CHAPTER 14

AIRBORNE TROOPS

GENERAL

987. *Airborne forces* are ground forces which are specially organized, trained, and equipped to utilize air transportation for entry into combat. Normally such units will include parachute- and glider-borne elements. They should not be confused with other ground units, many of which may be transported by air, but which are not specifically organized, trained, nor equipped for this method of movement.

988. *Troop carrier forces* are air forces which are specially organized, trained, and equipped to transport airborne troops and supplies into combat. They should not be confused with elements of the Air Transport Command.

989. An *airborne task force* is a force composed of airborne and troop-carrier units for the accomplishment of a specific mission. It may include other ground units which are transported by aircraft, and which disembark after the aircraft reaches the ground.

990. Airborne units are organized into airborne divisions, airborne brigades, or separate parachute and glider units. These units are smaller in size than comparable ground units. They include infantry, artillery, engineers, and essential services.

991. Equipment of airborne forces is limited to that which can be transported in available aircraft.

992. Airborne and troop-carrier units are theater of operations forces. Plans for their employment are initiated by the agency which coordinates action of all land, sea, and air forces. *This responsibility should not be delegated to lower headquarters, otherwise positive coordination cannot be insured.*

Airborne units should remain under the direct control of the theater commander until they land in the ground combat area, when control passes to the officer in command of that area.

993. *Air superiority* is a fundamental prerequisite for successful airborne operations. The degree of air superiority which can be attained will be a major factor in determining whether airborne operations should be conducted during daylight or under cover of darkness.

994. To secure maximum effectiveness, airborne troops should be employed—

a. By surprise.

b. In mass.

c. As part of a combined effort in close coordination with other military or naval forces.

d. In a manner that will contribute to the success of the main effort.

e. Only on missions that cannot be performed as economically or as expeditiously by other ground forces.

995. As airborne units are not organized or equipped for sustained action they should be employed only when they can be supported or relieved within a period of 3 to 5 days. Timely relief facilitates reorganization and reequipping and insures early availability for further missions.

996. *Airborne units* may be used to—

a. Seize, hold, or otherwise exploit important tactical localities in conjunction with or pending the arrival of other forces.

b. Attack the enemy rear and assist a break-through or landing by the main force.

c. Block or delay enemy reserves by capturing and holding critical terrain features.

d. Capture enemy airfields.

e. Capture or destroy vital enemy installations, thereby disrupting his system of command, communication, and supply.

f. Create diversions.

g. Delay a retreating enemy until the main forces can overtake and destroy him.

h. Reinforce threatened or surrounded units.

i. Seize islands or areas not accessible to other ground forces.

997. The primary missions of troop carrier units are to—

a. Provide air transportation for airborne forces into combat.

b. Supply such forces until they are withdrawn or can be supplied by other means.

c. Provide air evacuation of casualties.

998. The secondary missions of troop carrier units are to—

a. Provide emergency supply and evacuation.

b. Ferry troops and supplies.

c. Provide routine transportation of personnel, supplies, and mail.

999. Within limitations imposed by his mission and orders, the airborne commander will select the general

area for the landing of airborne troops. Specific fields for the landing of gliders and powered aircraft will be selected by the troop carrier commander within the areas acceptable to the airborne commander.

1000. Routes, altitudes, time schedules, and means of identification while in the air and on the ground must be known by all forces concerned, air, ground, and naval, in order to provide mutual security and to preclude firing on friendly forces. Dissemination of this information is the responsibility of higher headquarters. Establishment of a common challenge, password, and reply for all troops by the highest command is essential. The altitude and route must be selected carefully and coordinated with all participating forces. The route should avoid naval convoys and antiaircraft installations whenever possible. If routes lie close to naval convoys, mutually exclusive lanes for aircraft and naval vessels should be prescribed by the higher commander. An air lane with a minimum width of 5 miles on each side of the line of flight is necessary.

