

CHAPTER 4

THE EXERCISE OF COMMAND

DOCTRINES OF COMBAT

■ 112. The *ultimate objective* of all military operations is the destruction of the enemy's armed forces in battle. The ability to select objectives whose attainment contributes most decisively and quickly to the defeat of the hostile armed forces is one attribute of the able commander.

■ 113. Simple and direct plans and methods with prompt and thorough execution are often decisive in the attainment of success.

■ 114. Unity of command obtains that *unity of effort* which is essential to the decisive application of full combat power of the available forces. Unity of effort is furthered by full *cooperation* between elements of the command.

■ 115. Through offensive action a commander exercises his initiative, preserves his freedom of action, and imposes his will on the enemy. A defensive attitude may, however, be deliberately adopted as a temporary expedient while awaiting an opportunity for counteroffensive action, or for the purpose of economizing forces on a front where a decision is not sought. The selection by the commander of the right time and place for offensive action is a decisive factor in the success of the operation.

Numerical inferiority does not necessarily commit a command to a defensive attitude. Superior hostile numbers may be overcome through greater mobility, better armament and equipment, more effective fire, higher morale, and better leadership. Superior leadership often enables a numerically inferior force to be stronger at the point of decisive action.

A strategically defensive mission is frequently most effectively executed through offensive action. It is often necessary for an inferior force to strike at an early moment in order to secure initial advantages or to prevent itself from being overwhelmed by a growing superiority in the hostile forces.

■ 116. Concentration of superior forces, both on the ground and in the air, at the decisive place and time and their employment in a decisive direction, creates the conditions essential to victory. Such concentration requires strict economy in the strength of forces assigned to secondary missions. Detachments during combat are justifiable only when the execution of tasks assigned them contributes directly to success in the main battle.

■ 117. Surprise must be sought throughout the action by every means and by every echelon of command. It may be obtained by fire as well as by movement. Surprise is produced through measures which either deny information to the enemy, or positively deceive him, as to our dispositions, movements, and plans. Terrain which appears to impose great difficulties on operations may often be utilized to gain surprise. Surprise is furthered by variation in the means and methods employed in combat and by rapidity of execution.

Surprise often compensates for numerical inferiority of force.

Surprise finds the enemy in a state of mental, moral, or physical unpreparedness. Every effort should be made to deny him time to take effective countermeasures. The effect of surprise may be lost through dilatory methods of execution.

■ 118. To guard against surprise requires a correct estimate of enemy capabilities, adequate security measures, effective reconnaissance, and readiness for action of all units. Every unit takes the necessary measures for its own local ground and air security. Provision for the security of flanks and rear is of especial importance.

COMMAND

■ 119. Command is the authority which an individual in the military service lawfully exercises over subordinates by virtue of rank or assignment.

Command and leadership are inseparable. Whether the force is large or small, whether the functions of command are complex or simple, the commander must be the controlling head; his must be the master mind, and from him must flow the energy and the impulse which are to animate all under him.

■ 120. Decision as to a specific course of action is the responsibility of the commander alone. While he may accept advice and suggestions from any of his subordinates, he alone is responsible for what his unit does or fails to do.

■ 121. A willingness to accept responsibility is the foremost trait of leadership. Every individual from the highest commander to the lowest private must always remember that inaction and neglect of opportunities will warrant more severe censure than an error of judgment in the action taken. The criterion by which a commander judges the soundness of his own decision is whether it will further the intentions of the higher commander. Willingness to accept responsibility must not manifest itself in a disregard of orders on the basis of a mere probability of having a better knowledge of the situation than the higher commander. The subordinate unit is a part of a tactical team employed by the higher commander to accomplish a certain mission, and any independence on the part of a subordinate commander must conform to the general plan for the unit as a whole.

