

CHAPTER 15

THE DIVISION

SECTION I

INFANTRY DIVISION

■ 1043. The infantry division is the basis of organization of the field forces. It is the basic large unit of which corps (except armored and cavalry) and armies are formed. It is the smallest unit that is composed of all the essential ground arms and services and which can conduct, by its own means, operations of general importance. It can strike or penetrate effectively, maneuver readily, and absorb reinforcing units easily. It can act alone or as part of a higher unit.

The combat value of the infantry division derives from its ability to combine the action of the various arms and services to maintain combat over a considerable period of time. In active operations the division should be reinforced with air observation means.

When operating alone, additional aviation, engineer, anti-tank and supply means will normally be required by the division.

■ 1044. There are two types of infantry divisions in the United States Army, which for convenience are designated as the "square" and the "triangular" division. The square division retains the brigade organization for infantry and artillery components, each infantry brigade consisting of two infantry regiments, the artillery brigade of three regiments. In the triangular division, on the other hand, there is no brigade organization. Three infantry regiments and four field artillery battalions comprise the major combat elements.

All organic transportation of the square and the triangular infantry divisions is motorized. Neither of these divisions is provided, however, with sufficient transportation to move all its elements simultaneously.

The triangular division organization eliminates the brigade echelon in the chain of command with a corresponding acceleration of order transmission. The field artillery bat-

talions operate directly under the orders of the division artillery officer representing the division commander.

■ 1045. The doctrines of operations and combat by ground, nonmechanized forces discussed in earlier chapters of this manual are applicable to the infantry division.

■ 1046. When a division is operating as part of a higher unit, restrictions on the freedom of action of the division commander are often necessarily imposed by the higher commander. In an advance the corps commander will ordinarily prescribe a zone of advance for each division of the corps. The road net within the zone may largely influence the march formations and supply arrangements within the division. The corps may also prescribe the general line which advance guards of the divisions will cross at a given time at the beginning of the march, the extent of the march, as well as any special formation of the corps for the advance.

Further coordination may be obtained by designating lines which the various divisions must clear by specified times and by designating rear boundaries for divisions at the completion of each stage of the march.

■ 1047. The army or corps has reconnaissance elements which operate in advance of the divisions. While cooperation and contact between these reconnaissance elements and those of the division are necessary, their presence in no way relieves the division commander of responsibility for reconnaissance by, and security for, his own command.

■ 1048. In combat the mission assigned the division may require the division to act in close coordination and cooperation with adjacent divisions or to operate at a distance from the main force. The decisions and actions of the division commander in either situation are predicated upon the greatest assistance to the successful execution of the task of the higher commander.

■ 1049. In all operations the personal reconnaissance of the division commander is of the highest importance. He makes use of all available means of transportation to reach vantage points from which he can gain direct information and exert his influence most effectively and expeditiously on the operations. He must be provided with alternate means of signal communication so that his orders can be speedily transmitted.

SECTION II

MOTORIZED DIVISION

■ 1050. The *motorized division* is a triangular infantry division which has sufficient additional organic motor transportation to permit the *simultaneous* movement of all its elements.

■ 1051. The motorized division is a specially equipped, highly mobile unit intended primarily for employment by higher commanders. It has greater capability than the normal infantry division for rapid movement under suitable conditions but, when dismounted, maneuvers and fights in the same manner as the normal division. The characteristics of the motorized division make it especially suited to execute the following types of operations:

To provide close support of armored or tank units; to consolidate and hold gains made; to protect the flanks and rear of armored or tank units and permit their continued advance; to relieve armored units when terrain renders their operations unremunerative; and to protect armored or tank elements when withdrawn or halted periodically to refuel or to reorganize.

To seize and hold important localities pending arrival of less mobile forces.

To exploit success achieved by armored, tank, parachute, and other units.

To execute envelopments and turning movements either in close cooperation with armored and other mobile units or, under favorable conditions, independently against hostile flanks and rear or strategic localities.

To constitute a powerful mobile general reserve for use either offensively or defensively as the situation demands.

■ 1052. Except in emergency situations, motorized divisions should be employed on missions which permit initially the utilization of their inherent mobility, primarily in support of, or in cooperation with, other mobile forces. When an independent or semi-independent mission is contemplated for a motorized division, provisions should be made for reinforcing it with reconnaissance and security means, tanks, additional motorized engineers, artillery, or other necessary units.

March procedure must insure proper control and direc-

tion, both day and night, by means of vehicular radio, periodic reports, control posts, guides, direction signs, and other expedients. Additional control and coordination of reconnaissance, security, and combat teams may be assured by designation of phase lines.

Maximum exploitation of the mobility of the motorized division by day will be contingent upon control of the air for the area of movement by motor. At all times, dispositions must be made with due consideration of hostile air observation and attack. An adequate observation and warning system must be in operation continuously and include both ground and air elements. Vehicular antiaircraft weapons must be manned and alert for prompt action at all times during movement and at halts. Maximum use of cover, concealment, and camouflage must be habitual. Distances between columns and vehicles in column are increased, but with due regard for the greater time length of the columns and its effect on the tactical employment of the division.

