose of se-

The platoon leader should make a reconnaissance with the combat outpost commander after initiating the forward movement of his platoon.

Guns may be employed singly. Positions selected should cover the areas favoring the advance of armored vehicles, afford a long-range field of fire, and be close to the crest of high ground to facilitate withdrawal. Posi-

lecting firing position areas, routes of movement, and positions for prime movers.

(2) Orders of the platoon leader based on orders of the combat outpost commander.

(3) Movement of guns to firing position areas and occupation of cover positions.

(4) Reconnaissance and plan for withdrawal to the battle position.

tions for the prime movers should be in defilade and as close to the combat echelon as the situation and terrain allow. Brief and concise orders should be issued disposing the platoon in accordance with the orders of the combat outpost commander and specifying conditions for opening fire.

Guns should be moved by prime movers as close to firing position areas as the terrain and hostile fires permit and then by hand into cover positions. Ammunition should be placed at firing positions. Alternate and supplementary positions should be selected and all preparations made to occupy them quickly.

Routes for withdrawal should be reconnoitered and made known to all members of the platoon. Routes selected should not interfere with fires from the battle position.

d. Daylight attack.

A problem involving the battalion 37-mm antitank platoon in a daylight attack. Necessary rifle elements of the battalion should be represented.

Situation to be based on the battalion attack order

The platoon leader should reconnoiter as directed by the battalion commander and make recommendations for the employment of his platoon.

The orders of the platoon leader should be clear, con-

and to be drawn so as to require—

(1) Reconnaissance by the platoon leader and his recommendations for the employment of his platoon.

(2) Orders of the platoon leader to execute missions assigned in the battalion order.

(3) Movement of platoon from positions protecting an assembly area to attack positions.

(4) Reconnaissance to facilitate displacement.

(5) Displacement to provide continuous antitank protection to the attacking echelon upon capture of a terrain mask.

cise, and assign definite missions. Each section should be assigned a firing position area, principal directions of fire, and the conditions for opening fire; or be directed to protect a designated company.

The antitank platoon must be prepared to protect the battalion during its movement to the line of departure.

Attack positions should be occupied as described in the preceding directive on security.

After issuing tentative instructions for displacement to section leaders the platoon leader, accompanied by at least one messenger (and assisted by the platoon sergeant if the sections are widely separated), should follow the attacking echelon closely and reconnoiter for the displacement of his platoon. His reconnaissance should cover the location of the attacking echelon, hostile tank approaches, routes for displacement, firing and cover positions, and truck assembly areas. Routes should be marked or section leaders informed of their location.

Displacement should be made rapidly, as soon as the terrain mask is captured. Sections should be met on

nearing new position areas and guided into position. Preparations to repel armored counterattack should be completed without delay.

e. Continuation of attack.

A problem involving the battalion antitank platoon (37-mm gun) in the continuation of a daylight attack. Necessary rifle elements of the battalion should be represented.

Situation to be based on the battalion attack order and to be drawn so as to require—

(1) Selection and occupation of positions to cover the reorganization of the battalion.

(2) Reorganization of the platoon.

(3) Reconnaissance and orders for continuation of the attack.

(4) Ammunition supply.

(5) Communication.

The platoon leader should promptly dispose his guns so as best to protect the front and flanks of the attacking echelon during its reorganization against mechanized attack.

The platoon leader should direct the necessary reorganization of the platoon, replace leaders or key men who have become casualties, and equalize the strength of units, where necessary, by transfer from one section to the other.

The platoon leader should initiate an early reconnaissance for new firing positions from which the platoon can protect the attacking echelon when the attack is resumed and should issue appropriate orders to his platoon. (Movement to new positions is made as directed by the battalion commander.)

The platoon leader is responsible that ammunition supply is promptly replenished and that a sufficient amount is available at gun

positions for completion of fire missions.

Communication within the platoon and with the battalion commander should be maintained by available means.

f. Defense—occupation and organization of defensive positions in daylight—front-line defense area.

A problem involving the antitank platoon (37-mm gun) in the occupation of a front-line battalion defense area in daylight.

Situation to be drawn so as to require—

(1) The platoon leader's reconnaissance and recommendations for antimechanized defense during movement to the battalion defense area and during its organization and occupation to include recommendations for the location of antitank obstacles and mine fields.

(2) Disposition of the platoon and construction of primary, alternate, and supplementary positions, in accordance with the battalion defense order which should prescribe the positions and missions of the platoon and the quantity of ammunition to be placed on the position.

(3) Establishment of air-antitank warning system.

The platoon should be disposed to provide all around antimechanized security for the battalion from primary, alternate, or supplementary positions. Coordination of the antitank defense of the battalion with that of higher and adjacent units is accomplished by the regimental antitank officer.

Based on the battalion warning order and following a reconnaissance of the battle position the platoon leader should submit recommendations to the battalion commander for the employment of his platoon, for antitank obstacles to be constructed or improved, and for the location of antitank mine fields.

Clear, brief, oral orders should be issued to the section leaders in time to enable them and their squad leaders to reconnoiter assigned position areas, make dispositions, and initiate work of emplacing guns without delay. Am-

munition should be placed at each emplacement. Transport should then be assembled under control of higher authority.

Provision should be made to insure prompt relay of air-antitank warning to all elements of the platoon by proper utilization of available means of communication.

g. Defense—occupation and organization of defensive positions at night—front-line defense area.

A problem involving the battalion antitank platoon (37-mm gun) in the occupation of a front-line battalion defense area at night.

The situation to be drawn so as to require—

(1) Daylight reconnaissance by the platoon leader and his recommendations for antimechanized defense of the battalion defense area to include recommendations for the location of antitank obstacles and mine fields.

(2) Marking of routes and primary, alternate, and supplementary gun positions for quick recognition at night.

(3) Movement of the platoon to the defense area and occupation of positions during darkness in accordance with a battalion defense order issued prior to darkness and before contact with the

The platoon leader should accompany the battalion commander on reconnaissance or perform reconnaissance directed by him and should submit recommendations covering the antimechanized defense of the battalion defense area to include employment of the platoon, the location of mine fields, and the location or improvement of antitank obstacles.

He should issue clear and concise orders to section leaders without delay to allow them and squad leaders maximum daylight in which to reconnoiter and mark exact positions to be occupied. Guides should be familiar with routes forward and mark them prior to darkness.

The movement to the defense area should be con-

enemy has become imminent. (The order to prescribe the positions and missions of the platoon and the quantity of ammunition to be placed on the position.)

(4) Establishment of air-antitank warning system.

(5) Readiness at daybreak to meet a mechanized attack from any direction.

ducted without lights. Emplacements should be constructed prior to daylight. Ammunition should be placed at each emplacement.

Provision should be made to insure prompt relay of air-antitank warning to all elements of the platoon by proper utilization of available means of communication.

All elements of the company should be prepared for action against air or mechanized attack at daylight. Transport should be removed to rear areas under control of higher authority prior to daylight.

h. Conduct of defense.

A problem involving the battalion antitank platoon (37-mm gun) in the conduct of the defense.

Situation to be based on the battalion occupying a defense area and drawn so as to require—

(1) Action against tank attack in accordance with the fire plan.

(2) Action against attack by hostile air and foot elements.

As hostile armored vehicles cross the terrain features designated in the fire plan guns should open fire against them. Priority of fire should be given to the most dangerous targets.

Security against hostile air attack should be provided by concealment, dispersion, and use of fox holes.

(Additional security may be provided by heavy machine-gun elements located nearby.)