■ 122. The commander's mission is contained in the orders which he has received. Nevertheless, a commander of a subordinate unit cannot plead absence of orders or the non-receipt of orders as an excuse for inactivity in a situation where action on his part is essential, or where a change in the situation upon which the issued orders were based renders such orders impracticable or impossible of execution. If the situation does not permit communication with the superior commander and the subordinate commander is familiar with the general plan of operations or the mission of the whole command, he should take appropriate action and report the situation as early as practicable.

■ 123. The situations that confront a commander in war are of infinite variety. In spite of the most careful planning and anticipation, unexpected obstacles, frictions, and mistakes are common occurrences in battle. A commander must school himself to regard these events as commonplace and not permit them to frustrate him in the accomplishment of his mission.

■ 124. Personal conferences between the higher commander and his subordinates who are to execute his orders may at times be advisable, that the latter may arrive at a correct

understanding of the plans and intentions of their superior. Commanders do not justify their decisions to subordinates, nor do they seek the approval of subordinates for their actions.

■ 125. All the troops assigned to the execution of a distinct mission should be placed under one command, to function as a task force for the duration of the operation. So long as a commander can exercise effective command, he does not disturb the established chain of command in his force. In some situations, conditions dictate that attachments must be made to subordinate commands. Such attachments may be necessary in marches, during periods of development, in rapidly changing situations, or in the later stages of any action, and, in general, when better support or coordination can be effected.

■ 126. A commander who is advanced to a higher command should be relieved from the responsibility of direct command of his former unit.

ESTIMATE OF THE SITUATION

■ 127. In any tactical operation the commander must quickly evaluate all the available information bearing on his task, *estimate the situation*, and reach a decision.

■ 128. The commander's estimate of the situation is based on the mission of the unit, the means available to him and to the enemy, the conditions in his area of operations including terrain and weather, and the probable effects of various lines of action on future operations. (See FM 101-5.) On the basis of these factors he considers the lines of action open to him which, if successful, will accomplish his mission, and the lines of action of which the enemy is physically capable and which can interfere with such accomplishment. He analyzes the opposing lines of action, one against another, to arrive at conclusions as to the probability of success for each of his own lines of action. On the basis of this analysis he then considers the relative advantages and disadvantages of his own lines of action, and selects that line of action which most promises success regardless of what the enemy may do. If two or more lines of action appear equally promising, he chooses that one which will most favor future action.

■ 129. The estimate often requires rapid thinking, with consideration limited to essential factors. In campaign, exact conclusions concerning the enemy can seldom be drawn. To delay action in an emergency because of insufficient information shows a lack of energetic leadership, and may result in lost opportunities. The commander must take calculated risks.

■ 130. In considering the enemy's possible lines of action, the commander must guard against the unwarranted belief that he has discovered the enemy's intentions, and against ignoring other lines of action open to the enemy. Even when the weight of evidence warrants the belief that the enemy is committed to a definite line of action, the commander must bear in mind that a change in the enemy's plans may occur at any time.

■ 131. Because of their great mobility and rapid striking power, the capabilities of the opposing air and armored forces and the possible effect of their employment must be continually evaluated. In estimating the capabilities of air, armored, and motorized forces, both friendly and hostile, the commander must be provided with full and up-to-date information on the existing and probable future weather conditions and their effect, both ground and air, on employment of such forces.

■ 132. The estimate of the situation culminates in the decision. A decision once made is not changed without some compelling reason. In combat the will and energy of the commander must persist until the mission is accomplished. Estimation of the situation is, however, a continuous process, and changed conditions may, at any time, call for a new decision. Too stubborn an adherence to a previous decision may result in costly delay, loss of opportunity for decisive action, or outright failure.

TERRAIN

■ 133. That part of the commander's estimate dealing with *terrain* often exercises a decisive influence upon his decision and plan. Proper evaluation and utilization of the terrain reduce the disadvantage of incomplete information of the enemy. The more important features to be considered in evaluating terrain include not only natural ground forms such as mountains, ridges, streams, bodies of water, woods,

and open spaces, but also artificial features such as roads, railroads, and towns. The commander seeks always to utilize the terrain to his own advantage and to the enemy's disadvantage.