TIMING OPERATIONS

1001. Airborne units may operate either by day or night. During daylight, navigation is easier, troops can be more rapidly concentrated at the landing area than at night and, after landing, troops can be assembled quickly and control regained. The chances of surprise are increased in night operations and formations are less vulnerable to enemy air and antiaircraft attack. Glider operations are practicable only when there is a quarter moon or better.

Daylight landings in conjunction with use of smoke combine some of the advantages of both a day and night operation. In addition, a night take-off followed by a daylight or dawn landing, facilitates surprise.

COOPERATING AVIATION

1002. Cooperating aviation is all combat aviation which assists in the preparation and execution of an airborne mission. Cooperating aviation is coordinated with the mission of troop carrier and airborne units by higher headquarters.

PLANNING AND TRAINING

1003. The airborne operations must be an integral part of the basic plan. To superimpose the airborne phase of an operation already planned will rarely if ever be successful.

Plans must provide for the necessary preparation by troop carrier, airborne, and cooperating aviation units, to include joint training and practice operations and the concentration of these units in the departure areas. Realistic joint training is vital. Such training must cover all details of the operation and should culminate in a full rehearsal of the operation on terrain and under conditions closely approximating combat.

Upon issuance of orders by higher headquarters the commanders of the airborne, troop carrier, and cooperating aviation forces jointly formulate a plan. This plan, when approved, should be considered fixed; changes should be required by higher headquarters only if sufficient time is available for complete coordination.

Weather must be carefully considered. In the event of unfavorable weather, higher headquarters must be prepared either to postpone launching the main operation or to operate without airborne forces.

All plans must be simple and flexible.

CONDUCT OF OPERATIONS

1004. Airborne operations are characterized by the speed and surprise with which such troops can execute

an attack in hostile rear areas or can intervene at critical points.

For daylight operations, *preliminary air attacks* against the prospective landing areas to destroy or disorganize local defenses may be made. Usually, night operations are carried out without preliminary air attack.

The landing of parachute and glider troops during daylight should be timed to follow closely the preliminary air attacks.

During night air movement and landings, great care must be taken to insure that military and naval bombardment does not so light up the ground by explosions and fires, with resultant dust and smoke, that recognition of routes and landing areas becomes impossible.

SUPPLY

1005. The headquarters directing the employment of airborne units must provide for their supply.

Supply may be by ground or air means. Supply by glider or powered aircraft is more economical than supply by parachute.

In the case of air supply the airborne commander must submit his requirements during the planning phase of the operation to higher headquarters which, through its service agencies, will assemble the necessary supplies at a designated airbase or bases. Packaging, loading, and delivery of these supplies to the combat area is a function of the Army Air Forces. (See FM 31–40.)

MEDICAL CARE AND EVACUATION

1006. The general doctrines of medical service, described in detail in FM 8–10 apply with slight modifications to airborne operations.

1007. An airborne division is organized and equipped to provide treatment and transportation to the point selected for evacuation by air. Higher echelons of evacuation may be by airborne or ground medical organizations, depending on the situation and availability of means. Patients may be evacuated to a rear base by returning transport aircraft or by specially organized, trained, and equipped air evacuation squadrons.

1008. Mobile hospital units capable of treating serious casualties may be air transported to the combat area to receive casualties.

1009. For details of operations see FM 31–30, 31–40 and 101–10. For countermeasures against airborne troops see paragraph 275.

CHAPTER 15

THE DIVISION

Section I. INFANTRY DIVISION

1010. The infantry division is the *basis of organization of the field forces.* 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.

1011. Three regiments of Infantry and four battalions of Field Artillery comprise the major combat elements. All organic transportation is motorized, although it does not have sufficient transportation to move all its elements simultaneously.

1012. The doctrines of operations and combat by ground, nonmechanized forces discussed in earlier chapters are applicable to the infantry division.

1013. 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.

1014. *When fully motorized by the attachment of additional transport,* the infantry division is a highly mobile unit. It is then especially suited to execute the following types of operations:

a. To provide close support of armored units; to consolidate and hold gains made by such units.

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

c. To exploit success achieved by armored, airborne, and other units.

d. 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.

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

1015. 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.

1016. 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.