Security against hostile foot elements should be provided by adjacent friendly rifle units. When attacked

by hostile foot elements, personnel should take cover in fox holes and open fire with carbines unless engaged in action against tanks.

2. Night withdrawal.

A problem involving the battalion antitank platoon (37-mm gun) in a night withdrawal.

Necessary rifle elements of the battalion should be represented.

Situation to be based on the battalion order specifying that one section of the antitank platoon be reported to the battalion covering force commander to provide antimechanized protection for the withdrawal of the covering force; and that the platoon (less one section) withdraw with the battalion less the covering force. Elements of the platoon less the section with the covering force should be attached to the rifle companies in whose areas the guns are emplaced for withdrawal to the coupling position. The forward limit of transport should be prescribed. The situation should be drawn so as to require—

(1) Plans, actions, and orders of the platoon leader in compliance with the battalion order.

The platoon leader should initiate daylight reconnaissance to select routes of withdrawal from the coupling position to the battalion assembly area.

Guns attached to rifle companies are moved by hand from their emplacements to the location of the prime movers, where they are dispatched singly to the battalion assembly area.

The leader of the section designated to remain with the battalion covering force should report to the covering force commander. Prime movers for these elements must be left with the covering force. The section is withdrawn as directed by the covering force commander.

(2) Execution of the withdrawal.

j. Daylight withdrawal.

A problem involving the battalion antitank platoon (37-mm gun) in a daylight withdrawal. Necessary rifle elements of the battalion should be represented.

Situation to be based upon the battalion withdrawal order directing the attachment, for the withdrawal only, of elements of the platoon to rifle companies in whose respective areas these elements are located. When available, smoke should be used to facilitate the initial phase of the withdrawal.

The platoon should be attached to the battalion covering force upon reaching the line held by it.

Situation to be drawn so as to require—

As part of the battalion covering force protection of the battalion assembly area and protection of further retrograde movement.

k. Delaying action.

A problem involving the battalion antitank platoon (37-mm gun) in delaying action.

Situation to be based on the battalion order for delay-

The platoon leader should assist rifle company commanders in every way possible during their movement to the position of the battalion covering force.

Vehicles are sent as far forward as practicable by infiltration. As elements of his platoon arrive at the position of the battalion covering force the platoon leader should assume control and dispose them as directed by the covering force commander. Vehicles are retained near the gun positions.

The platoon leader should initiate early reconnaissance in accordance with the orders of the covering force commander to protect the further retrograde movement of the battalion. Protection especially must be provided against hostile armored elements attempting pursuit.

Based on his reconnaissance the platoon leader should submit recommendations, when called for by the battalion commander, for the disposition of his platoon and

ing action and to be drawn so as to require—

(1) The platoon leader's reconnaissance and recommendations for disposition of his platoon on the first delaying position.

(2) Employment of the platoon, in accordance with the battalion commander's orders in support of the defense of the initial delaying position and at least one subsequent delaying position.

(3) Reconnaissance for rear positions.

(4) Employment of the platoon during movement between positions.

(5) Ammunition supply.

the location of antitank obstacles and mine fields.

Initial employment of the platoon should be as for defense. Fire is opened at maximum effective ranges. Locations near a topographical crest should be selected. Prime movers should be retained close to the gun positions.

Early reconnaissance of succeeding delaying positions and routes of withdrawal must be initiated by the platoon leader. The platoon sergeant or agent corporal may be used for this reconnaissance.

During movement between positions the platoon should be constantly prepared to go into action, without delay, in any direction. Rapidity of decision and action is essential.

Only sufficient ammunition to meet estimated needs should be located near the gun. The transport corporal should supervise resupply of ammunition, if resupply is required.

■ 7. RIFLE BATTALION.

a. Approach march on a broad front (see FM 7-20 and 7-40).

Scope

A problem involving the use of a rifle battalion as the

Execution

The orders of the battalion commander usually will be

leading echelon of an interior regiment in approach march on an extended front.

Situation to be based on the regimental order prescribing the battalion zone of advance and final march objective, and assigning the battalion the mission of providing frontal security for the regiment. Situation to be drawn so as to require—

(1) Plans, actions, and orders of the battalion commander for—

(a) Initial dispositions of units.

(b) Measures for control.

(c) Measures for security.

(2) Disposition and control of motor vehicles.

(3) Use of ammunition and pioneer platoon.

(4) Action against hostile elements.

(5) Evacuation of wounded.

oral and fragmentary. Among other provisions his initial order should include: The battalion final march objective; initial location of units in the formation; measures for control, including announcement of phase lines (or requiring reports of progress); direction of advance and frontages (where applicable); and measures for security, including missions of leading company (or companies), antitank weapons, and heavy machine guns. (Unless covered in standing operating procedure the order should include designation of base unit and instructions for posting of air-antitank guards.)

The battalion commander should utilize his staff to assist in reconnaissance of his zone of advance. He must actively supervise the movement to insure that subordinate commanders maintain direction and modify their formations to meet changes in the terrain and in the hostile situation.

The formation adopted should insure adequate coverage of the assigned zone. When practicable, the battalion should be distributed in depth for proper use of terrain and to insure maxi-

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imum flexibility in maneuver. Contact should be maintained with adjacent units.

Ordinarily weapon carriers should move with their respective units. Communication (less one truck with radio), ammunition, and medical vehicles should move under control of the battalion transport officer in rear of the battalion.

Extra ammunition should be issued to leading units before they take up the approach march. The ammunition and pioneer platoon should be utilized to facilitate forward movement of the battalion transport.

Action against hostile elements should be characterized by aggressiveness to overcome initial resistance and develop enemy dispositions.

Casualties should receive treatment from company aid men. Litter bearers should direct ambulances to wounded who are unable to walk or carry the wounded to points from which ambulances can evacuate them.

b. Occupation of bivouac area at night (see FM 7-20 and 7-40).

A problem involving a rifle battalion in the occupation at night of a bivouac within

Movement of the battalion into the bivouac area should begin after dark and be ac-

range of hostile artillery, and the establishment of a bivouac outpost.

Situation to be based on the regimental bivouac order allotting the battalion a portion of the regimental bivouac area, assigning the battalion a sector of the bivouac outpost, and to be drawn so as to require—

(1) Movement of troops to the bivouac area and utilization of a quartering party.

(2) Actions and orders of the battalion commander for—

(a) Establishment of the outpost.

(b) Provisions for air-anti-tank protection.

(c) Secrecy.

(3) Signal communication.

(4) Arrangements for feeding and ammunition supply.

completed in secrecy and without loss of direction. Prior to darkness a battalion quartering party should be designated, to consist of one officer from the battalion and one noncommissioned officer from each company to function under the regimental quartering officer. The battalion quartering officer should suballot the battalion area to companies and orient each company guide. Movement into company areas should be without halts.

The battalion commander should initiate reconnaissance of the outpost area during daylight, prior to the time the battalion reaches the bivouac area, and should establish the outpost promptly upon arrival of the battalion in the bivouac area. In his outpost order, he should direct the location and establishment of supports and any detached posts required; instruction should be included for patrolling and employment of supporting weapons.

The battalion commander should exercise necessary supervision to see that men and vehicles are dispersed within the area and that full advantage is taken of natural cover. He should direct the

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prompt preparation of individual shelter and air-anti-tank security measures within the bivouac to include an interior guard and measures for maintaining secrecy regarding the location of the area.

Prime reliance should be placed on messengers for communication within the area. Radio should not be used, but other available means may be utilized.