Close cooperation and coordination of reconnaissance and security agencies of all echelons are essential to assure rapid, uninterrupted, and secure movement of motorized units.

Reconnaissance and security groups obtain and transmit timely information of terrain, routes, and enemy dispositions so as to prevent delay or countermarching of other elements. Engineer reconnaissance agents should accompany divisional ground reconnaissance groups.

■ 1053. The motorized division operates normally as two or more closely coordinated combat teams which may advance by separate routes or zones previously examined by reconnaissance agencies. When the situation calls for a strong attack, the division is assembled for concerted action by appropriate maneuver, so as to develop its full power.

Operations must be conducted with the maximum speed consistent with conditions of terrain, roads, and the tactical situation. For this reason engineers must march well forward in order to insure expeditious advance in difficult areas and negotiation of difficult points. Similarly, commanders must habitually move near the head of respective groups. Decisions must be timely. Orders must be brief, normally oral and fragmentary, and transmitted by the most rapid means available—radio, visual signals, staff officer, or vehicular messenger.

While speed and boldness must characterize the operations of motorized divisions, development for combat must be with a proper appreciation of vulnerability to hostile combat aviation, artillery, and mechanized units. In the approach march, motors move across country when practicable with security provided by reconnaissance vehicles. Assembly areas or detrucking points should provide maximum security and cover for personnel and vehicles, and be reasonably secure against effective hostile artillery fire. Parks for personnel carriers must be properly concealed and camouflaged. Park locations should facilitate protection without necessity for detachment of combat elements for that purpose. Anticipatory measures for further movement of vehicles from assembly areas or parks must be habitual to include liaison agents and communication with combat elements, reconnaissance of forward and rear routes, and preparation of routes by engineers.

Motorized divisions which are supporting armored units must provide close support and prompt relief in order to facilitate the continued rapid advance of the armored troops.

In situations where further operation of the motorized division is unprofitable, it should be relieved promptly by less mobile troops and released for use where its mobility can be utilized.

In exploiting a break-through, motorized divisions may be used in support of, or in conjunction with, armored divisions.

■ 1054. The mobility of the motorized division provides higher commanders a powerful, flexible means to meet crises in defensive situations and to launch surprise counterblows.

The special characteristics of a motorized division make it especially suitable for execution of delaying missions, except against armored units.

In order to capitalize the mobility of the motorized division, close control of and coordination of combat teams should be emphasized. This involves both communication means and technique and proper use of liaison agents within the division and with other units.

SECTION III

CAVALRY DIVISION

■ 1055. The *cavalry division* is a tactical and administrative unit consisting of a division headquarters and headquarters

troop, two brigades, mechanized reconnaissance, antitank, artillery, engineer, signal communication and service elements. Scout cars, primarily for distant ground reconnaissance, motor trucks for supply, and motorized elements for command and signal communication purposes are all organically assigned. Specially equipped trucks are organically contained in the division to transport a limited number of horses, men and equipment. Its organization is such, however, that it can continue to operate effectively without the motor elements.

The cavalry division may be assigned independent missions which require operations far from other troops. It may constitute part of a cavalry corps; it may be assigned or attached to a corps, an army, or group of armies, or it may be held in general headquarters reserve.

■ 1056. Cavalry is most effectively employed in those areas where the terrain is definitely unfavorable to the operation of mechanized units or in areas known to be free of hostile mechanized forces. If employed in areas where hostile mechanized forces are likely to be encountered, the cavalry division should be strongly reinforced by mechanized and antimechanized means.

■ 1057. The *primary mission* of Cavalry is combat. The mobility of the cavalry division permits it to extend the scope of operation of less mobile ground troops and secure freedom of action for them. In a war of movement, cavalry is employed initially for surprise thrusts into enemy territory, for reconnaissance, and for screening and covering other forces. Thereafter, its most effective employment is in large groups for swift and decisive action. Its main strength must not be dissipated through indiscriminate detachments, nor sacrificed through prolonged performance of missions which can be performed more satisfactorily by other arms.

■ 1058. Cavalry ordinarily executes *reconnaissance* in cooperation with aviation. Aviation locates the enemy at a distance and orients the ground reconnaissance elements, thereby conserving their energy and speeding up their execution of reconnaissance.

■ 1059. The cavalry division executes *reconnaissance* for larger units in accordance with instructions from the higher

commander. These instructions include all pertinent information about the enemy and friendly troops, the missions of the larger units, the intentions of the higher commander, the mission of the cavalry division expressed in terms of the information required, the area to be reconnoitered and the cooperation and coordination between the cavalry division, reconnaissance aviation, and other reconnaissance agencies.

The higher commander assigns to the cavalry division a zone of reconnaissance which ordinarily does not exceed 25 to 30 miles in width. The cavalry division commander re-distributes this zone to reconnaissance detachments varying in strength and composition according to the enemy opposition expected and the relative importance of their missions.