1017. 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. LIGHT DIVISION

1018. The *light division* is organized so as to be suitable for amphibious, airborne, mountain, or jungle operations. Its major combat elements consist of three infantry regiments (somewhat smaller than those found in the infantry division) and its division artillery (basically three battalions of 75-mm howitzers). There is a minimum of organic transportation.

1019. Equipment will vary with the type of operation.

1020. The division operates on foot, with handcarts, except for essential loads that cannot be transported in this manner. Such loads will be handled by pack animals or ¼-ton trucks. If conditions permit, the division may be reinforced by larger trucks.

1021. The division can function efficiently under adverse terrain conditions. The doctrines of operation and combat for infantry divisions (sec. I) are applicable to the light division.

Section III. CAVALRY DIVISION

1022. The *cavalry division* is a tactical and administrative unit consisting of a division headquarters and headquarters troop, two cavalry brigades, a mechanized reconnaissance squadron, artillery, engineer, signal communication and service elements. Mechanized reconnaissance units primarily for distant ground reconnaissance, motor trucks for supply, and motorized elements for command and signal communication purposes are all 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 be assigned, attached to a corps or larger force, or held in reserve.

1023. The *primary mission* of the cavalry division is combat. The mobility of the cavalry division permits it to extend the scope of operation of less mobile ground troops. In a war of movement, the cavalry division 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.

1024. 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.

1025. The cavalry division executes reconnaissance for larger units in accordance with instructions from the higher commander who assigns to the cavalry division a zone of reconnaissance which ordinarily does not exceed 25 to 30 miles in width. The cavalry division commander redistributes 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 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.

1026. 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 counterreconnais-

sance mission, the division seeks to defeat or neutralize 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.

1027. Large bodies of horse cavalry normally 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.

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.

1028. The dispositions of the cavalry division for attack usually include a pivot of maneuver about which the command operates, a maneuvering force charged with the main attack, and a reserve.

As soon as contact with the enemy 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.

1029. The maneuvering force 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 force is to be launched.

1030. The reserve is held mobile. It is located initially in an area favorable to the plan of employment. The division commander commits the reserve promptly to strike enemy weakness, to exploit a success, to pursue a defeated enemy, to cover a reorganization, to assist in holding a position gained, or to cover a withdrawal.

1031. *When a cavalry division is employed to exploit a break-through,* it is moved to the vicinity of the expected break in the enemy's defenses. The breach should be sufficiently wide to enable the cavalry to pass through without receiving severe fire from the flanks. The division should be assigned a specific aggressive mission.

1032. *When the cavalry division executes an encirclement,* it may perform one or more of the following missions:

a. Destruction of enemy installations.

b. Execution of demolitions on his line of withdrawal.

c. Occupation of favorable positions to block enemy retreat.

d. Attacks against enemy flanks.

1033. *When the cavalry division acts alone in pursuit,* it destroys the retreating enemy by direct pressure and encircling movement. (See ch. 10.)

1034. The cavalry division may be employed on the defensive to seize and hold a position pending the arrival of other forces, to cover a withdrawal, to delay enemy advance, to fill a gap in a defensive position, or to counterattack.

1035. *When acting alone in defense,* the cavalry division organizes a position with part of the force and engages the enemy at a distance with the remainder. The mobility of cavalry is employed to best advantage in defense by engaging the enemy in advance of the final position and conducting a delaying action. The reserve should be large when the division is opposed by an enemy with strong mobile elements. Within their capabilities and limitations, elements of the division organize a defensive position in the same manner as infantry.

1036. The cavalry division employs frontal delay and flank attack in delaying action. Offensive or defensive tactics, or a combination of the two are used. The division acts aggressively but avoids decisive combat before suffering serious loss. Delay is accomplished by forcing the enemy to reconnoiter, maneuver, and deploy. Delaying positions are occupied successively and are organized as thoroughly as time permits.