The battalion supply officer should be directed to make necessary arrangements to facilitate movement of kitchen trucks to company areas and return to regimental control as directed. He should also plan to replace any ammunition expended.

c. Preparations for a daylight attack (see FM 7-20 and 7-40).

A problem involving a rifle battalion as an interior unit of the attacking echelon in the occupation by night of an assembly area which is covered by security elements of the regiment and advance to the line of departure preparatory to an attack at daylight.

Situation to be based on the regimental attack order prescribing the battalion as-

Assisted by selected members of his staff, and accompanied by a small security detachment, the battalion commander should make a daylight reconnaissance of the assembly area and routes thereto; in addition he should complete necessary reconnaissance to enable him to issue his attack order.

He should direct the battalion quartering officer to

sembly area, zone of action, objective, line of departure (less than 1½ miles from assembly area), and time of attack, and to be drawn so as to require—

(1) Action, plans, and orders of the battalion commander for the movement to and disposition of units in the assembly area.

(2) Actions taken during occupation of area for—

(a) Feeding.

(b) Disposal of packs.

(c) Issuance of extra ammunition.

(3) Issuance of battalion attack order.

(4) Movement to line of departure.

(5) Disposition of weapon carriers.

subdivide his assigned area, and should make provisions for its security, and for adequate marking to facilitate night movement and occupation.

The march should be accomplished expeditiously and in secrecy. Weapon carriers should be released to units in the assembly area. Assignment of units to subdivisions of the assembly area should facilitate their transition to the attack.

Under direction of the battalion commander and in accordance with the regimental supply plan, the battalion supply officer should supervise—

(1) Feeding, including arrangements to guide trucks to company areas, feeding appropriate hot meal(s) and a cold lunch; returning vehicles to regimental control.

(2) Removal of packs from unit areas on kitchen trucks.

(3) Release of vehicles of the battalion ammunition train to rifle companies for the issuance of extra ammunition to individuals and teams; prompt refill of weapon carriers; consolidation of loads on vehicles of battalion ammunition train and prompt refill of empty trucks;

and use of the ammunition and pioneer platoon.

Warning orders, sufficiently detailed, should be issued in time to allow subordinates to complete adequate daylight reconnaissance. Final details of the plans and orders may be completed in the assembly area. To insure surprise, movement to attack positions should be completed under cover of darkness and the movement to the line of departure should be timed so that forward elements cross it with supporting weapons in position to support the action at the prescribed hour.

Weapon carriers normally should be released to units. Exceptionally, where cover is lacking in the forward areas, they should be located under cover near the route of ammunition advance under control of the battalion transport officer.

Carriers should be returned to their units whenever the situation permits.

d. Daylight attack (see FM 7-20 and 7-40).

A problem involving an interior rifle battalion in a daylight attack in compliance with a previously issued regimental attack order.

The battalion to be sup-

Movement forward from attack positions, if in rear of a regimental line of departure, should be initiated at such time that the leading elements of the attacking

ported by the field artillery which is supporting the regiment and to have one platoon of the regimental cannon company in direct support. The artillery liaison officer and the cannon platoon liaison agent should have previously reported to the battalion commander.

The situation to begin with all elements of the battalion in attack positions and to be drawn so as to require—

(1) Initiation of the attack at a prescribed hour.

(2) The decisions, actions, and orders of the battalion commander when—

(a) Part of the attacking echelon of the battalion is held up short of its initial objective while the remainder of this echelon has captured its initial objective.

(b) A company of the attacking echelon is badly disorganized and unable to advance.

(c) All of the attacking echelon is held up while an adjacent battalion has reached more advanced positions.

(d) The enemy delivers a counterattack against an exposed flank of the battalion.

(3) Signal communication.

(4) Ammunition supply.

(5) Display of marking

echelon cross the line at the prescribed hour.

The battalion commander should observe the progress of the attack and further it by timely instructions for displacement of his heavy weapons or for the shifting of their fires. He should employ his staff to assist him in control and in securing information, maintaining supply and communication, planning, and disseminating information and orders. He should arrange for fires or shifts of fires from the artillery or cannon platoon through the liaison officer and liaison agent, respectively. As the attacking echelon advances he should keep his reserve within supporting distance of the attacking echelon, moving it by bounds to successive covered positions. He should dispose the battalion antitank platoon to protect the attacking echelon from successive positions.

The battalion commander may concentrate supporting fires to assist the unit which is held up short of its objective, direct the successful unit to assist it, or employ the reserve to capture the objective by flank attack.

He should employ the reserve to continue the attack

panels on call from friendly planes.

in the zone of action of a disorganized company from positions on its flank if practicable; the replaced unit should be directed to reorganize and revert to battalion reserve as soon as hostile fires permit.

When advance in an adjacent zone creates an open hostile flank, he should promptly arrange with the adjacent commander for movement of his reserve into that zone to envelop the hostile resistance or for movement of supporting weapons to more advantageous positions therein, or both.

All available supporting fires should be promptly massed against a hostile counterattack and the reserve rapidly employed to repel it, preferably by attack against its flank.

By timely orders to his staff, he should insure that his observation and command posts are kept well forward and that the ammunition distributing point and aid station are advanced whenever the situation and terrain permit.

On call from friendly aviation front-line units should display marking panels to indicate their location.

e. Continuation of the attack (see FM 7-20, 7-30, 7-40, and 30-15).

A problem involving a rifle battalion as an interior element of the attacking echelon in continuation of the attack.

Situation to be initiated with the battalion having captured its initial objective under circumstances requiring the issuance of further battalion orders before the attack can be resumed.

The battalion has employed its three rifle companies, suffered casualties, and become badly disorganized.

Situation to be drawn so as to require—

(1) Actions and orders of the battalion commander during reorganization with particular reference to:

(a) Security measures.

(b) Supervision of reorganization and constitution of a new reserve.

(c) Ammunition supply.

(d) Handling of stragglers and prisoners of war.

(2) Preparations for the continuation of the attack to new objectives.

(3) Evacuation of wounded.

The battalion commander should promptly initiate the displacement of heavy weapons and antitank guns to cover the reorganization and make any necessary adjustments in measures taken by front-line companies for local security.

He should assign areas to companies for their reorganization, if necessary to avoid confusion, and designate the composition, initial location, and mission of a new reserve. He should require units promptly to report their command post locations. Assisted by his staff he should ascertain the relative strength and readiness for combat of subordinate units and replace casualties in his staff and among the company commanders.

He should insure the prompt forward movement of ammunition vehicles to facilitate resupply and the collection and redistribution of ammunition from dead and disabled.

Stragglers should be returned promptly to their own organizations. Prisoners of war should be assembled at battalion headquarters where

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they should be searched and briefly examined for identification and information of importance to front-line units. Information concerning new identifications should be sent immediately to the regimental commander. Prisoners should be sent under guard to the regimental collecting point with a brief of information discovered, any captured documents and material, and hostile identifications.

The battalion commander should promptly initiate reconnaissance, develop plans, and issue orders for the continuation of the attack. Orders should be issued in time to permit the attack to be resumed without delay after reorganization is completed.

Company aid men should locate and administer first aid to the wounded, direct walking cases to the aid station, and indicate the locations of those unable to walk. Litter bearers from the battalion section should carry nonwalking wounded to the aid station; when the aid station displaces forward, these men are left in groups to be picked up by collecting personnel of division units.

f. Organization of a battalion defense area in daylight (see FM 7-20 and 7-40).

A problem involving the occupation and organization of an interior defense area on the main line of resistance by a rifle battalion during daylight.