In distributing forces for reconnaissance and in assigning missions, the division commander estimates the relative importance of factors affecting the mission of the division and assigns greater strength and a more aggressive mission to detachments operating in decisive zones.

The cavalry division commander indicates the general axes or zones for reconnaissance detachments within the division zone of action and the lines to be reached at designated times by elements of the detachment. The distance between the reconnaissance detachments and the main body of the division varies with the situation; at times it may become several days' march. Reconnaissance detachments are not responsible for the immediate security of the division. This must be provided by the detail of the necessary covering forces.

When reconnaissance detachments are operating at considerable distance from the division, or when secrecy considerations necessitate radio silence, the establishment of advance message centers will facilitate the forwarding of information and reduce the burden on the reconnaissance elements. Under such circumstances, the protection of the advance or relay stations devolves upon the division commander.

When the distance between the main opposing forces is so reduced that the mobility of the cavalry cannot be utilized, the division should be rapidly shifted and, depending upon the situation, directed against the enemy flanks or rear, disposed to protect a flank, or placed in reserve.

■ 1060. A cavalry division protects the disposition and action of other ground forces by *counterreconnaissance* or

screening, which may be conducted either offensively or defensively. In executing a counterreconnaissance mission the division seeks to defeat or neutralize enemy ground reconnaissance forces.

In the performance of counterreconnaissance the cavalry division ascertains at the earliest practicable time the location and activity of the enemy cavalry or other major ground forces whose operations may jeopardize the main forces.

A screening mission is most effectively accomplished by the early defeat of the enemy ground reconnaissance forces. The dispositions of the division in offensive counterreconnaissance are similar to those prescribed for reconnaissance. Reconnaissance detachments operate aggressively and locate the main enemy forces to obtain information for the division upon which it can base further operations. In defensive counterreconnaissance, which is most effective when established along a continuous obstacle, patrols are pushed to the front; and the division commander disposes his forces so as to block the main routes of approach.

When screening the concentration of large forces, cavalry divisions usually act defensively. The screen utilizes available obstacles to the maximum and is established at a sufficient distance to the front to keep enemy ground reconnaissance agencies from observing the location and disposition of the forces being concentrated.

■ 1061. Large bodies of horse cavalry usually *maneuver* mounted and fight dismounted. Cavalry uses the mobility of its horses to gain the advantage of surprise against the hostile flanks and rear from which dismounted fire attacks can be employed effectively and decisively.

Terrain may be the controlling factor. Where concealment exists for a dismounted advance, losses are minimized. Conversely, where there is no concealment or cover, a quick mounted dash from a concealed line of departure often results in fewer losses.

Long mounted advances against troops in position, and mounted attacks against prepared positions, or against troops in position and able to employ their combat power effectively, should not be made.

■ 1062. The dispositions of the cavalry division for *attack* usually include a pivot of maneuver about which the com-

mand operates, a maneuvering mass charged with the main attack, and a reserve.

As soon as contact is foreseen, the division endeavors to secure points of observation and to deny them to the enemy.

In a meeting engagement, the advance guard establishes the pivot of maneuver. In a more deliberately prepared attack, a special force may be detailed to establish it. The pivot of maneuver engages the enemy's attention and pins him to his position by a fire attack or by a combination of fire attack and maneuver.

The maneuvering mass contains the main offensive power and often constitutes the greater part of the division. The division commander assigns to the leader of this fraction the accomplishment of the vital offensive action and allows him sufficient liberty of action to take full advantage of the developments of the situation. He informs him of the general plan, the mission of the maneuvering mass, and the duties of the other elements of the division. He usually specifies the general location, and the route thereto, from which the attack of the maneuvering mass is to be launched.

■ 1063. The *reserve* is kept mounted or close to its horses. Its initial location depends upon its contemplated employment. The division commander uses the reserve promptly to strike at a weak area in the hostile dispositions, to push through a success gained either by the pivot or the maneuvering force, or to pursue a defeated enemy. Should the attack fail, the reserve may be employed to cover the reorganization, to assist in holding the position gained, or in occupying a rear position when a withdrawal follows.

■ 1064. When a cavalry division is to be employed in the *exploitation* of a break-through, it is moved to the vicinity of the main effort of the attack which is expected to break through the enemy's defenses. The breach should be sufficiently wide to enable the cavalry division to pass through without receiving severe fire from the flanks. The mission assigned the division on clearing the breach is clear-cut, aggressive, and should be relentlessly carried out.

■ 1065. When the cavalry division constitutes an encircling force *in pursuit*, it seeks to block the enemy retreat, especially at defiles and other critical areas; it delivers attacks against

the enemy flanks, and carries out destruction on his lines of retreat.

■ 1066. When the cavalry division is acting alone, it seeks to destroy the hostile retreating force by direct pressure and encircling pursuit. (See ch. 9.)

