CHAPTER 8

THE OFFENSIVE

Section I. GENERAL

THE OBJECTIVE

376. The purpose of offensive action is the destruction of the effectiveness of the enemy's armed forces and of his will to fight. To facilitate the accomplishment of this purpose, the commander selects for his attack a physical objective such as a body of troops, dominating terrain, a communications center, or lines of communications, or other vital area in the hostile rear for his attack. The attainment of this objective is the basis of his own and all subordinate plans. This objective should have the following characteristics:

a. Its capture must be possible within the time and space limits imposed by the assigned mission.

b. The threat of its capture should compel the enemy to evacuate his position or risk destruction therein.

c. Its capture should facilitate contemplated future operations.

d. It should produce a convergence of effort.

e. It must be easily identified.

377. The objective having been selected, all components are directed in coordinated efforts towards its attainment. Actions which do not contribute to this purpose are avoided.

378. An objective sometimes may be attained by maneuver alone; ordinarily it must be gained by close combat.

379. Sound tactical maneuver in the offensive is characterized by a concentration of effort in a direction where success will insure the attainment of the objective. This principle necessitates that

only the minimum means essential to deceive the enemy and reduce his ability to resist the main effort will be employed elsewhere on the front. These secondary efforts are justified only by the extent to which they contribute to the success of the main effort.

DISTRIBUTION OF FORCES

380. In the offensive, troops are distributed into two or more principal tactical groupings; one or more main attacks in which the greatest possible offensive power is concentrated to bring about a decision, and one or more secondary attacks the mission of which is to render maximum assistance to the main attack. In each tactical grouping, the mass of the available means of combat is applied in a decisive direction.

381. Main attack groupings are designed to secure the objective and to destroy the hostile force. Secondary attack groupings are designed to hold the enemy in position, to force him to commit his reserves prematurely and to an indecisive location, and to prevent him from reinforcing the front of the main attack. This normally will necessitate the delivery of a limited objective attack whose success will contribute to the main effort.

382. Main attacks are characterized by narrow zones of action, strong support of artillery, armor, and other supporting weapons, effective support of combat aviation, and deep echelonment of reserves.

383. a. Secondary attacks are usually assigned wider zones of action than is the main attack, with a consequent reduction in both strength and depth of reserves. Such attacks are therefore usually assigned limited objectives. To compensate for this lack of reserves strong fire support is essential. The flexibility of artillery frequently permits it to support a secondary attack against an important limited objective without interference with the subsequent support of the main attack.

b. When the forces available for the secondary attack are limited in strength, strong fire support may be employed to offset such weakness and deceive the enemy. Skillfully located supporting weapons can fire in support of an earlier secondary attack without adversely affecting their support of a subsequent main attack.

384. When it is impracticable to determine initially when or where the main attack is to be made, the commander retains his freedom to act by disposing his forces in great depth, by holding out strong

reserves, and by maintaining centralized control of his supporting weapons. Mobility and correct initial location will permit rapid exploitation of the success of the planned main attack or of favorable developments in the holding attack.

385. Attacking echelons once committed to action lose their immediate availability for employment in the execution of other missions. Deployed and under fire, they can change front only at the risk of incurring heavy losses. The commander can influence the course of an action once begun by the employment of reserves, fire support, and air support.

386. a. In selecting the direction for the main attack, the terrain must be carefully studied. The choice of the front on which the main attack and the main efforts of subordinate units are made is often determined by the possibilities which the terrain offers for movement, for concealment, for cover, and for effective employment of artillery and armored units. The road net available must also be considered from the viewpoint of logistical support.

b. Selection of the direction of the main attack is influenced also by the time available for movement before the attack must be launched. In situations where speed is essential, mobile units composed largely of armor may be employed. The hostile dispositions must also be considered. For example, armor should not be employed against strongly prepared positions protected by obstacles. At times unfavorable factors may be accepted in selecting the area to be attacked in order to achieve surprise. Effective support by combat and reconnaissance aviation is essential in any major attack.