■ 134. While the mission of a force is the basic factor in the commander's estimate, this may frequently be resolved into terms of terrain. Thus, in the defense, it may be vital to hold certain dominating ground, or to protect a certain defile. Similarly, in the offense, success may hinge on the capture of such features which then become the immediate objective of the attack. Where possible, it is an aid to proper evaluation of the terrain to reduce the mission to terms of terrain.

■ 135. Maps are the basis for terrain studies, but should be checked by air reconnaissance, air photographs, and ground reconnaissance. Map errors must be expected. Moreover, changes in the terrain, especially in the road-net and drainage system, occur continually.

■ 136. *Terrain* can always be evaluated in terms of the following five factors: observation, fields of fire, concealment and cover, obstacles, and routes of communication.

a. Observation of the battlefield is essential in order to bring effective fire to bear upon the enemy, to control the maneuver of one's own troops, and to prevent surprise by the enemy. It is obtained from commanding elevations.

b. Fields of fire are essential to the defense. On the offensive, the commander seeks to make his main attack in areas lacking in good fields of fire to the defender. Best fields of fire are found in level or uniformly sloping stretches of open ground.

c. Concealment and cover may occur together. Concealment is protection against observation from the ground and air. Cover is protection against fire. The ideal defensive position is one having concealment and cover within but none in front of it. The attack is best favored by terrain affording good concealment throughout the depth of the advance. Concealment and cover, from ground weapons, are to be found in broken wooded terrain.

d. Obstacles are terrain features which impede the movement of military forces. They are of increasing importance in modern warfare where masses of mechanized units are employed. Although chiefly of advantage to the defense, they

may be of great importance in protecting the flanks of attacking units. Some of the common terrain obstacles are mountains, rivers, bodies of water, marshes, gullies, steep inclines, and extensive woods.

e. Routes of communication include roads, railroads, waterways and airways and their facilities. They are important in both offensive and defensive operations for the movement of troops and supplies. Troops in small bodies move across country readily, but in the operations of large bodies of troops, routes of communication are of vital importance.

■ 137. Features such as bridges, streams, woods, and towns divide practically all terrain into more or less separate areas. Such an area frequently consists of a valley lying between two ridges, or an open space between two woods. When the terrain features enclosing the area prevent direct fire and observation into it from positions outside, the area is called a *compartment*.

A compartment of which the longer axis extends in the direction of movement of a force, or leads toward or into a defensive position, is called a *corridor*. In general, a corridor favors the attack because it limits observation and direct fire from the flanks by the defender. From the standpoint of terrain, it is desirable that boundaries between tactical units in the attack should coincide generally with the boundaries of corridors in order that a single unit may control the terrain features from which direct fire can be brought to bear on troops within the corridor.

In the defense, boundaries are usually located within corridors. To assure unity of defensive dispositions, the boundary within the corridor should be so located as to include within the sector of a tactical unit of appropriate size avenues of approach to the position. To locate boundaries within an avenue of approach divides responsibility at critical areas.

A compartment which extends across the direction of movement of a force, or which extends parallel with a defensive front, is called a *cross-corridor*. Cross-corridors favor the defense. However, ridge lines perpendicular to the direction of advance permit an attacker to deal successively with elements of the hostile position. During the advance, these crests offer the attacker facilities for observation and fire, as well as shelter behind which he may reorganize his units.

- 138. See FM 101-5 for a detailed discussion of terrain.

CONDUCT IN BATTLE

■ 139. The commander's decision for his unit as a whole, and the missions to subordinate units in support of the decision, are communicated to subordinates by clear and concise orders, which gives them freedom of action appropriate to their professional knowledge, to the situation, to their dependability, and to the teamwork desired.

■ 140. After providing for the issuance of orders, the commander places himself where he can best control the course of action and exert his leadership. His command post affords the advantage of established signal communication. When opportunity offers and when his presence at the command post is not urgently required, he visits his subordinate commanders and his troops in order to inspire confidence and to assure himself that his orders are understood and properly executed.