Section IV. ARMORED DIVISION

ORGANIZATION

1037. The *armored division* is the basic large armored unit of the combined arms. It comprises a balanced unit of essential ground arms and services so organized and equipped as to make it tactically and administratively self-contained. It is capable, to a limited extent, of independent action. Detachment of any unit disturbs the balance and should be made only after careful consideration of the probable effect upon contemplated operations of the division.

1038. The armored division is organized for flexibility in the formation of combat teams. The self-contained battalion is the basic combat unit. The division consists of a headquarters, two combat commands, a reserve command, a cavalry mechanized reconnaissance squadron, three tank battalions, three armored infantry battalions, the division artillery consisting of a headquarters and three armored field artillery battalions, an armored engineer battalion, and signal and service troops. Units are attached to the two combat commands and the reserve command in the type and number desired for a particular operation.

CHARACTERISTICS

1039. The armored division is a powerfully armed and armored, highly mobile force. Its outstanding characteristics are its battlefield mobility and protected fire power. Other important characteristics are extended radius of action; shock power; and great sensitiveness to mine fields and other obstacles, unfavorable terrain, darkness, and weather.

MISSIONS

1040. The armored division is organized primarily to perform missions that require great mobility and fire power. It is capable of engaging in most types of ground operations, either as part of a larger force or independently when reinforced. Its primary role is offensive operations in hostile rear areas. It may be employed to—

a. Break through an enemy protective screen and establish early contact with hostile forces.

b. Seize ground essential to the development of the higher commander's plan.

c. Regain the initiative by means of surprise attack or restore the impetus of an attack that has lost momentum.

d. Spearhead the attack against an enemy incompletely prepared for defense.

e. Attack on a narrow front against a prepared position.

f. Break through on a wide front against a demoralized enemy.

g. Exploit a success.

h. Pursue a defeated enemy.

i. Perform strategic envelopment.

j. Attack to destroy enemy armored units when forced to do so as a matter of self-preservation or when hostile tanks threaten seriously to disrupt operations of other troops.

k. Operate against lightly armored formations or installations.

l. Counterattack in withdrawal to disrupt hostile operations.

m. Execute delaying action.

1041. *Armored infantry and tanks* supported by artil-

lery operate in close coordination. Seldom will tanks operate without infantry support.

1042. The *tank battalion* is the heavy striking element of the division. Its primary mission is to close with and destroy the enemy. Tanks—

a. Destroy or neutralize automatic weapons, particularly machine guns, and personnel likely to hold up the advance of the infantry.

b. Neutralize the objective until the infantry has arrived and taken over.

c. Destroy or neutralize hostile reserves and artillery in the battle area.

d. Make passages through wire or other obstacles, except antitank obstacles.

e. Break up hostile counterattacks.

f. Attack to destroy enemy reserves forming for counterattack.

g. In defense, counterattack to eject an enemy that has succeeded in penetrating the position.

h. Give close fire support to infantry.

i. Execute reinforcing artillery fires.

1043. The *light tank company* may be used to exploit the success of medium tanks; probe for weak points in the enemy position, execute battle reconnaissance, act as a covering force, draw the enemy into prepared traps, and act as advance, flank, or rear guards.

1044. The *medium tank companies* are usually the leading waves of the attack.

1045. The *armored infantry battalion* is a powerful, mobile, lightly armored unit. It moves forward in vehicles until forced by terrain or enemy fire to dismount. Its primary role is the support of the tanks. In performing this role it may—

a. Follow the tank attack to wipe out remaining enemy resistance.

b. Seize and hold ground gained by the tanks.

c. Attack to seize terrain favorable for a tank attack.

d. Form, in conjunction with artillery and tank destroyer units, a base of fire for the tank attack.

e. Attack in conjunction with tanks.

f. Clear lanes through mine fields in conjunction with engineers.

g. Protect tank units in bivouac, on the march, in assembly areas, and at rallying points.

h. Force a river crossing.

i. Seize a bridgehead.

j. Establish and reduce obstacles.

k. Organize and defend a position.

l. Perform reconnaissance and counterreconnaissance.

1046. The *armored artillery* is highly mobile, self-propelled, and armor-protected. Its primary mission is close support of the advancing elements of the division by individual and massed battery fires.