FORMS OF OFFENSIVE ACTION

387. Attack maneuvers are classified as envelopments and penetrations.

388. a. In an envelopment, the main attack is directed against the flank or rear of the initial disposition of the enemy's main forces and toward an objective in rear of his front lines. It seeks to surround that portion of the enemy's forces both in front of and on the objective. It is assisted usually by a secondary attack directed against the enemy's front.

b. A successful envelopment depends largely on the degree of surprise attained and on the ability of the secondary attack to contain the bulk of the enemy's forces. Surprise is secured by maneuvering to avoid observation by the enemy and by deceiving

him. Superior mobility and air superiority increase the prospect of success.

c. An envelopment avoids attacking on ground chosen by the enemy, and forces him to fight in two or more directions to meet the converging efforts of the attack. Every effort is made to strike the defender's flank or rear in order to avoid any part of his organized front. Such an attack minimizes losses, handicaps the defender's ability to meet it promptly, compels the defender to fight on ground chosen by the attacker, and produces decisive results.

389. A turning movement is an enveloping maneuver which passes around the enemy's main forces to strike at some vital point deep in the hostile rear. The force making the maneuver usually operates so far from the secondary attack that the principal tactical groupings may be beyond mutual supporting distance. (Supporting distance is the distance by which forces may be separated and yet permit one to move to the aid of another before it can be defeated by an enemy force.) Hence, each grouping must be strong enough, or mobile enough, to avoid defeat in detail. When conditions favor such action, all striking elements of the command may be employed in the turning force, leaving only reconnaissance elements confronting the hostile dispositions. The turning movement is adapted particularly to highly mobile commands, such as armored cavalry and motorized forces, and forces transported by aircraft. It should be employed by highly mobile forces in situations in which the vital objective in the hostile rear can be seized by such a maneuver before it is necessary to involve the enveloping force in a major engagement with the enemy. Deception, secrecy, and mobility are vital to successful execution of a turning movement.

390. a. When the enemy takes up a defensive position, the commander of the attacking forces should consider the possibility of turning the enemy out of his position and forcing him to abandon his position and fight on ground more favorable to the attacker.

b. Situations may occur, especially in the pursuit of a defeated force, in which the enemy can be forced by direct attack to take up a defensive position while a portion of the more mobile attacking forces executes a turning movement against his lines of communication.

391. a. A double envelopment is executed by three principal tactical groups; two enveloping attack forces and a secondary

attack force. A simultaneous envelopment of both flanks generally requires considerable superiority.

b. The command seeking to attack by double envelopment must be deployed, or be capable of deploying, on a broad front against an enemy on a much narrower front or with little capability for maneuver. The maneuver is executed by making a secondary effort in the center while striking with enveloping forces on both hostile flanks. When mobile forces are available in reserve, they may complete the envelopment by an attack from the rear. When conditions favor it, this form of maneuver should be used because of the decisive results it promises. After an initial envelopment of one flank, favorable conditions for passing to a double envelopment through the use of reserves may be created when the success of our troops has placed the enemy in a disadvantageous situation.

392. a. The enemy's preparations to meet an envelopment of his flank ordinarily cannot be organized as completely as the defense of his front without sacrificing the strength of his original front, especially if the envelopment is launched from a locality deep on the hostile flank or rear.

b. The defender strengthens an unsupported flank by reserves echeloned in depth and in width. When threatened with envelopments and he does not withdraw, he may be expected to move his reserves to meet the envelopment. If necessary, he reconstitutes reserves from those portions of his front not heavily attacked. He may attempt to envelop the attacking forces, or to extend his flank beyond that of the attack up to the limit of his strength. An attempt on the part of the attacker to maneuver outside (outflank) such hostile extension may lead to overextension or to a dangerous separation of the enveloping forces from those making the secondary attack. It usually is better to take advantage of the enemy's extension and consequent weakness by retaining a deep formation and to penetrate his thinly held front than to overextend in an effort further to outflank the position. Protection of the flank of an enveloping force is assured by the impetus of the attack, the distribution of troops in depth, and the support of combat aviation. The use of combat aviation to hinder the movement of enemy reserves and supplies in his rear areas can be a decisive factor in the successful execution of an envelopment or a turning maneuver.

393. When the situation does not favor an envelopment, the main attack is directed to a penetration of the hostile front. Conditions which demand a penetration are enemy flanks which are unassail-

able, or lack of time to make an enveloping maneuver. Conditions which favor a penetration are overextension of the enemy, or terrain and observation favorable for more effective cooperation of the combined arms. A penetration often can be organized more quickly than can an envelopment.