■ 1067. Cavalry divisions may be employed on the *defensive* to seize and hold a position pending the arrival of other forces, to cover a withdrawal, to delay the enemy's advance, or to fill a gap in the line of battle.

■ 1068. Within the scope of its powers and limitations, cavalry operates, in defensive combat, the same as infantry.

Due to organization and characteristics, cavalry units usually occupy comparatively broader fronts with less depth than do corresponding infantry units.

In defensive combat the position or area to be defended is prepared for defense and occupied by a small proportion of the available cavalry force consisting principally of horse elements, while the bulk of the command including the mechanized elements, by maneuver and threat, or actual attack, endeavors to block or divert the enemy at a distance. Even when it is necessary for cavalry to defend a particular area or position, its best chance of success lies in initial dispositions in advance of the final defense area. In this manner, inherent mobility will be used to best advantage. Against an enemy strong in cavalry, the division reserve should be large.

■ 1069. In executing *missions of delay* the cavalry division employs defensive tactics, offensive tactics, or a combination of the two, consisting of frontal delay and flank attack.

It avoids decisive combat.

Every effort is made to surprise the enemy by the choice of delaying positions and by the forms of action used.

The maximum amount of time is gained by forcing the enemy to reconnoiter, maneuver, and deploy.

The delaying force checks the enemy by bold and aggressive action, mounted and dismounted.

It usually withdraws before suffering serious loss unless its missions require more determined resistance.

Surprise attacks delivered over previously reconnoitered ground on the heads of hostile columns as they emerge from defiles, woods, or villages, have excellent chance of success.

SECTION IV

ARMORED DIVISION

ORGANIZATION

■ 1070. The *armored division* is the basic large armored unit of the combined arms. It comprises troops of the essential arms and services so organized and equipped as to make it tactically and administratively a self-contained unit, capable to a considerable extent of independent action.

■ 1071. The armored division is a powerfully armed and armored, highly mobile force. Its outstanding characteristics are its battlefield mobility and its protected fire power. Other important characteristics are: extended radius of action; shock power; logistical self-containment; and great sensitiveness to obstacles, unfavorable terrain, darkness and weather.

■ 1072. The armored division is organized primarily to perform missions that require great mobility and firepower. It is given decisive missions. It is capable of engaging in all forms of combat, but its *primary role is in offensive operations against hostile rear areas.*

■ 1073. Two or more armored divisions may be organized into an armored corps. (See FM 100-15.)

■ 1074. The armored division consists fundamentally of five echelons: *command, reconnaissance, striking, support, and service.* The component arms and services are organized, equipped and trained to operate within the division framework in accordance with their tactical role. When operating separately or as part of an armored corps, the division is reinforced by the attachment of such additional arms and services and by the support of such aviation as the mission and situation demand.

■ 1075. The *command echelon* is organized and equipped for great speed in the conduct of operations. Plans must be simple and flexible. Rapidly changing situations require advance planning, preparation of terrain studies, and close contact with developments in forward areas in order to make changes in the initial plan and expedite the announcement of subsequent decisions and orders. Maximum use is made of

standing operating procedure, air liaison, and special pre-arranged signals.

■ 1076. The *reconnaissance echelon* performs ground reconnaissance for the armored division. If necessary, it fights for information. It works in close cooperation with observation aviation, troops transported by air, and supporting ground units. Its reconnaissance is characterized by fast, bold, aggressive action and by prompt transmission of information procured. Success of armored operations depends largely on prompt and aggressive exploitation of the results of reconnaissance. In many situations, the reconnaissance echelon seizes terrain objectives in advance of the division pending the arrival of other elements. Under certain conditions it executes delaying missions. During combat it may be assigned reconnaissance or security missions or may be held initially in division reserve to meet emergencies.

■ 1077. The *striking echelon* is the main attack force of the armored division. It consists of tank regiments reinforced as the situation requires by other elements organic to the division. Reconnaissance and heavy weapons elements are included in the tank organizations.

■ 1078. The *support echelon* consists of infantry carried in armored vehicles. It is reinforced by artillery and other organic elements of the division in accordance with the mission and tactical situation. Its basic role is to support closely the striking echelon by offensive or defensive action.

■ 1079. The *service echelon* assures prompt supply, evacuation, maintenance, and administration of the division. (See FM 100-10.)

■ 1080. The *artillery* components are organized and equipped to render immediate, controlled fire support to the various elements of the division. Timely support is facilitated by the organization and equipment of armored artillery and the transmission of information by radio.

Once the attack is in progress, the speed of the striking force may make its support by artillery impracticable. Combat aviation must take over and execute the missions assigned to artillery in more slowly moving operations.

■ 1081. *Engineer units* facilitate the movement of the armored division by removing, or assisting in the passage of, obstacles and mine fields; by strengthening bridges; and by constructing, repairing, and maintaining crossings. Demolitions and natural and artificial obstacles are used to hinder or canalize movements of hostile forces. Engineers engage in combat when necessary for the accomplishment of their assigned work.