■ 141. Whenever the commander leaves his command post, he should orient his staff as to further plans to be made or measures to be taken in anticipation of future contingencies, and should inform his staff where he can be reached.

■ 142. During the decisive phase of battle, the place of the commander is near the critical point of action.

■ 143. A commander influences the course of subsequent action by his leadership, by the use of his reserves, by the concentration of artillery and other supporting fires, and by the employment of combat aviation and armored units.

■ 144. The duration of a tactical operation can seldom be predicted. Successful engagements sometimes progress so slowly that the gains made are not immediately apparent. At other times, they progress so fast that the gains made can be capitalized only by the most aggressive and farsighted leadership.

Troops are used up rapidly in the decisive phases of combat. This attrition must be anticipated by the commander and his staff who take timely measures for replacement of men, units, transport, and weapons, and for replenishment of ammunition and other supplies. When the situation permits, troops which have been heavily engaged are rested and reorganized before being assigned a new and important mission.

STAFF

- 145. The staff assists the commander, to the extent that he may require, by providing information, data, and advice; by preparing detailed plans and orders in accordance with his directions; and by exercising such supervision over the execution of his orders as he may prescribe. A staff officer, as such, does not exercise command.
- 146. The staff may be divided into two groups—the *general staff* and the *special staff*. In large units these two staff groups are separate and distinct; in smaller units they merge into each other, and one staff officer frequently is charged with duties pertaining to both staff groups.
- 147. In every headquarters there is a constant tendency to multiply personnel, expand the functions of staff administration, and accumulate records and office equipment. *The commander must avoid this expansion.* He must organize his headquarters so as to maintain its readiness for prompt movement.
- 148. The organization, functions, and duties of the various sections of the staff and the employment and duties of liaison officers are prescribed in FFM 101-5.

COMBAT ORDERS

- 149. The authority to issue orders is an inherent function of command. Orders are normally issued to next subordinate commanders. Bypassing the normal channels of command is resorted to only in urgent situations; in such cases both the commander issuing and the commander receiving the order should notify intermediate commanders of its purport as soon as possible.
- 150. Orders may be either complete or fragmentary.
The order is *complete* when it covers all essential aspects and phases of the operation. Complete orders include missions to all subordinate units charged with the execution of tactical operations in carrying out the commander's plan.
Fragmentary orders are used when speed in delivery and execution is imperative. Fragmentary orders are issued successively as the situation develops and decisions are made, and consist of separate instructions to one or more subordinate

units prescribing the part each is to play in the operation or in the separate phases thereof. This procedure will be usual in divisions and smaller units. Fragmentary orders may be either oral or written. They are concise but not at the expense of clarity and omission of essential information. Instructions issued in fragmentary orders may be repeated in a complete field order or in an annex if considered desirable.

■ 151. Orders should be originated sufficiently early and transmitted in such form as to permit subordinate commanders the maximum periods to reconnoiter, to estimate their own situations, to issue their orders, and to prepare their troops for the contemplated operation. Commanders should be alert to forestall delays in the successive dissemination of orders in their lower echelons.

■ 152. In many situations it may be necessary or desirable to issue an order to warn of impending operations (warning orders). A warning order contains information which enables subordinate commanders to make preparations for a contemplated operation. Its principal purpose is to gain time for preparatory measures and to conserve the energy of the troops.

■ 153. An order should not trespass upon the province of a subordinate. It should contain everything that the subordinate must know to carry out his mission, but nothing more.

■ 154. Orders must be clear and explicit and as brief as is consistent with clarity; short sentences are easily understood. *Clarity is more important than technique.* The more urgent the situation, the greater the need for conciseness in the order. Any statement of reasons for measures adopted should be limited to what is necessary to obtain intelligent cooperation from subordinates. Detailed instructions for a variety of contingencies, or prescriptions that are a matter of training, do not inspire confidence and have no place in an order. Trivial and meaningless expressions divide responsibility and lead to the adoption of half measures by subordinates. Exaggerated and bombastic phrases invite ridicule and weaken the force of an order. Expressions such as "attack vigorously," if used in orders, are not only verbose and meaningless, but tend to weaken the force of subsequent orders in which such expressions do not appear.