394. a. In a penetration the main attack passes through some portion of the area occupied by the enemy's main forces and is directed against an objective in his rear. It is characterized by a rupture of the enemy's dispositions; the seizure of objectives by operations through the gap; and the envelopment of one or both flanks created by the break-through.

b. A penetration depends for success on coordinated power. The more important conditions favorable to success are surprise, adequate fire power, especially artillery, to neutralize the area of penetration, favorable terrain within the hostile position for the advance of the attacking troops, and strength to carry the attack through to its objective. An integral part of the plans for the penetration of a defensive position should be the pinning down of hostile reserves by the action of artillery fire and the tactical air force. Air power may be used to extend and deepen, or supplement the fires of artillery in neutralizing the enemy in the area selected for penetration.

395. a. In the penetration of a defensive position, the main attack is launched on a front wider than that of the contemplated break-through in order to hold the enemy in place on the flanks of the penetration. The attack on the remainder of the hostile front is designed to contain the enemy and prevent him from moving his reserves.

b. The amount of artillery, armored units, and combat aviation available largely determines the width of the front of penetration. The wider the front of penetration, the deeper the gap which can be driven, and the more difficult it will be for the enemy to close the gap. The deeper the penetration, the more effective will be the action of mobile reserves in seizing the objective and rolling up the hostile flanks created by the break-through.

c. The greatest distribution in depth is placed opposite the prospective front of penetration. The distribution of troops provides for three separate impulses: the initial break-through of the hostile position, a widening of the gap thus created by enveloping one or both interior hostile flanks, and the seizure of the objective. Exploitation which follows the seizure of the objective should include the destruction of the hostile forces enveloped and may

also include operations against key objectives deep in the hostile rear.

d. The sequence of these impulses depends on the situation. In some situations it is practicable through the existence of weaknesses or gaps in the enemy's front for armored cavalry or motorized forces to break through and to proceed straight to the objective, while operations of local envelopment and exploitation are performed by less mobile troops. In other situations foot troops must break through, the more mobile troops being held initially in reserve and used later to operate through the gap created by the foot troops.

396 a. The mission of the attacking echelon of troops is to break through the enemy's dispositions to a depth which will prevent the maintenance of the continuity of his battle position. Until this mission has been accomplished, the attacking troops do not divert their strength to the attack of the flanks of the gap. Hostile counterattacks against the flanks of the penetration are met by reserves, by the fire of the artillery, and by combat aviation.

b. The missions of rolling up the flanks of a gap created by penetration and of exploiting the break-through are assigned to reserves. Armored and motorized units are especially suitable for seizing the objective and for exploitation. Troops transported by air may be used to support these operations. Combat aviation is employed against hostile reserves and other important objectives to prevent reinforcement of the hostile forces under attack.

397. In large commands, a penetration often is initiated by launching simultaneously two or more powerful attacks, that is, a multiple penetration against weak localities on the hostile front. Strong localities are contained initially by secondary attacks. When the penetrating attacks have advanced sufficiently, the interior strong localities are reduced and the penetrating attacks are united into a single main attack. The destruction or isolation of strong hostile localities often is facilitated by launching multiple penetrations in converging directions. The doctrines applicable to a single penetration govern the organization and conduct of a multiple penetration.

FRONTAGES AND DEPTHS

398. The frontage assigned to any unit in an attack varies with the mission, mobility, combat power of the unit; the terrain; available fire support; and the expected hostile resistance.

399. a. Units are distributed in depth to provide flexibility of maneuver, continuity in the attack, and security. For infantry units, depth of formation for combat rather than a wide extension of front is necessary in the initial deployment since the progress of battle will call for maneuvers that cannot be clearly foreseen. This condition can be met only by initial distribution in depth.

b. Depth achieved by a column formation facilitates maneuver by complete tactical units to meet obscure situations. Depth achieved by a formation with subordinate units abreast, with each unit in column, facilitates maximum power to the front as well as reliefs within units with minimum disarrangement of command. Such a formation is suitable for an interior unit in the penetration where the resistance has been definitely located and the possibility of maneuver limited.

400. a. Whether the maneuver adopted is an envelopment or a penetration, success will depend primarily on intelligent, energetic, and coordinated execution.

b. The doctrines which underlie the employment of the combined arms in the offensive are conservation of the combat power of troops in the attack echelon, provision of assistance for them to close with the enemy, and thereafter support of their attack until the enemy's power of resistance is broken.