Situation to be based on the regimental order and drawn so as to require:

(1) Plans, actions, and orders of the battalion commander stressing—

(a) Issuance of warning orders to subordinates and movement of battalion to the defense area while reconnaissance, planning, and issuance of orders are conducted.

(b) Timely completion of plan, and issuance of orders for the establishment of a combat outpost, and for the occupation and organization of the area to the company commanders and other selected personnel.

(c) Supervision of the organization of the defense area.

(2) Establishment of a system of communication.

(3) Plans for supplying ammunition and feeding the men.

Upon receipt of the regimental order the battalion commander should make a brief map study, confer with the artillery liaison officer and representative of the cannon company, and decide upon a tentative plan of defense. He should take necessary steps to initiate or continue movement of the battalion to the position by using a member of his staff (usually the executive officer) to conduct the movement and to acquaint the company commanders with the situation. He should plan his reconnaissance and announce the time and place of issuance of the battalion defense order and the personnel to be present. He then should make a ground reconnaissance, accompanied by selected personnel such as S-3, the heavy weapons company commander, the artillery liaison officer, the antitank platoon leader, messengers, and radio personnel with suitable equipment. He may assign other members of his staff to make special reconnaissances or contact adjacent unit commanders, or both.

Following his reconnaissance the battalion com-

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mander should complete his plan, which should coordinate the fires of his heavy weapons with those of adjacent heavy weapons units, cannon company, and supporting artillery. He should then meet his company commanders (who have preceded their units) at the previously designated time and place and issue an oral order to them and to members of his staff to include at least the following:

(1) The employment of the rifle companies (to include composition, location, and mission of combat outpost, boundary between companies, and trace of the main line of resistance).

(2) Locations or position areas and missions for heavy weapons and light machine guns; general firing positions and principal directions of fire for 37-mm antitank guns; primary targets for 81-mm mortars.

(3) Location of mine fields and obstacles.

(4) Location of the battalion ammunition distributing point and aid station.

(5) Priority of work for the organization of the position.

(6) Disposition of weapon carriers.

(7) Instructions for establishing an air-antitank warning system. Additional details may be issued later.

The battalion commander should supervise the organization of the ground personally and through frequent visits by members of his staff.

He should require the communication officer to establish communications to all major units of the battalion, utilizing all available means.

In compliance with the regimental order he should direct that the prescribed quantity of ammunition be placed on the position. (This amount should obviate resupply prior to dark.) He should check S-4's arrangements for the feeding of the men and resupplying of ammunition.

g. Organization of a battalion defense area at night (see FM 7-20, 7-30, and 7-40).

A problem involving the occupation and organization of an interior defense area on the main line of resistance by a rifle battalion during the night. The battle position to be protected by a cov-

Upon receipt of the regimental order the battalion commander should make a brief map study and then plan a daylight reconnaissance of the area. He should utilize his staff to assist him.

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ering force provided by higher authority.

Situation to be initiated with the battalion in a concealed bivouac several miles from the defense area, to be based on a regimental order, and to be drawn so as to require—

(1) Daylight reconnaissance of defense area by the battalion commander and his staff.

(2) Issuance of battalion order.

(3) Reconnaissance by unit commanders before dark.

(4) Establishment of security measures.

(5) Movement of troops into position during darkness.

(6) Distribution of engineer tools.

(7) Disposition of vehicles.

(8) Organization of the area prior to daylight.

Ordinarily staff officers are directed to reconnoiter as follows: S-2—the battalion observation posts; S-4—supply installations and company mess locations; surgeon—battalion aid station; and communication officer—battalion command post. S-3, the heavy weapons company commander, the artillery liaison officer, and the leader of the antitank platoon should accompany the battalion commander on his reconnaissance.

The battalion order should be issued in time to permit unit commanders to reconnoiter and mark assigned areas, firing positions, and routes of movement to fix sectors of fire and to orient guides before dark.

All daylight reconnaissance parties must be small.

Combat outposts should be established by the battalion at or soon after dark for protection of troops during the night occupation.

Movement of all troops and vehicles should be made under cover of darkness over previously marked routes and in secrecy. Lights should be prohibited and noise should be kept to a minimum.

Engineer tools should be distributed under supervision

of S-4, as directed by the battalion commander.

After depositing their loads and supplying additional ammunition, vehicles (except those necessary for command and communication) should be withdrawn to the rear in accordance with the regimental order.

Frequent visits by the battalion commander and staff officers should be made to all units during the night to check the progress of the organization.

Prior to daylight an inspection should be carried out and any necessary adjustments made.

h. Conduct of defense—battalion on the main line of resistance (see FM 7-20, 7-40, and 100-5).

A problem involving a rifle battalion in the conduct of the defense of a battalion defense area.

The battalion to be supported by one platoon of the regimental cannon company and by field artillery (one light artillery battalion supporting the regiment). The liaison agent of the cannon platoon and the artillery liaison officer have reported to the battalion commander. The general outpost has been withdrawn.

Situation to be based on the battalion occupying an

The combat outpost should be assigned the mission of delaying and deceiving the enemy and giving warning of his approach to the troops on the battle position; the battalion order should require it to withdraw before becoming closely engaged. The withdrawal should be made under cover of long-range fires, by routes previously selected by the outpost commander and approved by the battalion commander.

Under orders of platoon and section leaders troops in rear of the main line of re-

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organized interior defense area on the main line of resistance, with a battalion combat outpost in position and the remainder of the reserve occupying its defense areas that extend the depth of the battalion. Situation to be drawn so as to require—

(1) Battalion orders to the outpost commander and plans to cover withdrawal of the outpost.

(2) The withdrawal of the outpost.

(3) Decisions, actions, and orders of the battalion commander, and conduct of subordinate elements when—

(a) An air attack is made on the battalion defense area.

(b) Enemy foot troops approach to midrange; to close range.

(c) Enemy foot troops attempt an assault of the front-line defense positions.

(d) A deep penetration within the battalion defense area is effected by hostile foot troops.

(e) An adjacent area is penetrated by the enemy.

(f) Hostile elements infiltrate into the battalion area.

(g) A strong mechanized attack succeeds in penetrating through the position.

(h) The battle is interrupted by nightfall.

sistance (and those on the main line of resistance who already have opened fire on ground targets) employ their rifles, automatic rifles, and heavy machine guns for anti-aircraft fires when air targets offer a greater threat than do ground targets. The battalion commander should insure that troops not directly under an air (or artillery) attack continue to fire, or are prepared to fire, assigned ground missions.

The battalion fire plan should bring the attacker under a steadily increasing volume of fire. Machine guns sited in rear of the main line of resistance should fire on remunerative targets during the approach of the enemy. Mortars, supporting elements of the cannon company, and supporting artillery should fire on enemy concentrations or on suspected enemy locations.

Fires of elements on the main line of resistance should be withheld until the enemy approaches within 500 yards of their positions. Close defensive fires should be delivered in accordance with the fire plan as the enemy closes with the position; they should be delivered only in front of those localities which are

threatened by the hostile attack.

The hostile assault must be met by rifle and supporting fires, grenades, and the bayonet and other forms of hand-to-hand combat, since the success of the defense depends upon each small unit holding its assigned area.

When the enemy succeeds in penetrating deeply into the battalion defense area, the battalion commander should counterattack before the attacker has time to organize the captured position.

In case of a penetration in an adjacent area the battalion commander should commit the necessary portion of the battalion reserve to previously reconnoitered and prepared flank positions to prevent the widening of the penetration and the envelopment of the battalion flank.