■ 155. Orders should prescribe only so far as conditions can be foreseen. Orders which attempt to regulate matters too far in the future result in frequent changes. Frequent changes in orders overload the means of signal communication, cause confusion and misunderstanding, impose needless hardships on the troops, and injure their morale.

Orders issued by subordinates should not be mere repetition of those from higher authority with additions of their own. New orders are clearer and more satisfactory.

■ 156. As a rule it is desirable to keep contemplated operations secret as long as possible and to confine knowledge thereof to a few staff officers and senior commanders. However, upon entry into action no unit should be in doubt as to what the commander wants it to do. Whenever knowledge of his intentions is necessary to insure the cooperation of the units engaged, a commander does not hesitate to disclose them to all concerned. Ignorance of his intentions may often lead to inactivity on the part of subordinates.

■ 157. It is impossible to prescribe detailed forms of orders to fit every tactical situation. To attempt to do so would result in a rigid form and a routine style of expression which would not be in accord with the tactical requirements presented by the diverse situations that arise in war. To the extent practicable, however, it has been found efficient and convenient to classify combat orders according to their purpose and scope and, for some of these, to adopt a standard sequence of composition. This makes for ease of understanding, the avoidance of omissions, and ready reference. Moreover, experience has shown that an order which can be misunderstood will be misunderstood and that, to obviate this danger, it is necessary to follow certain rules relating to the designations of boundaries, details of time and place, military terminology, abbreviations, designations of units, and the like. For details relating to these matters, see FM 101-5.

■ 158. *Annexes* may be issued to accompany combat orders, either for brevity, clarity, or simplicity—for example, maps, overlays, photographs, and sketches—or to amplify particular aspects of the operation, if the volume of detail is too great for inclusion in the order itself. The more mobile the operation, the less opportunity there will be for annexes. Where an annex has limited distribution, certain instructions

contained therein must be repeated in order to insure coordination.

■ 159. In every unit, *standing operating procedure* is prescribed by the commander whenever practicable. This procedure covers those features of operations which lend themselves to a definite or standardized procedure without loss of effectiveness. The adoption of such procedures will save time in the preparation and issuance of orders, minimize the chances for confusion and errors when under stress of combat, and greatly simplify and expedite the execution of operations in the field. (See FM 101-5.)

COMMAND POSTS

■ 160. For convenience of operation in campaign, the headquarters of a large unit is divided into a forward and a rear echelon. When desirable, headquarters of smaller units may be similarly divided.

The forward echelon consists of the staff agencies immediately required by the commander for assistance in tactical operations. The rear echelon consists of the remaining staff agencies which have administrative duties.

■ 161. The *command post* is the location of the forward echelon of a headquarters. All agencies of signal communication center at the command post.

■ 162. In the selection of a command post, consideration is given to the disposition of troops in the plan of operations, routes of communication, requirements of signal communication, space for staff activities, cover, and concealment. In the case of divisions and larger units, the presence of existing wire lines is important.

Remote location of a command post with respect to subordinate units places an unnecessary burden on the means of signal communication, delays the transmission of orders and information, and makes tactical control difficult.

Through the use of motor transport a command post can be moved quickly over a considerable distance. Frequent changes in the location of the command post are avoided, particularly in large units. In large units, before a change of location is made, the necessary means of signal communication for the new command post must be established.

■ 163. A commander must keep superior and subordinate units informed of the location and contemplated movement of his command post.