RESERVES

401. a. The primary mission of the reserve is to enter the action offensively at the proper place and moment to clinch the victory or exploit success.

b. The initial strength and location of the reserve will vary with its contemplated missions, the type of maneuver, the terrain, possible hostile reaction, and clarity of the situation. After the attack is launched, the reserve and the fires of supporting arms including combat aviation are the principal means available to the commander for shaping the course of action and for obtaining a favorable decision.

402. In a penetration the reserve must be large enough to widen the break-through by enveloping one or both of the flanks created in the gap and to exploit by operating deep in the hostile rear.

403. In an envelopment the reserve must be large enough to extend the envelopment or to exploit a successful enveloping action by operating against the hostile rear. To favor the envelopment the reserve is disposd toward the flank enveloped.

404. When open flanks exist or when there is danger of a hostile threat, some reserves are disposed to meet dangerous contingencies. This situation frequently will be met by echelonment of these reserves to provide depth in at least two threatened directions.

405. When the situation is relatively clear and enemy capabilities are limited, the reserve may consist of a small fraction of the command disposed to favor the maneuver. When the situation is obscure, the reserve may consist initially of the bulk of the command, centrally located and prepared to move to any point on the front or flanks.

406. a. The location of the reserve should combine a maximum of protection for itself against hostile observation and air and armored attack with a road net which facilitates rapid movement to any point of possible employment. Motor vehicles should be held available for the movement of reserves lacking organic means of rapid movement.

b. Dispersion in the location of the reserve is dependent upon the time required to concentrate the entire reserve for the implementation of any one of the plans for its employment. A poorly located reserve may suffer heavy casualties before it is engaged.

407 a. Often a commander's most difficult and important decisions are, whether or not to commit the reserve, and choosing the time and place of commitment.

b. At the decisive moment every man that can be used to advantage must participate in the battle. The reserve must be launched without hesitation. Piecemeal commitment of reserves is avoided. Reserves should be reconstituted from other units which the course of action makes available.

COORDINATION

408. The commander is responsible for coordination of the action of all the elements of his command.

409. The efficient employment of signal communication plays an important role in the effective coordination of the action of all elements of the command. The commander places great reliance upon his signal communication for the transmission and receipt of orders, information upon which to base his decisions and to request supplies and munitions. Movement and fire direction

are largely controlled and coordinated through the signal communication systems.

410. The highest degree of coordination permitted by the situation and time element is sought. The considerations discussed below are applicable in general to situations in which thorough coordination can be prescribed. In other situations they are applied to the degree practicable.

411. Against a strong enemy, a decision to develop and deploy for attack directly from march columns risks loss of control and sacrifices some of the capabilities of artillery, tanks, and other supporting weapons. Even in a moving situation an attack is best organized and coordinated in assembly areas.

412. From a march formation the commander develops the main body for a coordinated attack by assigning march objectives to the larger units, usually the assembly areas they are to occupy, and routes or zones of advance thereto. The development order announces the missions of units already engaged, the missions of the artillery, the dispositions of the main body, the security measures to be taken, and instructions for further reconnaissance. It provides for essential administrative details so that the necessary preparations can be made. Instructions given in the development order are as complete as time permits so as to furnish maximum guidance to subordinate commanders. For movement to assembly areas and security during development, see paragraphs 320 to 325 and 436 to 440 inclusive.

413. a. The location of assembly areas is dependent on several factors. Darkness, cover from observed hostile artillery fire and air attack, a thorough knowledge of the situation, and a plan of attack already decided upon favor advanced positions located in conformity with the plan of maneuver. Conditions the reverse of these require the selection of assembly areas well back. Units of high mobility may complete their development and preparations for battle at greater distances from the hostile front than infantry.

b. If the plan of attack involves an enveloping maneuver, the assembly area of the enveloping force is separated by a sufficient interval from the troops in the secondary attack to preclude interference between units when deployed for attack.

414. Subordinate commanders assigned assembly areas may in turn assign more advanced assembly areas to the component units of their commands as knowledge of the situation and of

plans becomes available. The final assembly area of an infantry or armored cavalry battalion or similar unit in the attack echelon usually is the most forward concealed position available in rear of the line of departure. It is termed the attack position. Its location is usually designated by higher commanders but where necessary may be selected by the commander concerned. It should afford cover from hostile small arms fire.