Constant vigilance must be maintained against small groups infiltrating into the battalion area, particularly at night, or in fog or smoke. Patrols and stationary observers cover the ground between defense areas during periods of reduced visibility. Local reserves should be used to mop up any groups found.

If the enemy succeeds in penetrating the front-line

defense positions with a strong mechanized attack the battalion commander should insure that units on the battle position close the gap thus created without delay. When necessary, he should use the reserve to assist in closing the gap.

When the battle is interrupted by nightfall, the battalion commander should establish local security and make provisions for patrolling and for illuminating the foreground and the intervals between defense areas.

i. Organization of a regimental reserve area (see FM 7-15, 7-20, and 7-40).

A problem involving the organization of the regimental reserve area by a rifle battalion under conditions indicating the likelihood of a hostile attack accompanied by an intensive aerial bombardment which might immobilize the regimental reserve.

Situation to be based on a regimental defense order directing the battalion to organize and occupy a defense area to protect the flanks and rear of front-line battalions and block the most probable penetration of the regimental sector. The order

Upon receipt of the regimental defense order the battalion commander should make a reconnaissance to select positions from which the reserve can best accomplish its assigned missions; and to determine the locations, missions, and primary targets of his heavy weapons when they are released from regimental control. The battalion commander should be accompanied by his S-3, heavy weapons company commander, and antitank platoon leader. He should assign other members of his staff to make special recon-

to direct reconnaissance and organization of additional positions from which to deepen the defense, block penetrations from the flanks, and provide all around protection. The order should include pertinent details of the plan of fires of the supporting artillery, regimental cannon company, and attached chemical troops; it should assign initial locations (in rear areas of front-line battalions) and long-range missions in support of the main line of resistance to the battalion heavy weapons company. Situation to be drawn so as to require—

(1) Reconnaissance by the battalion commander and his staff.

(2) Selection of rifle company defense areas; positions and missions for heavy weapons after completion of initial missions and release from regimental control.

(3) Issuance of battalion order to staff and company commanders.

(4) Occupation and organization of the reserve area.

(5) Measures for air-gas-antitank warning. Measures for security, to include mopping up hostile elements that infiltrate behind the forward battalions.

naissance and to contact adjacent unit commanders.

Following the reconnaissance the battalion commander should complete his plans, meet his staff and company commanders, and issue his orders.

Heavy weapons, protected where necessary by small rifle detachments, should be promptly emplaced to perform the initial missions prescribed by the regimental order.

In organizing the defense areas a high priority should be given within the latitude permitted by regimental orders, to preparing emplacements and fields of fire for heavy weapons and individual shelter for all personnel. The defense area initially to be occupied should be so organized that the reserve can—

(1) Support front-line battalions by fires of heavy weapons (after their release from regimental control).

(2) Defend in place.

(3) Move to counterattack.

(4) Promptly occupy prepared positions on either flank or to the rear of the reserve area. (Planning and execution of counterattacks as covered in the succeeding directive.)

(6) Movement to flank positions to prevent the widening of a penetration in an adjacent sector.

When the positions are organized, the reserve (less heavy weapons initially under regimental control) should occupy the defense area designated in regimental orders. A system of air - gas - antitank warning should be provided.

The battalion commander should establish small combat groups and security patrols to protect the reserve area against infiltrating groups. He should be prepared to dispatch elements promptly to capture or destroy hostile groups which have penetrated beyond the holding garrison. Aggressive leadership by small-unit commanders should characterize the action of these elements.

When the developments of the situation require occupation of flank position(s), movement thereto should be accomplished rapidly, without confusion, and with maximum use of all available cover.

j. Organization of a regimental reserve area, continued; prior planning and execution of counterattacks (see FM 7-20 and 7-40).

A problem involving the planning and execution of a counterattack by a rifle battalion in regimental reserve.

In his initial reconnaissance for the organization of the regimental reserve area the battalion commander

Situation to be based on a regimental defense order which directs the battalion commander to prepare and submit for approval a series of plans to resist hostile penetration by counterattack and to be drawn so as to require—

(1) Reconnaissance by the battalion commander and his staff.

(2) Preparation of at least two plans based on possible penetrations of the regimental sector.

(3) Submission of plans to the regimental commander.

(4) Rehearsal of counter-attack plans.

(5) Execution of at least one counterattack from the assembly area of the battalion.

should include plans for all counterattacks directed by the regimental order. Additional reconnaissance may be necessary for detailed planning of support of heavy weapons and for employment of smoke or artillery fires.

The battalion commander should develop a plan to meet each possible penetration outlined by the regimental commander. Each plan should provide for the use and control of fires of all supporting weapons (the regimental cannon company, artillery, chemical mortars, and tanks, if made available) and should cover the formation, direction of counterattack, objective, line of departure, and movement to the line of departure. The plan should provide for a single coordinated blow, with little or no reserve held out, and should preferably be directed against the shoulder of the hostile penetration and toward an objective within the regimental sector.

Counterattack plans should be written in the form of brief notes, supplemented by sketches or overlays, and numbered or lettered when submitted to the regimental commander for approval so that he may quickly order

that a given counterattack plan be executed, when required.

When the situation permits, counterattack plans should be rehearsed, but if this is impracticable as many subordinate leaders as possible should be conducted over the area and the plans explained to them on the ground.

Immediately upon receipt of the regimental commander's order the counterattack should be launched to effect surprise, and with boldness and speed; supporting fires should be coordinated to the greatest possible extent.

The battalion commander should promptly notify the regimental commander of the results of the counterattack. The battalion should quickly organize recaptured ground for defense.

k. Night withdrawal (see FM 7-20 and 7-40).

A problem involving a night withdrawal of an interior rifle battalion from a front-line defense area.

Situation to be based on withdrawal from contact to a defensive position several miles to the rear in accordance with a regimental order which should prescribe the time of withdrawal, regimen-

Reconnaissance of routes to the company, battalion, and regimental assembly areas, and of the rearward battalion defense area should be executed during daylight. The reconnaissance parties should include guides for each company.

The battalion withdrawal order should designate a cov-

tal and battalion assembly areas, point of release and forward limit of movement of transport, and the time and route of withdrawal of the covering force. Situation to be drawn so as to require—

(1) Daylight reconnaissance of routes, assembly areas, and battalion defense area in the new position.

(2) Issuance of battalion withdrawal order, including designation of a battalion covering force, its commander, and the time he assumes command.

(3) Enforcement of secrecy measures.

(4) Withdrawal of the battalion, less covering force.

(5) Withdrawal of the covering force.

(6) Ammunition supply.

(7) Evacuation of wounded.

ering force consisting of not to exceed one-third of the rifle strength and necessary supporting weapons and a covering force commander. It should prescribe the time at which the latter assumes command, usually the hour at which the forward elements of the battalion initiate their withdrawal. The covering force should consist of widely deployed rifle elements and single machine guns located on the main line of resistance, small supports placed in the company support areas, and a small reserve held in the battalion reserve area. One section of heavy machine guns may be left in position in rear of the main line of resistance. Some anti-tank weapons (37-mm guns or rifles with antitank grenades) should be left in place to cover avenues of approach suitable for use by mechanized forces at night.

Secrecy measures similar to those for a night attack should be prescribed and rigidly enforced. Motor vehicles should not be permitted forward of the line designated in regimental orders.