1047. The primary role of the *armored engineer battalion* is to facilitate the rapid movement of the division. It executes engineer reconnaissance, breaches and lays mine fields, erects or demolishes other obstacles, and to a limited extent makes emergency repairs on roads. When necessary, it participates in combat. When extensive bridging and repairs are necessary, reinforcements by additional engineers and equipment, including engineer treadway bridge companies, must be provided.

1048. The primary mission of the *cavalry mechanized reconnaissance squadron* is, in conjunction with reconnaissance aviation, to furnish the division commander with information upon which to base a plan of action. Its secondary mission is counterreconnaissance. It

should not be used for purely security missions. Reconnaissance units seek particularly for weak spots in the enemy positions.

OPERATION

1049. The armored division usually operates in a corps consisting of one or more armored divisions and one or more infantry (cavalry) divisions. It may, either by itself or reinforced, operate directly under army.

1050. In general, the role of the infantry division operating with armored division is to create an opportunity for the armored division to exploit. The infantry division secures ground from which the armored division may launch a decisive attack; creates a gap for the armored division to pass through; or forms a base of maneuver for the armored division.

1051. The armored division should be free to take advantage of its mobility to defeat the enemy decisively. Mobile infantry should follow it closely to protect the flanks and rear, relieve the armored infantry, protect reorganization, and to free the armored division for further action.

1052. Operations of the armored division are characterized by employment in mass, the full utilization of surprise, and by maneuver in a decisive direction. Four conditions should be present or created for decisive offensive action. They are effective reconnaissance, favorable terrain, adequate reserves of supplies, and absence or neutralization of hostile antitank means. Air superiority and surprise are highly desirable.

1053. The objective of the armored division is the complete destruction or dislocation of the enemy. To attain this objective the division may either attack

enemy troops directly or attack to seize dominating ground from which operations against hostile rear areas may be initiated. In advancing to its objective a series of intermediate objectives may be seized.

1054. Attack is usually launched from assembly areas but may be launched direct from march column.

1055. In general there will be a base of fire, a maneuvering force, and a reserve. The base of fire consists of the bulk of the artillery protected by infantry and tank destroyers. When the terrain is suitable, the maneuvering force should consist of the bulk of the tanks, with some infantry, artillery, and other supporting units. Attack may be made either by envelopment or through the base of fire.

1056. The initial objective of the attack should be within range of the base of fire.

Tanks lead the attack when terrain is favorable and hostile antitank defenses are weak. Infantry leads the attack over unsuitable tank terrain or against a strong antitank defense. Tanks and infantry may attack together, particularly when strong antitank defenses may be expected.

When tanks encounter unfavorable terrain or strong antitank defenses, the infantry passes through the tank formations, and supported by the fire of tanks, continues the attack. Similarly when favorable terrain and enemy antitank defenses permit, tank units pass through the infantry and continue the attack.

1057. In *defense*, as part of a larger force, the armored division is used to counterattack, to disorganize the enemy's attack preparations, to regain lost ground, or to spearhead a counteroffensive. Seldom will the division be assigned a defensive sector.

When required to occupy a defensive position, the

division places its infantry on the position, and uses tanks as local and general reserves.

1058. In *withdrawal*, the armored division is usually employed to make limited objective attacks against enemy forces offering the greatest threat.

The armored division, reinforced by sufficient tank destroyers and antitank guns and well supplied with antitank mines and demolitions, can effectively delay enemy formations. As part of a larger force in delaying action the armored division is used as a reserve for counterattack, for diversionary attacks against the flanks to dislocate the enemy or for flank protection. When acting alone it may delay in one or successive positions. The infantry occupies the position while tanks are used for counterattacking.

1059. In *attack of a river line* the armored division usually crosses after the establishment of a bridgehead. When required to force a river crossing the division should be suitably reinforced with infantry and engineers. The infantry supported by artillery and fire of medium tanks, forces the crossing. Some tanks may be ferried across early. Other tanks are crossed after the bridge has been built.