■ 1082. The *signal troops* of the armored division are organized for the rapid establishment and maintenance of signal communication. Because of its speed, radio is the principal means used, but all practicable means are provided. Effective signal communication between armored units and supporting artillery and combat aviation is vital in armored operations.

■ 1083. *Combat aviation* is employed against hostile aviation to prevent air observation and attack of the division. During battle it is used for direct support of operations. Its missions include attacks on hostile command and supply installations; attacks on hostile reserves and formed bodies of troops, particularly hostile armored units; attacks on hostile antitank weapons, artillery, and other ground weapons; attacks on targets of opportunity and critical points in the enemy position and the maintenance of air superiority in the decisive areas.

■ 1084. *Observation aviation* performs command, reconnaissance, observation, liaison, and signal communication missions and cooperates closely with the division reconnaissance echelon. Air observation of artillery fire is necessary if fire is to be delivered on targets which cannot be observed from the ground. Observation aviation maintains effective liaison and coordination between the tanks, artillery and combat aviation.

■ 1085. *Troops transported by air* may be employed in conjunction with the operations of the armored division to land in advance of it, to secure terrain objectives on the routes of march or to seize vital points in rear of the hostile front.

■ 1086. Attached *antiaircraft units*, equipped with weapons suitable for both air defense and antitank employment, pro-

vide protection of areas and installations vital to the operations.

■ 1087. Attached *chemical units* are charged with the planning, execution, and supervision of chemical operations. They are employed to supplement organic means of the division in the execution of smoke missions during operations.

RECONNAISSANCE

■ 1088. Speed of movement of the division and of the enemy requires air and ground reconnaissance forces to operate at great distances from the main body. The distance at which air reconnaissance operates is never less than the operating range of hostile armored forces. These distances at which the division reconnaissance battalions operate are influenced by the imminence of contact with hostile ground forces and the characteristics of these forces. Reconnaissance agencies of lower units search the area intervening between the division reconnaissance battalion and the main body. When the threat of hostile air attack is present, air reconnaissance includes the known location of the threat and is extended to such distance as will afford the division and supporting pursuit aviation ample warning of an air attack.

When necessary, the air reconnaissance effort is supported by combat aviation; ground reconnaissance units of the division are given such additional support from other elements of the division as the situation and mission demand.

■ 1089. In conjunction with the execution of specific missions, all reconnaissance elements report information of terrain, roads, signal communication facilities, landing fields and supplies observed. Ground reconnaissance elements should include engineer personnel whose mission is to determine the condition of roads and bridges and furnish timely information of any repairs or construction required. Negative reports must be submitted with the same promptness as is positive information.

SECURITY

■ 1090. Security depends largely on the efficacy of concealment, of supporting combat aviation and antiaircraft artillery, and of ground security detachments in preventing discovery in bivouac and during movement.

Timely warning from far reaching, aggressive, air and ground reconnaissance is vital to protection against surprise. Natural barriers, with their crossings or passes destroyed or blocked, and defended, provide a high degree of ground protection with economy of force for both the division and its lines of communication. Camouflage, dispersion, concealment, and high speed in movement, combined with the aggressive employment of combat aviation and antiaircraft weapons, afford the best security against air attack.

■ 1091. Precautions and protection against attack, principally against air attack, are stressed during periods of refueling and maintenance. Congestion must be avoided. Maximum use is made of concealment and cover.

■ 1092. In cooperation with large forces, security may be provided initially by other troops so that the armored operations may come as a complete surprise to the enemy. During subsequent operations, the superior commander may prescribe security measures to be performed by other troops for the protection of the combat elements of the division, the mobile supply base, and the lines of communication. In all situations, columns or groupings of the division are responsible for their own local security.

■ 1093. Bridges over unfordable streams, passes through mountains, and other defiles are seized in advance of the main body and protected against both ground and air attack. Existing natural barriers paralleling the direction of advance are used to establish protected corridors for security of the division and its lines of communication.

■ 1094. Usually *security detachments* for daylight movements are composed of tank units reinforced by other arms. During night movements, during extended periods of tank maintenance and refueling, or when terrain is occupied for protection, infantry and machine guns are the principal component. Security detachments for the movement are smaller and operate at greater distances between elements than for cavalry or foot divisions.

■ 1095. During movement, *frontal security* is normally performed by column advance guards.

In proximity to hostile armored forces, column advance guards are stronger and operate at a greater distance from the main body than when opposed by other hostile forces. Zones of responsibility are assigned by division to column commanders.

■ 1096. During movement, *flank security* is provided where practicable by utilizing natural and artificial obstacles, protected by detachments and by flank guards detailed by column commanders.

■ 1097. During long halts, and in bivouac, the division secures itself principally by far reaching reconnaissance, by skillful use of terrain and natural and artificial barriers, by depth of disposition in the halt area, by an outpost and by local security measures. In proximity to the enemy or behind the enemy lines, all around security is provided. Infantry, with artillery, antitank and engineer units, constitutes the principal element of the outpost.