415. a. While units are moving into and during the occupation of their assembly areas, the commander prepares his orders and completes arrangements for the execution of his plan of maneuver.

b. Commanders of troops in the attack echelon and the commanders of units designated to support them coordinate the action of their units. Whenever possible, reconnaissance and planning should be conducted concurrently with troop movement into such positions to insure against unnecessary delay.

416. a. As a unit arrives at its assembly area, march columns clear roads and take immediate measures for security against air, armored or other attack. Signal communication is established without delay between the superior command post and those of the major subordinate units.

b. In the assembly area, equipment not essential to combat is turned over to the custody of the unit's service echelon. Extra ammunition is issued to troops. The assembly area in which these measures are taken is determined by cover, concealment, situation, time and comfort, and effectiveness of troops. Reconnaissance, coordination of the maneuver and fire plans of subordinate units and attack orders must be completed and issued before forward movement from the attack position begins.

417. Development of the command terminates with the troops distributed in accordance with the plan for their employment and in an approach march formation favoring rapid deployment.

418. a. Should the commander decide that rapidity of action is essential to retain a tactical advantage, he may dispense with assembly areas, decentralize operations to combat commands, combat teams or task forces, and issue orders to those units to develop and attack.

b. Situations which justify decentralized control of this type are—an obscure tactical situation; necessity for rapidity of action over execessive distances; or operations over such extensive areas that centralized control is impracticable due to difiiculties of signal communication.

c. Detailed advance planning combined with modern signal communication reduces the necessity for such decentralized control to very special situations. Every effort should be made to retain the advantage of improved coordination of effort inherent in centralized control. (See par. 433.)

419. a. Subordinate units ordinarily are assigned a zone of action, a line of departure, and an objective. In some situations a direction of attack and an objective, or an objective alone will suffice. When a commander desires that a subordinate unit direct its main effort in a specific direction within its zone of action he should so indicate by assigning a direction of attack as well as a zone of action to the unit.

b. Where such boundaries are desirable, zones of action are defined by designating their lateral boundaries, or by the assignment of a front of deployment, and the designation of the lateral limits of the objective. In large units the designation of objectives and boundaries may be made from the map; in small units these designations are made on the ground. Points designated should be easily identifiable on the ground.

c. When tactical groupings are separated initially by wide intervals, designation of a boundary between them may be withheld until a later phase of the action. In such situations, it frequently will be necessary to establish a limiting line between them for coordination and control of their supporting fires.

420. a. Zones of action should extend through the depth of the hostile position at least as far as the location of the hostile artillery and reserves, more deeply if the situation is definite. Important localities and terrain corridors commensurate with the size of a tactical unit should lie wholly within the zone of action of that unit. If it is desired that an adjacent unit render special assistance to another in the attack, this assistance should be clearly stated. During the progress of combat, and especially when reserves are committed to action, appropriate changes in zones of action are made.

b. To take advantage of favorable routes of approach, units may move temporarily into adjacent zones, after coordination with commanders concerned. Such movement must not interfere with the action of adjacent units or result in a dangerous massing of troops. Arrangements should insure that congestion and confusion are minimized. The emplacement and movement of artillery and other supporting weapons in zones of action adjacent to the zone of the units they support are permissible, but must

be carefully coordinated with the commanders of the affected zones of action.

421 a. The battalion is ordinarily the smallest unit which is assigned a zone of action. Smaller units usually are assigned directions and objectives.

b. When lateral boundaries are not clearly defined they are supplemented by assigning compass directions of attack. This is particularly important in small units.

422. A line of departure is a designated line which troops starting an attack cross at a prescribed hour. Based on the scheme of maneuver, it may be necessary or desirable to assign separate lines of departure and different hours to the several attacking units. The purpose of the line of departure is to coordinate the advance of the attack echelon so that its elements will strike the enemy in the order and at the time desired. It also facilitates coordination of fires. This line should be recognized easily on the ground and should be approximately perpendicular to the direction of attack. It should be controlled by friendly forces. As permitted by these criteria, the line of departure should be as close to the enemy positions as possible.