1060. In *defense of a river line,* the armored division is usually held in reserve ready to move quickly to any threatened point. When required to defend a sector of the river, elements of the reconnaissance squadron patrol the far bank while infantry and reconnaissance units patrol the near bank. The bulk of the division is held as a reserve.

1061. The armored division avoids the attack of towns, if practicable. When an attack on a town is necessary, infantry makes the direct assault with the fire support of tanks and artillery. Tanks are used

to encircle the town to prevent reinforcements and escape.

1062. In the attack of fortified positions, other troops usually breach the defenses and the armored division then passes through the gap. (See FM 31–50.)

1063. For a more complete discussion of the armored division see FM 17–100.

CHAPTER 16

TANK DESTROYER AND NONDIVISION ARMORED UNITS

Section I. TANK DESTROYER UNITS

1064. *Tank destroyer units* are organized into brigades, groups, and battalions. Battalions are tactical and administrative units and may be armed with either self-propelled or towed tank destroyer weapons. The group consists of two or more battalions of one or both types. The brigade consists of two or more groups.

1065. Tank destroyer units are highly mobile, are capable of massing a great amount of armor piercing fire power, and are provided liberally with radio for communication. The self-propelled tank destroyer is highly mobile but its light armor makes it vulnerable to antitank gun fire. The towed tank destroyer is more easily concealed but has less armor protection and battlefield mobility than the self-propelled destroyer, and once in position, is difficult to move under fire.

1066. The primary mission of tank destroyer units is the destruction of hostile tanks by direct gun fire.

When not employed on their primary mission, tank destroyers may be employed as reinforcing artillery; to defend beaches; to destroy pill boxes and other permanent fortifications; and to give direct fire support to assaulting troops.

1067. Ammunition requirements for secondary missions may exceed the supply capabilities of tank de-

stroyer units. Under such conditions, higher headquarters must assume responsibility for supplying the additional ammunition. Except in emergency, organic loads should remain intact for primary missions.

1068. Tank destroyer action consists of—

a. Seeking information of hostile tanks by vigorous reconnaissance.

b. Movement to firing positions so as to intercept hostile tanks and arriving in advance of the tanks sufficiently to permit proper emplacement and concealment of tank destroyers. *Tank destroyers ambush hostile tanks but do not charge or pursue them in the open.*

c. Destruction of hostile tanks. When tanks advance, the tank destroyers hold their ground since destruction by fire can be accomplished best at close range.

1069. Tank destroyers are vulnerable to antitank gun, tank, and artillery fire and every practicable means must be taken to secure concealment. In featureless terrain they must be dug in. The most advantageous positions are those affording flanking fire.

1070. As the point of hostile armored attack will rarely be known beforehand, forward units are provided with a minimum of organic antitank guns. These guns delay the hostile attack and cover the employment of tank destroyers. Some tank destroyers, preferably towed guns, may be attached to reinforce organic antitank guns. As the hostile armored attack develops, tank destroyers are placed into action progressively to counter the threat.

1071. The following considerations are paramount in the employment of tank destroyers on their primary mission:

a. Tank destroyers should be massed to cover terrain passable for tanks.

b. When the location and strength of hostile armor is unknown, the bulk of the tank destroyers should be held in readiness, prepared for rapid movement to a threatened area.

c. When the location and strength of hostile armor is known, tank destroyers are massed to counter their movement.

1072. The tank destroyer battalion should be employed as a unit. Employment by separate company or smaller unit seldom gives good results and frequently results in failure.

1073. Massed tank destroyer units may be deployed in firing positions, subject to rapid movement to other positions; or they may be held initially in readiness, prepared to move to firing positions as the situation develops.

1074. An efficient antitank warning service is essential. Information is obtained also by liaison with higher headquarters and other ground and air intelligence agencies.

1075. *On the march* in the presence of hostile armored units, security detachments should be strong in tank destroyers. Depending upon the enemy's proximity and capabilities, massed tank destroyers are distributed along columns, or held in readiness at successive points along the route.