■ 1098. The area selected for a halt to assemble, reorganize, rest, or refuel should permit rapid communication with reconnaissance elements, and should provide natural terrain barriers to hostile attack, particularly in the presence of hostile armored units. The halt area may be utilized as a base for the continuance of operations.

■ 1099. Based on information received from its reconnaissance and security agents, the armored division dispatches troops and combat aviation, if available, to destroy a known, potential hostile threat before that threat can become a real danger to the division.

MARCHES

■ 1100. The armored division normally marches in multiple columns to facilitate readiness for action and protection against hostile air and armored force attack. In the presence of hostile aviation, secrecy, surprise and protection are favored by night marches. When tactical considerations govern, march columns are constituted in accordance with the probable employment of the striking and support echelons in combat. Mobility is exploited to achieve surprise.

■ 1101. The tank elements usually lead when the column contains both tank and infantry units. However, during hours

of darkness, when the situation is obscure, when the plan of maneuver contemplates the commitment of the infantry prior to the tanks, and when the employment of the tanks cannot be reasonably foreseen, infantry is placed in the lead.

OFFENSIVE OPERATIONS

■ 1102. Tactical operations of the armored division are characterized by bold maneuvers executed at high speed to create a preponderance of power in the decisive area. Combat action is further characterized by the maximum coordination possible initially, followed by decentralization of means and reliance upon the initiative of subordinates.

Operations are predicated upon deliberate, detailed planning and rapid, aggressive execution. Completeness of plans is limited only by the time available.

The timely personal influence of the commander must be exerted in all operations. He must have at his disposal various means of rapid transportation and signal communication to enable him to exert this influence.

■ 1103. All armored force attacks contemplate the rapid transfer of shock power and protected fire power into the vital part of the hostile rear area from an unexpected direction. The attack is launched in mass in a decisive direction with such speed and violence that the enemy is afforded no time or opportunity to organize and coordinate his reaction before the armored attack mission is accomplished. Such attacks produce early, hostile demoralization and decisive results.

■ 1104. The mobility of the armored division permits great latitude in the choice of direction and method of attack. Whether the attack will be executed as a turning movement, envelopment, or penetration, will be largely determined by the hostile dispositions and organization of the ground, the terrain, the time factor, and lines of communication within the hostile area.

■ 1105. Four conditions should be present or be created for successful offensive action: air superiority, surprise, favorable terrain, and the absence or neutralization of massed enemy defensive means.

■ 1106. In order to obtain surprise, all preparatory movements are carefully concealed and measures are taken to prevent hostile ground and air observation of the division. The mobility of the armored division is exploited to keep the enemy in doubt as long as possible as to the area of its employment. Radio often is silenced prior to the attack. After the attack is launched the element of surprise may be retained by sustained speed and power.

■ 1107. Areas favorable for attack are determined from the information obtained by map study, from reconnaissance agencies, from higher and adjacent units, and from troops already in contact with the enemy.

Armored units can be employed on comparatively rough terrain. Localities with heavy timber, high boulders and stumps, steep slopes, marshes, deep or muddy bottom streams, and streams with abrupt banks are, however, obstacles to armored vehicle operations. Defended towns or cities are avoided.

■ 1108. Ground antitank measures include natural and artificial obstacles, demolitions, strongly organized localities, mine fields, antitank weapons, artillery and armored units. The attack is planned so as to neutralize, blind or overcome the hostile antitank defenses in the zone of attack and to strike at defensive weakness.

■ 1109. In attack the combat elements of the armored division generally are disposed into three parts: a striking force (striking echelon), a supporting force (support echelon), and a reserve.

■ 1110. When the initial terrain is unfavorable for tank operations or when hostile antitank defenses are strong, the support echelon of the armored division may attack in advance of the striking force to secure ground favorable for the initiation of the tank attack. If operating in close cooperation with other troops, the entire armored division may be held out until the difficult zone has been taken by other troops or has been disrupted by artillery and air attack.

When conditions permit the striking echelon to lead the attack the support echelon follows the striking force to occupy and hold objectives seized by the striking force.

■ 1111. Reserves are employed to protect the flanks of the attack and to maintain its continuity and direction.

■ 1112. Except when the attack is launched by passing through foot troops already in position, the division as a whole usually assumes attack formations directly from march columns. Ordinarily, a short halt is necessary for subordinate units to designate objectives on the ground.

■ 1113. Zones of action and a line of departure often are prescribed for coordination. Attacking tank units are disposed in approach march formation when they cross the line of departure. As soon as resistance is encountered by covering detachments, the leading tank waves assume attack formations.

■ 1114. Prominent terrain features may be designated as phase lines to coordinate the effort of all troops, including supporting combat aviation.

■ 1115. The depth and frontage of the initial combat formation depend primarily upon known hostile dispositions and characteristics, the terrain, and distance to the objective.