Any elements of the trains present with the battalion should be sent to the rear immediately after dark follow-

ed by any company transport, not required for security purposes or to facilitate the withdrawal. The combat echelon other than the covering force should withdraw at the hour designated in the regimental order. Small elements should move to designated company assembly areas and companies then move to the battalion assembly area. Supporting weapons emplaced within the forward areas should be attached to rifle companies for the withdrawal to the location of their trucks where they may be dispatched singly to the battalion assembly area. The battalion commander must provide close-in security for the movement to the rear from the battalion assembly area.

When assembled, the battalion should move via the regimental assembly area to the rear defense area.

Sufficient transport should be left to move the supporting weapons of the covering force. The latter should withdraw as prescribed in the regimental order. Its commander must provide close-in security to protect it during the movement.

An adequate supply of ammunition should be left with

the battalion covering force. Surplus stocks should be carried out by hand or destroyed. Resupply should be effected in a rear assembly area or on the new position.

Litters should be employed to evacuate wounded to the nearest available transportation. When this is impracticable, some aid men should be left with the wounded.

1. Daylight withdrawal (see FM 7-10, 7-20, and 7-40).

A problem involving a daylight withdrawal of an interior rifle battalion from a front-line defense area.

Situation to be based on a withdrawal from contact to a defensive position several miles to the rear, protected by a general covering force and supported by artillery and chemical troops in accordance with the regimental order. Transport should be released to the battalion at a designated place in rear of the regimental covering force.

Situation to be drawn so as to require—

(1) Selection by the battalion commander, within limits imposed by the regimental order, of the zones or routes of withdrawal and of the assembly area or phase lines.

The battalion assembly area should be the first phase line if one is designated by the regimental commander; otherwise it should be the first suitable delaying position in rear of the regimental covering force. If practicable, the routes of withdrawal to the initial phase line or battalion assembly area should be reconnoitered by a staff officer. However, time may permit a map study only. In any case a staff officer should be sent to the assembly area to meet elements of the battalion as they arrive. Successive phase lines should conform to the requirements for successive delaying positions.

The battalion order should be brief, fragmentary, and oral. Company commanders

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(2) Issuance of battalion withdrawal order to include—

(a) Designation of battalion covering force, and of its commander, location, and mission.

(b) Disposition of supporting weapons.

(c) Measures to insure control during the withdrawal.

(d) Ammunition supply.

(e) Disposition of motor vehicles.

(f) Use of supporting artillery and chemical troops.

(3) Withdrawal of the battalion, less covering force.

(4) Withdrawal of the battalion covering force.

should not be assembled to receive it.

The covering force, consisting of the reserve company and supporting heavy weapons, should cover the withdrawal of the forward elements of the battalion from the vicinity of the battalion reserve area.

Rearward heavy machine guns may be attached to the covering force. Heavy machine guns and antitank guns in close support of the main line of resistance should be attached to rifle companies for the early phases of the withdrawal; the antitank guns should be attached to the covering force upon reaching its area; the heavy machine guns may be so attached. 81-mm mortar units should be employed in general support, under company control, from positions in rear of the covering force, to which one or more sections may be attached.

Positive measures must be taken to maintain control during the withdrawal. The battalion commander should prescribe the time of withdrawal and a zone or routes for each company.

Ammunition supply is identical with that for a night withdrawal.

Weapon carriers and prime movers should be brought as far forward as practicable by infiltration.

The battalion commander should employ the fire of the supporting artillery to cover the withdrawal of elements in close contact with the enemy and to interdict hostile movement into the areas initially vacated. Chemical troops should cover, by smoke, the withdrawal of front-line platoons.

The withdrawal should be conducted with all practicable speed. Elements less closely engaged or disposed near the most favorable lines of withdrawal should be the first to be withdrawn. Elements of the heavy weapons company not attached to rifle units should move directly to the battalion assembly area.

The battalion, less covering force, should move to the regimental assembly area when assembled.

The battalion covering force should be withdrawn, under the protection of the regimental covering force, when all other elements of the battalion have cleared a line previously designated by the battalion commander.

m. Delaying action (see FM 7-20 and 7-40).

A problem involving a rifle battalion (with one platoon of the cannon company attached) as a covering force which is to cover the daylight withdrawal of its regiment from the battle position.

Situation to be based on orders from the regimental commander, which include the general location of the first delaying position and drawn so as to require—

(1) Initial plans and actions upon receipt of the regimental commander's order.

(2) Occupation, organization, and conduct of defense at the initial delaying position.

(3) Actions and orders for and conduct of the withdrawal to successive positions.

(4) Dispositions of motor transport.

(5) Supply and evacuation.

(6) Signal communication.

Upon receipt of orders for his delaying mission the battalion commander should make a map study, select tentative successive delaying positions, plan his reconnaissance, and warn subordinate commanders. If necessary he should issue orders to initiate immediate movement by the battalion.

He should then make a reconnaissance to determine the exact location of the initial delaying position. Company commanders with parties may accompany or follow the battalion commander's party.

Orders will usually be fragmentary. They should provide for the establishment of security to give warning of hostile approach.

In open country initial and successive delaying positions must provide good observation and fields of fire at long ranges for all weapons. In close terrain they should be astride avenues of approach. There should be concealed routes of withdrawal; natural obstacles to the front and flanks; and concealment for units on each position. When practicable, the line of resistance should be on or near a topographical crest. The

front may be twice that of a normal defense area. The strength of the reserve varies with the need for flank protection and should not exceed one rifle company. All supporting weapons should be placed well forward; anti-tank guns and elements of the cannon platoon should be able to move to a threatened flank. Weapons that are to be withdrawn with rifle elements should be attached to them. Full advantage should be taken of the mobility and range of the cannon platoon.

Upon approach of the enemy all weapons should open fire at maximum effective ranges. Antitank weapons should fire on armored vehicles only. Fires of the cannon platoon should be delivered as in any defense and also to cover each successive withdrawal.

Orders usually will be fragmentary. They should provide for the establishment of security to give warning of hostile approach.

The battalion commander should initiate early reconnaissance of successive delaying positions and routes thereto.

Withdrawals to succeeding positions should be effected without becoming closely en-

gaged with the enemy. If the enemy gains close contact with a position the withdrawal must be made in general conformity with the methods for a daylight withdrawal. If the situation permits, defense of the initial position or of any successive position should be prolonged in order that the later stages of the withdrawal may be made under cover of darkness.

The battalion commander should designate small rifle units with automatic weapons to occupy intermediate positions and effect maximum delay. These groups should withdraw by previously designated routes in time to prevent capture or destruction.

Transport should be released to the companies and retained as close as practicable to their weapons in order to facilitate ammunition supply and the withdrawal. Arrangements should be made for resupply of ammunition at successive delaying positions.

Advance arrangements should be made with higher authority for evacuation of aid stations prior to withdrawal.

Timely measures should be taken for establishment of signal communication on successive delaying positions. Communication between battalion headquarters and subordinate elements should be effected largely by radio and messenger.

n. Assumption of the defense following an unsuccessful attack (see FM 7-10, 7-20, 7-40, and 100-5).

A problem involving an interior rifle battalion which has been halted on unfavorable terrain following an unsuccessful attempt to capture an objective.

Situation to be initiated with all reserves of the battalion committed and one platoon of the cannon company in support. The battalion commander to have been previously informed by the regimental commander that the regimental reserve has been committed and that no assistance, other than normal artillery and cannon company support, is available for the battalion prior to dark. The situation to be drawn so as to require—

(1) Reconstitution of a battalion reserve.

(2) Adjustments by elements of the battalion for hasty organization of the defense.