■ 164. Each large unit announces the location of its command post and, when practicable, the location of the command post of each of its major subordinate units. In rapidly moving situations, it may be necessary to direct subordinate units to select and report the locations of their own command posts. In closely coordinated operations requiring the movement of command posts, each large unit may designate its own axis of signal communication by naming the probable successive locations of its command post, so far as such locations can reasonably be foreseen, and may similarly assign an axis of signal communication to each of its major subordinate units.

■ 165. On the march, a command post may move by bounds along a designated route, or it may move at a designated place in a column.

■ 166. In combat, the location of command posts for small units in proximity to a good observation post, and for large units in proximity to a suitable landing field is desirable.

■ 167. The ability of mechanized units and parachute troops to strike quickly in rear areas indicates the necessity of locating command posts well forward, both in the offense and defense. A forward location assures a certain degree of all around protection by the combat troops; the command post will not so easily be cut off from the units it controls and the nerve center of the command is favorably located to meet rapidly changing situations.

■ 168. The maintenance of secrecy as to the location of command posts, particularly of large units, is of great importance. They are the special objectives of hostile airplanes, mechanized units, parachute troops, and cavalry. This threat makes it necessary not only to provide security against surprise attack from either the air or ground, but also to use great care not to disclose their locations to such troops. Concealment from the air is of major importance. Traffic in and out of command posts is rigidly controlled. Landing fields, dropping and pick-up grounds, and radio stations are placed at a distance. Signs to mark their locations and the

routes thereto are used sparingly—when the danger is great, not at all; in place of signs, guides are posted to point the way and messengers are given more precise instructions.

SIGNAL COMMUNICATION

■ 169. The efficient exercise of command and the prompt transmission of information and instructions require the establishment of reliable means of signal communication. Signal communication is effected by technical means and by messengers. Entire dependence cannot be placed upon any one means; alternate means must be provided. (See FM 24-5 and FM 11-5.)

■ 170. Every commander is responsible for the establishment and maintenance of the signal communication system of his unit and for its efficient operation as a part of the system of the next higher command. Signal communication systems must be simple, flexible, and properly used.

The establishment and maintenance of signal communication between superior and subordinate units is the responsibility of the superior commander; between adjacent units, as directed by their common superior. A unit supporting another by fire is responsible for the establishment and maintenance of signal communication with the supported unit.

■ 171. The various means of signal communication are so employed that they supplement each other. Those requiring great expenditure of effort and matériel are not installed when the service required can be effectively performed by less elaborate means.

■ 172. When headquarters are in movement, signal communication is maintained between and within columns by means of vehicular radio, airplanes, and motor or mounted messengers.

■ 173. The command posts and advance message centers are the control points in the initial installation of the signal communication system. Early information is given to the signal or communication officer of a unit relative to projected operations and the location and movement of command posts, in order to facilitate the prompt establishment of signal communication. The necessary instructions therefor are prepared by the unit signal or communication officer, in accord-

ance with the directions of the commander. Communication officers of higher units maintain close cooperation with the signal or communication officer of the subordinate unit.

■ 174. *Message centers* are operated at the command posts of all units down to and including battalions, and at the rear echelons of headquarters of large units, by the signal communication personnel of the command. Message centers assist the commander and staff by coordinating the transmission of outgoing orders, reports, and other messages with the available signal agencies, and by expediting the delivery of incoming messages. In general, the cryptographing and de-cryptographing of messages are the responsibility of the message center.

■ 175. *Advance message centers* are established whenever needed for the reception and relay of messages. Information as to their location is always transmitted to the troops.

Advance message centers are frequently employed in the reconnaissance operations of large units as collecting points for messages of several reconnaissance detachments.

■ 176. The message center is not responsible for those messages which are—

a. Transmitted directly by the writer to the addressee by telephone or personal agency.

b. Handled by the military or civil postal service.

c. Local messages between staff sections of the same headquarters located at the same place.

■ 177. The message center transmits messages in accordance with the classification as to urgency indicated by the writer. For classification of messages in accordance with the urgency of handling, see FM 101-10.