The attack of the striking force must be organized and launched with sufficient depth to insure sustained striking power. It is delivered on the minimum frontage necessary to overcome resistance to its advance.

■ 1116. The attack is rapid, deep and sustained until the decision is won. It is characterized by the employment of the striking echelon in mass in a series of waves, by rapid concentrations of artillery, heavy machine-gun and combat-aviation fire on critical objectives, and by proper timing in the engagement of reserves.

■ 1117. Each subordinate tank unit in the attack is assigned a direction and one principal objective. Suitable objectives are those hostile elements or installations, the destruction of which will disrupt most effectively the enemy operation.

■ 1118. The situation, hostile dispositions and characteristics, the number of objectives which can be assigned definitely to major tank units, the direction of advance to the assigned objectives, and the terrain may admit an attack in column of waves or they may require echelonment of the waves on one or both flanks.

In an obscure situation the main attack is launched in a deep column of deployed tank units. This formation is flexible, is easy to control during later deployment, and makes available the means with which to meet unforeseen contingencies.

■ 1119. The infantry element of the support echelon is transported in armored personnel carriers. It remains mobile as long as the situation permits. When assigned the mission of following the striking echelon, it follows closely; prepared to overcome the remaining hostile resistance in the areas over which the tanks have passed, to occupy and hold the ground gained, or to cover the reorganization of tank units during the course of the attack. Prior to the attack by the striking echelon, it may be used to develop the enemy situation with a secondary attack supported by artillery, combat aviation, engineers, and, when necessary, by some of the tanks.

■ 1120. The attack of the armored division requires careful coordination of the supporting fires of the artillery, heavy infantry weapons, including mortars, and combat aviation to prevent concentration of hostile mobile antitank weapons in the zone chosen for the offensive, and to neutralize enemy weapons dangerous to the attack.

At times preparatory fires may be omitted in order to attain surprise.

■ 1121. The artillery covers the development of the division. It may be employed to neutralize hostile rear defenses until the engagement of the tanks or to concentrate on areas secure from tank attack. In support of the division attack the artillery fires are directed to the neutralization of the antitank defense and artillery which constitute the greatest threat to the advance. Frequently small artillery units are pushed forward, prior to the attack, in order to deliver direct fire on targets of opportunity. Prearranged signals and messages are used to facilitate cooperation between the tanks and supporting weapons.

■ 1122. In a meeting engagement with unarmored troops the attack is pushed to conclusion without delay. The attack is launched promptly and aggressively in order to afford the enemy no time to develop and concentrate his defensive means. Tank attacks on a broad front against a flank will

engage a greater number of enemy troops simultaneously and permit a maximum use of shock and fire power. If flank attacks are not practicable, frontal attacks with deployment on a narrow front in great depth are made from march columns.

■ 1123. In a meeting engagement with hostile armored units the advance guard, supported by artillery and combat aviation, attacks to limit hostile maneuver to the front and to deceive the enemy regarding the direction, time and strength of the main blow. The situation may favor the main blow as a follow through of the advance guard action. Otherwise, the division seeks to launch its striking force against the flanks and rear of the hostile force to surround and destroy it.

Supporting combat aviation attacks hostile tanks, artillery, antitank weapons, reserves, and reinforcing troops.

■ 1124. In an enveloping attack by the division acting alone, against an enemy in position, the support echelon may attack to fix the enemy front while the striking echelon makes the main attack. In cooperation with other large unarmored units, the entire armored division is employed to make or lead the enveloping attack while other units hold the enemy in position.

When the direction of the envelopment has been determined, the striking echelon preceded by its reconnaissance units and covering detachments, develops and maneuvers rapidly to launch its attack. Elements of the support echelon not required for the secondary attack, follow the striking echelon closely.

■ 1125. The armored division penetrates an enemy position on a narrow front and then extends to attack the enemy rear in order to destroy his defense and exploit the success.

■ 1126. In penetrations of organized positions in cooperation with other large units of the combined arms, the zone of the initial break-through may be neutralized or breached by other troops. The armored division is then employed to continue the attack and complete and exploit the hostile disruption. It is followed immediately by other highly mobile units to extend, widen, or hold the breach. Motorized divisions are especially suitable for this purpose.

■ 1127. Delay in launching the armored division through a neutralized zone or a breach affords the enemy time in which to organize and coordinate countermeasures and may result in a serious reverse.

The shoulders of the gap must be held securely, either by troops of the support echelon or by other troops. The passage of the armored division through the breach must be effectively protected against antitank gun fire and hostile air and ground reaction. Once the breach has been effected, the enemy must not be permitted to close it. Flank attacks continue to widen the breach.

Hostile counterattacks against the flanks of the penetration are met by combat aviation, by reserves, and by the fire of artillery, antiaircraft artillery and antitank weapons.

■ 1128. When forward progress of attacking units is stopped by hostile resistance, fire of artillery and combat aviation is concentrated on the resistance, and flanking movements are initiated at once.