When an attack is halted after all reserves have been committed, the same general principles apply as for consolidation of the final objective in the face of hostile interference. The battalion commander should insure that leading elements dig in and take all other feasible steps, including protection of the flanks, so as to hold the ground occupied. He should notify the regimental commander of the situation without delay.

Assisted by his staff he should promptly assemble such individuals and small groups as are in defilade, or whose movement is possible under existing conditions of terrain and hostile fire, as a temporary reserve. A member of his staff may be detailed to command this reserve, if necessary. Restrictions may also be placed on

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(3) Plans and orders of the battalion commander for the occupation and organization of a more favorable defensive position, after dark, in accordance with a regimental order.

(4) Movement of the battalion, after dark, and occupation of the new position.

any uncommitted elements then under control of rifle company commanders. If permitted by enemy fire and accidents of the terrain the attacking echelon may be gradually thinned out and the reserve thereby increased.

After a hasty reconnaissance the battalion commander should order such changes in position areas and missions of 81-mm mortar and antitank-gun elements as are necessary to provide maximum protection against hostile counterattack. He similarly should direct that necessary changes be made in sectors of fire of machine guns and that such guns as are in positions where movement is possible be moved to more favorable position areas for defense. These minor adjustments should be made without delay. Smoke, when available, should be used when its employment will permit movement that otherwise would be impracticable.

The battalion commander should inform the artillery liaison officer of the defensive barrages he desires and arrange methods for their release. He should inform the cannon company representative of fires which may

be desired from that company.

Within the limits prescribed by the regimental order, the battalion commander should reconnoiter for a more favorable defensive position to be occupied and organized after dark, and make the necessary preparations for the movement of the battalion to the new position.

The standards set forth in the directives for night withdrawal and for organization of a battalion defense area at night are applicable to the movement to this position.

o. Night attack (see FM 7-20 and 7-40).

A problem involving a rifle battalion acting alone in a night attack.

Situation to begin with the battalion in a suitable rear assembly area. Situation to be based on a regimental attack order, issued not less than 3 hours before dark, which should direct the capture of a limited objective to facilitate continuation of the attack at daylight, prescribe the time of attack, and place one battalion of field artillery and two platoons of the cannon company in direct support until the daylight attack commences. The objective should be from 400 to

The battalion commander should promptly issue a warning order to his staff and subordinate commanders giving all available information and setting a time and place for issuance of further orders. If not supplied he should request aerial photographs of the objective and approaches thereto. Assisted by his staff he should then make a detailed terrain reconnaissance. He should issue at least a fragmentary attack order at such time and containing such details of the plan and such instructions for night patrolling as will permit adequate daylight

500 yards in width. The situation to be drawn so as to require—

(1) Actions, plans, and orders of the battalion commander in preparation for the night attack.

(2) Employment of the battalion heavy weapons company, supporting artillery, and supporting cannon platoons to protective fires.

(3) Conduct of the attack.

(4) Extension of technical signal communication facilities, and displacement of at least part of heavy weapons company and antitank platoon to the captured objective prior to daylight.

(5) Action against a hostile counterattack shortly after daylight.

reconnaissance by all subordinate leaders. This should include reconnaissance by patrol leaders and selection of firing positions for all supporting weapons, together with preparation of necessary night firing data. Final details of the plan may be issued after dark.

The battalion commander should arrange with the artillery battalion commander or his liaison officer, and with the commanders of the heavy weapons company and cannon platoons for a closely coordinated system of protective fires to "box in" the objective and cover probable areas of departure and routes of approach for hostile counterattack.

During the attack all secrecy measures prescribed by the battalion commander (which should at least prohibit loading of weapons prior to capture of the objective, lights, smoking, and talking except in murmurs on official business), should be rigidly enforced. The advance should be sufficiently slow to insure quiet. Skirmish line should be formed 100 to 200 yards from the hostile position and the advance continued at a walk until hostile resistance is

seen, when it is charged by all who see it. The advance is continued until the objective is captured, when reorganization and preparations to repel counterattacks are commenced under cover of protective fires.

The attacking echelon should be equipped with both radiotelephones and pyrotechnics for use in calling for or lifting protective fires or for emergencies. A pyrotechnic code should be prescribed. A telephone line should be run to the objective promptly after capture.

At least part of the heavy weapons company and anti-tank platoon should reach the objective in time to be in position, by daylight, to assist in repelling counterattacks. Reconnaissance details should accompany the attacking echelon to select firing position areas and guide displacing elements to them. Firing positions should be adjusted, as necessary, at dawn.

Elements of the reserve should mop up in rear of the attacking echelon at dawn. Daylight should find a reserve in hand within supporting distance and the battalion completely prepared to defend the objective against counterattack.

p. Attack in woods (see FM 7-10, 7-20, 7-40, and 31-20).

A problem involving an interior battalion supported by light artillery in an attack in woods.

Situation to be based on a regimental order placing one platoon of the cannon company in direct support of the battalion and to be drawn so as to require—

(1) Plans, actions, and orders of the battalion commander for reorganization within the woods after capture of the near edge.

(2) The conduct of the advance through the woods to include—

(a) Initial dispositions.

(b) Measures for maintaining control and direction.

(c) Actions and orders of the battalion commander upon encountering enemy resistance strong enough to bring the attacking echelon to a halt.

(3) Reorganization near far edge of the woods.

(4) Plans and orders of the battalion commander for the debouchment from the woods.

Upon capture of the near edge of the woods the battalion should halt to reorganize for the attack through the woods.

To reduce the halt to a minimum the battalion commander should make plans for the reorganization and the advance through the woods when he plans the initial attack and issue tentative orders accordingly. Halts should be planned on predetermined or well-defined areas or lines, or if satisfactory areas or lines cannot be found then on a time schedule so as to check direction and restore contact and cohesion. In dense woods the battalion order should require the leading rifle companies to advance in line of columns with reduced intervals and distances preceded by scouts; in thin woods the formation should be more open.

The battalion commander should confirm or modify his tentative orders during the reorganization and start the advance as soon as reorganization is completed. Connecting groups should be detailed. Companies should move on assigned compass azimuths.

The battalion reserve should follow the attacking echelon closely and mop-up areas passed through. The reserve should be prepared to send units by selected routes to infiltrate enemy rear positions. Heavy machine guns should be kept well forward, prepared to fire through clearings and gaps between advancing riflemen. 81-mm mortars should be prepared to fire whenever clearings in the woods permit observed fire; a section may be attached to each leading rifle company. In dense woods, antitank guns should be advanced by bounds prepared to block possible tank approaches, such as clearings and trails; in more open woods one section should follow each flank of the attacking echelon.

The artillery liaison officer and the cannon platoon liaison agent should remain with the battalion commander in rear of the leading rifle companies prepared to assist the advance whenever the terrain affords the necessary observation.

Battalion liaison details should closely follow the attacking echelon. When strong enemy resistance forces the leading rifle com-

panies to halt, these parties should reconnoiter to the flanks and report the situation to the battalion commander. Based on these reports the battalion commander should employ the battalion reserve to envelop the hostile resistance from the weaker flank.

Upon capture of the woods the battalion commander should direct reorganization far enough within the edge of the woods to avoid hostile fires directed at its edge. Supporting weapons should be displaced well forward to support the debouchment.

Patrols should be sent forward to reconnoiter the terrain and determine hostile dispositions.

Upon receipt of reconnaissance reports the battalion commander should issue his orders for continuing the attack and seizing the next objective.

q. Attack of a river line (see FM 7-20, 7-40, and 100-5).