1076. *In bivouacs and assembly areas* when armored attack is an enemy capability, towed tank destroyers should be employed to strengthen the antitank defense of the area. Self-propelled tank destroyers may be massed ready to move to probable points of attack.

Some self-propelled tank destroyers may be attached to the outpost.

1077. *In the attack,* massed tank destroyers are disposed to meet hostile armored counterattack, especially from exposed flanks. When operating with an armored division in the attack, towed tank destroyers may be used to strengthen the antitank defense of the base of fire and to protect the flanks. Self-propelled tank destroyers are usually held in reserve, ready to move quickly to block an enemy counterattack.

1078. *In defense,* time is usually available for thorough preparation and organization of tank destroyer positions and routes of access. The warning system is perfected. Observation and reconnaissance are organized fully. If the hostile armored units can be located beforehand, tank destroyers can be massed accordingly. If hostile tanks break through the forward elements of the defensive position, massed tank destroyers are moved to positions ahead of them or to one or both flanks.

1079. *In pursuit,* when enemy armor is still intact, our encircling forces should be strong in tank destroyers.

1080. *In retrograde movements,* tank destroyers are used boldly and aggressively to delay, drive off, or destroy hostile tanks.

1081. For a more complete discussion of tank destroyer employment, see FM 18–5.

Section II. NONDIVISION ARMORED UNITS

1082. Nondivision armored units consist of armored groups, tank battalions, armored infantry battalions, and armored field artillery battalions. These bat-

talions are the same as those of the armored division. The armored group consists of a headquarters and two or more battalions, all of one type or in any combination. The group is a tactical unit only.

1083. For characteristics and missions of armored battalions see section IV, chapter 15.

1084. Nondivision armored units are attached by group or battalion to corps or division (armored, infantry, or cavalry).

1085. Nondivision armored units operate as do like units of the armored division. Because of their mobility, armored infantry and armored artillery battalions are particularly suited for operation with tank battalions and should be so used when attached to an infantry (cavalry) division.

1086. When terrain is suitable, tank units are allotted to the main effort. When terrain is unsuitable for tank operation, medium tanks may be used as reinforcing artillery or held in reserve unless their operation in some other area will materially assist the main effort. Where terrain is unsuitable for mass tank employment or the situation is not favorable for such employment, companies, platoons, and even individual tanks may be attached to infantry (cavalry) units.

1087. The infantry-tank attack is divided into six phases: reconnaissance, preliminary coordination, preparatory fire support, the infantry-tank assault, consolidation, and continuation of the attack. The infantry-tank team operates as in the armored division (par. 1045).

Upon reaching the objective, tanks overrun the position and cover the objective by fire. The infantry must follow the tanks closely and occupy the objective promptly. When the infantry occupies the objective, the bulk of the tanks withdraw to the rallying points.

Some tanks may be left as a local reserve until the infantry has consolidated the position.

1088. In *defense,* tank units are used as a reserve for counterattack. The counterattack is organized similarly to the attack and is made in conjunction with infantry. The reserve position should permit rapid movement of the tanks to any probable area of employment.

1089. In *daylight withdrawal* from action, tanks may be used to make limited objective attacks to disrupt the enemy attack. Except on bright moonlit nights, tanks will seldom be used in night withdrawal.

1090. In *delaying action,* tanks are usually held in reserve and employed for limited objective attacks. When terrain is unfavorable for mass employment small units of tanks may be attached to infantry.

1091. Tanks may be used to make night attacks in conjunction with infantry. Such attacks are usually made on bright moonlit nights. They require detailed reconnaissance and careful coordination. Special means of maintaining direction should be prescribed.

1092. In the *attack of a fortified position or combat in towns,* tanks may be used to support the attack of the infantry by direct fire. Specially equipped tanks may be used to assist in breaching the defenses. (See FM 31–50.)

1093. In jungle warfare, tanks are usually employed in groups seldom larger than a company. They advance with the infantry and destroy hostile emplacements by fire and shock action.

1094. For a more complete discussion of tanks in support of infantry, see FM 17–36.

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