Elements of the support echelon, reinforced by combat aviation, artillery, and engineers, may be employed to advance the attack beyond terrain obstacles or ground unfavorable for tank action.

■ 1129. Some reorganization of assault units is often necessary after each tank objective is overrun. The leading waves may be passed through by other tank units. Every effort must be made to maintain the continuity and speed of the attack.

■ 1130. If the tank attack is unsuccessful initially, the advance elements of the support echelon strong in machine guns and antitank guns immediately establish a position behind which the tanks withdraw and reorganize for further effort. The supporting artillery and combat aviation protect the reorganization.

■ 1131. When the armored division has passed through the hostile organized resistance, its ground reconnaissance elements are dispatched at once toward the objective. These elements, working in close cooperation with the air reconnaissance, report hostile reserves and artillery, hostile command and supply installations, and unfavorable terrain. Appropriate targets are attacked.

■ 1132. The division must provide flank protection. Flank protection is aided by the speed of the advance, the utilization of natural barriers on the flank and by the support of combat aviation.

■ 1133. When the striking echelon captures its objective, the necessary reorganization is initiated at once under the protection of the support echelon, artillery and combat aviation.

Reorganization and consolidation of the objective are limited to the essentials. An advance to a second objective or exploitation of the success is begun without delay. Exploitation often will be executed in close cooperation with other highly mobile troops which have been moved close behind the armored division in its attack.

Extended exploitation may be initiated immediately after passage of the hostile organized resistance without waiting for reorganization or consolidation of the objective. This is particularly true in attacks against inferior hostile troops and against troops weak in aviation and mechanized units.

■ 1134. The armored division may be employed to exploit its own success and the successes of other troops by rapid attacks from the rear to overrun the hostile artillery, to destroy reserves and command and supply establishments, to break up hostile counterattacks, and to block strong reserves moving to restore the battle position or to occupy rear positions.

■ 1135. In exploiting a break-through the armored division is effectively employed to operate at great distances in the hostile rear areas to block routes of hostile movement, to attack strategic reserves, and to seize vital areas. In such operations, the division normally constitutes a part of a larger armored force which is closely followed by other mobile units, such as motorized divisions. Since the purpose of these operations is the complete destruction of the enemy, by placing a powerful striking force in his rear, the division moves through the area of the break-through at the greatest possible speed. Troops transported by air may be suitably employed in advance of the armored divisions. Opportunities for decisive exploitation by armored forces must be created.

■ 1136. Before directing exploitation or pursuit, the commander of the armored division must assure the required

supply of ammunition and motor fuel in combat elements. His plan must include provision for both supply and motor maintenance during the subsequent operations. Normally, little dependence should be placed on procuring motor fuel locally.

■ 1137. Once undertaken, pursuit must be boldly pushed with the utmost vigor and ruthlessness. Acting alone, the division organizes all combat elements for pursuit by direct pressure and by encirclement. A strong encircling force is provided. The tank units with the direct pressure force seek to pass through gaps which the attack may have opened in the hostile dispositions or to gain the rear of the enemy's covering force in order to attack the withdrawing hostile elements. The encircling force moves to strike the heads of the retreating columns by placing itself across the line of retreat on terrain favorable for its operation.

■ 1138. In a pursuit, when operating with large forces, the armored division reinforced with highly mobile units is normally employed as an encircling force.

■ 1139. In all pursuit operations, combat aviation acting in conjunction with the pursuing armored units materially assists in obtaining decisive results.

DEFENSIVE OPERATIONS

■ 1140. The employment of the armored division on a defensive position seriously restricts the use of its mobility and should be resorted to only in emergency.

■ 1141. Opposed to greatly superior armored forces, the division avoids decisive combat if its mission permits such action. If its mission requires it to gain time, it either occupies terrain unfavorable for hostile tank attacks or employs delaying tactics. When a position must be defended by the division against superior hostile armored troops, every advantage is taken of obstacles to protect the position and restrict the direction of the hostile attack.

The position selected should afford room for maneuver, suitable terrain for counterattacks and concealed routes of withdrawal. The units of the support echelon organize defense areas disposed in depth so as to take full advantage of

obstacles. The tank units prepare plans for counterattacks and for ambush against hostile tank units.

■ 1142. When the terrain is favorable, the armored division either alone or in cooperation with other forces may be employed in counterattack. The characteristics of the armored division may justify assigning it objectives considerably deeper or further to a flank than those whose capture would be necessary merely to restore the defensive position.

■ 1143. When a large force reinforced by armored divisions passes from the defensive to the offensive, the armored divisions may be employed rapidly to envelop a hostile flank or to form the spearhead of a penetration of a weak portion of the hostile front.

■ 1144. In delaying action against less mobile forces the support echelon operates against the heads of the advancing enemy units, while the tanks threaten or attack the hostile flanks and rear. Against hostile armored troops, every effort is made to locate each delaying position behind a formidable natural obstacle. Tank units protect the flanks and execute local counterattacks.