■ 178. The writer does not ordinarily designate the particular means by which a message is to be sent. If he desires a message transmitted by a particular means, he so marks it.

■ 179. Means of signal communication include wire, radio, visual and sound communication, pigeons, airplanes, and messengers.

■ 180. Wire communication (telephone, telegraph, and tele-graph printer) constitutes the basic technical means of

signal communication for the infantry division and the larger unit headquarters. It will not, however, always be available for signal communication between forces operating at a considerable distance from each other, between troop units and the higher command on the march, and between the advanced troops and the rear in combat. Rapidly changing situations, such as a pursuit or retreat, restrict the practicability of its employment. The possibility of failure to function in critical situations must also be reckoned with. A wire system must, therefore, be supplemented by other means.

Although wire communication is a relatively safe means, there is always the possibility of hostile interception. When such interception is practicable it is inadvisable to employ wire communication for the transmission in clear text of plans which are not to be executed immediately.

■ 181. Radio communication is especially applicable in spanning distances between widely separated mobile forces, between ground and air, and in the fire-swept zone of the forward area. It is less vulnerable than wire communication to hostile fire, and is, therefore, a valuable supplement to wire systems in combat. It is subject, however, to static, to hostile interference, to interception, and to location by the enemy.

Interception of radio messages must be presumed. Discretion must be used even in the sending of messages in code or cipher. When prompt action is called for, the commander must decide whether the urgency of sending the message in the clear outweighs the value to the enemy of information contained therein. Radio transmission in the clear is justified in situations when the time available to the enemy is insufficient for exploitation of the information contained in the message.

During certain phases of operations, use of radio must be rigidly restricted or it may even be prohibited by higher commanders.

■ 182. Visual signal communication (lamps, flags, pyrotechnics, panels) is not suitable for long messages or over long distances but finds especial application for communicating within and between small units and with airplanes by a few short signals in accordance with a prearranged code. (See FM 24-5.)

- 183. Sound communication is used chiefly to spread an alarm, as a means to attract attention, and to transmit short, prearranged messages.
- 184. Homing pigeons are a means of communicating from front to the rear when other means have failed.
- 185. Airplane messengers may be employed when distance, intervening obstacles on the ground, or other factors of the situation prevent the use of other means, or when more rapid transmission is required than can be otherwise accomplished.
- 186. Signal communication between airplanes and ground is accomplished by means of radio, visual signals, and drop and pick-up messages. In combat, dropping and pick-up grounds are established near unit command posts as required. On the march, they are established near the location of higher commanders and at points along the route of march. Dropping and pick-up grounds are identified by the display of panels. Moving vehicles designated to receive dropped messages are provided means by which they can be easily identified from the air. Airplanes in flight may be used to relay radio messages between ground forces.
- 187. Sole reliance cannot be placed upon the technical means of signal communication. Their absence or failure to function does not relieve the commander of his responsibility of keeping higher, lower, and adjacent units informed of the situation. Each commander provides for the transmission of orders, information, and reports by means of messengers.
- 188. Messengers are dispatched by the most efficient means of transport available. In hostile territory it may be advantageous to use airplanes or armored vehicles, or to provide an armed escort. In combat, mounted, bicycle, motorcycle, and motor messengers are employed as far forward as hostile fire and the terrain will permit. Runners are used in the more advanced units.
- 189. For covering long distances, relays of messengers may become necessary. When relays are established, relay (connecting) posts are generally placed at well-marked points on the messenger routes.
- 190. Important messages are often sent by two or more messengers, who travel separately. Officers are employed for

the transmission of important messages when explanation relative to the situation or additional information is required.

■ 191. The officer or noncommissioned officer dispatching a messenger gives him necessary instructions (destination, route, rate of movement, dangerous points to be avoided, place where he is to report after delivery of the message). This is of especial importance when secrecy precautions prevent the use of directional signs. (See par. 168.)

■ 192. Messengers have the right-of-way and must be given all practicable assistance. All commanders will assist messengers in expediting delivery of messages.