A problem involving a reinforced battalion as part of a larger force in the attack of a river line.

Situation to be initiated with the battalion concealed in a rear assembly area and to be based on a regimental order directing a crossing at

Upon receipt of the regimental order, the battalion commander, assisted by his staff, should make a detailed reconnaissance to include the river line. He should confer with his engineer officer to coordinate the technical details of the crossing. He

dawn. The order to attach to the battalion one combat engineer company reinforced by one engineer light ponton company (with 80 assault boats and sufficient equipage for two footbridges), a chemical platoon (with smoke), and the antitank mine platoon and one 37-mm gun platoon of the regimental antitank company; to prescribe the location of the battalion final assembly area, the battalion zone of action and objective, and to announce the regimental plan for fire support (see par. 200, FM 7-40). The situation should be drawn so as to require—

(1) Plans, actions, and orders of the battalion commander, including measures for secrecy.

(2) Movement to the final assembly area and dispositions for the crossing.

(3) Conduct of the crossing including—

(a) Utilization of assault boats and footbridges.

(b) Support of leading echelon during the crossing.

should arrange for patrols to reconnoiter on the hostile shore under cover of darkness. He should issue warning orders giving essential data in time to permit adequate reconnaissance by subordinate commanders.

Detailed plans and orders should be prepared and issued with minimum delay. The battalion commander should designate as company objectives areas from which the enemy can place direct, observed small arms fire on the crossing.

These objectives should be clearly defined.

Movement to the final assembly area should be made quietly and without lights under cover of darkness. Elements of the battalion should be disposed therein opposite the crossing points and in the order in which they are designated to cross.

Engineer troops should control the movement from the final assembly area to the crossing points, and the embarkation and crossing.

The first wave crossing in assault boats should be composed of the leading rifle companies and reconnaissance parties of the heavy weapons company and of the antitank platoons. The sec-

ond wave should comprise the heavy weapons company, antitank platoons, forward echelon of battalion headquarters, and artillery and cannon company liaison details. The reserve should cross in the third wave, using the footbridge if completed.

Supporting weapons, from suitable positions on the near bank, should be prepared to support the leading wave, and to fire on mechanized vehicles and low-flying hostile airplanes. The chemical platoon should be employed to prevent hostile observation of the crossing by use of smoke at dawn.

The battalion commander should prescribe that parties reconnoitering the shore line in daylight be small and keep well concealed; that every precaution is taken to avoid noise during the crossing; and that weapons remain unloaded until the enemy discovers the attack.

r. Establishment of a bridgehead (see FM 7-20, 7-40, and 100-5).

A problem involving a rifle battalion, reinforced, as part of a larger force in the establishment of a bridgehead. (See par. 200, FM 7-40.) (This problem may be a continuation of the preceding

The battalion commander should establish his command post across the river as soon as practicable to facilitate control of the attack.

The battalion commander employing the rifle companies

problem, or may be a separate problem.)

Situation to be initiated with the leading rifle companies having captured their initial objectives on the far bank of the river. The situation based on a regimental order to establish a bridgehead on a designated line (and attaching one combat engineer company reinforced by one engineer light ponton company a chemical platoon (with smoke), and the antitank mine platoon and one 37-mm gun platoon of the regimental antitank company), to be drawn so as to require—

(1) Continuation of the attack to seize the assigned portion of the bridgehead.

(2) Air-antitank security measures.

(3) Establishing signal communication including air-ground.

(4) Ammunition supply.

(5) Evacuation.

which have crossed the river should aggressively push the attack to the second battalion objective. He should lend full support to this attack with the fires of the artillery and cannon company elements from their initial positions and with fires of the heavy weapons which have crossed the river. He should exploit to the maximum any advantage gained before the enemy can move reserves to counterattack. When one company reaches the second battalion objective, available reserves and supporting weapons should be employed promptly to assist the advance of the other rifle company.

Upon capturing the second battalion objective he should promptly inform the regimental commander, effect necessary reorganization without delay, and prepare to continue the attack on regimental order.

Since anti-aircraft protection for the crossing usually is furnished by higher echelons battalion weapons should fire on the aircraft only when they appear to offer the greatest threat to the accomplishment of the mission.

The battalion commander should employ the antitank

mine platoon and the anti-tank guns to protect against hostile mechanized attack during the advance from the river, bank, particularly on the flanks.

For purposes of secrecy radios should be silent until after the attack starts. Then they will constitute the prime means of communication until wire can be laid. Leading elements should be prepared to display marking panels to friendly airplanes on call to facilitate air-ground cooperation and support.

The battalion commander should take steps to provide necessary assistance to hand-carry ammunition to supporting weapons until such time as weapon carriers cross.

Battalion medical personnel should cross the river as soon after the footbridge is constructed and establish the aid station. Until vehicles can cross, casualties are sent back in returning assault boats.

s. Defense of a river line (FM 7-15, 7-20, and 100-5).

A problem involving an interior front-line rifle battalion in the defense of an unfordable river on a wide front.

Situation to be based on the regimental defense order

During his reconnaissance the battalion commander should study the far shore and his map or aerial photograph to locate probable hostile routes of approach to the river line. Within his as-

prescribing the battalion boundaries and limiting points on the main line of resistance; on the estimate that a hostile attempt to cross within 24 hours is unlikely; and to be drawn so as to require—

(1) Development of plans and orders for defense of the battalion defense area.

(2) Organization of selected positions, stressing—

(a) Locations for outguards.

(b) Location(s) for mobile elements.

(c) Dispositions of battalion supporting weapons.

(3) Occupation of one prepared position to repel an enemy attack.

(4) Counterattack plans and action against successful hostile crossing.

signed defense area he should plan and organize two (or more) prepared positions. Each position should be located so as to block a likely point of hostile crossing. The frontage of each prepared position should be within the limits of a normal defense area. Each position should be organized for normal defense. A battalion fire plan, including support from the cannon company and artillery, should be prepared.

The battalion commander should designate locations and prescribe the strength of outguards to be posted at critical points along the river line. He should furnish them with rapid means of communication. The bulk of the battalion should be held mobile and fully prepared to occupy any one of the organized positions without delay.

Where cover permits rapid lateral shifting of weapons along the near bank the bulk of the machine guns should be attached initially to the outguards; the remainder may be disposed in depth.

Where lack of cover along the river bank prohibits shifting, machine guns should be disposed initially in depth, with some light or heavy machine guns at-

tached to the outguards to cover the most probable points of crossing and the bulk prepared to fire long-range missions.

The 81-mm mortar platoon should be disposed initially on a wide front with primary targets designated to cover likely hostile approaches on the far bank.

Elements of the battalion antitank platoon (37-mm gun) should be emplaced initially on the more likely avenues of mechanized advance, with their prime movers nearby prepared to move to a threatened area.

Routes of movement for all weapons should be carefully reconnoitered and plans completed for rapid shifts to meet threats.

When the enemy initiates his attack, battalion supporting fires should be concentrated against his attempted crossing point(s). Mobile units should move promptly, covered by these fires, to previously prepared positions to block the hostile crossing. If the enemy employs smoke, fires for close defense of the river line should be laid according to the battalion fire plan.

The battalion commander should direct and supervise

the preparation of counterattack plans, by the commander of the battalion reserve, to disrupt hostile crossings before the enemy can establish himself on the near bank. Complete details of supporting fires of the cannon company and artillery should be included in each plan for counterattack. The attack should be delivered aggressively, at the proper time, and in a decisive direction.

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