423. a. The time of attack is the hour at which the attack is to be launched. If a line of departure is prescribed, it is the hour at which the line is to be crossed by the leading elements of the attack. It is determined by the time required for commanders to make the necessary reconnaissance, prepare plans, and issue orders; for all units to coordinate their plans; and for the attack echelon to organize its attack and move to the line of departure.

b. The secondary attack may be launched prior to the main attack to force the enemy to commit the greatest possible portion of his forces against that attack, or the main and secondary attacks may be launched simultaneously.

c. Unity of effort is promoted by assigning subordinate units objectives which insure mutual support and by prescribing where and in what direction subordinate units are to make their main effort. The combat action and direction of attack taken by subordinate commanders must be such as to contribute to the main effort in accordance with the scheme of maneuver of the superior commander. The commander must endeavor constantly to prevent the attack from breaking up into a series of uncoordinated battles. Phase lines as described in chapter 7 may be used to aid in the control of the attack.

424. The degree of surprise attained is dependent in a large measure on the coordination and timing of the attack and the measures taken to deceive the enemy. Ruses, demonstrations, feints, and other measures for deception executed at the wrong time and place will be obvious to an alert enemy and will warn him of the impending attack. Superior mobility and the speed and aggressiveness of execution may be determining factors in achieving surprise.

425. The best guarantee for success in the attack is effective cooperation among the troops in the attack echelon, the supporting artillery, and combat aviation. The comander coordinates the fire support of all available supporting weapons with the plan of maneuver of the attacking troops.

426. Within the division, cooperation is facilitated by habitually associating a direct support artillery unit with the same infantry regiment or other supported unit. To insure close cooperation with the attacking troops, artillery units assigned to direct support of designated units maintain constant signal communciation and liaison with the supported unit.

427. It is desirable to locate the command post of the corps artillery, division artillery, or artillery commander of a smaller force of combined arms in close proximity to the command post of the corps, division, or force concerned. The location of the artillery command post is based on the control of its subordinate units and therefore may have to be separate. If separation of the command posts becomes necessary during the course of action, the artillery commander will continue to furnish liaison to the supported unit or to the division, corps or force command post. Direct support artillery units will establish and maintain signal communications with the supported unit, while the division, corps or force normally will establish and maintain signal communication to the command post of its artillery.

428. a. The commander of the supported unit informs the supporting artillery commander of the situation, his plan of attack, and the artillery support desired. The supporting artillery commander informs the supported commander of the terrain which the artillery commands with observation and fire and the means by which the artillery can most effectively support the attack. Based on this exchange of information, the interested commanders arrange the plan of fire support to be provided for the attack.

b. The artillery commander must comply with the requests of

the supported unit commander to the limit of his capabilities, subject only to orders received from higher authority. If he receives a fire mission which conflicts with the needs of the supported troops, he reports the situation to higher authority, then complies with the resulting decision, reporting the facts to the commander desiring the mission. If the urgency of the situation precludes these reports, the artillery commander acts on his own initiative in accordance with his knowledge of the situation, reporting his action to his superior at the first opportunity.

c. A direct support artillery unit establishes liaison with each supported infantry or armored cavalry battalion or other supported unit. A mutual obligation rests upon the commanders of supported and supporting units that liaison is established and maintained. It is essential that the supporting artillery know at all times the location of the leading elements of the attack echelon and be kept informed of the plans of the supported unit.

429. a. A single artillery staff working under the force commander facilitates the integration into a single coordinated fire plan of all the fires available to support a force of combined arms. Such a plan is based primarily upon the fire plans of subordinate units. The fire plan integrates not only the fires of direct support artillery but also provides for the utilization of those of reinforcing artillery including that of higher echelons and all other fire support. The final plan should be designed to furnish the maximum fire support to the maneuver plan supported.

b. In general, the shorter-range weapons and the direct support artillery will engage the targets in the immediate foreground best suited to the characteristics of the weapons involved. Other weapons are used as the situation requires to deepen the zone taken under fire or to supplement the fires upon targets most dangerous to the forces.

430. Early and adequate joint planning is necessary in order to obtain close coordination of the ground force elements and combat aviation which are employed in the attack. Suitable objectives for this combat aviation are those hostile elements, whose destruction or neutralization will contribute most toward a successful attack. During battle, combat aviation is especially useful to exploit a success, to correct an adverse ground situation, to attack hostile reserves or reinforcements, or to aid friendly ground troops in overcoming unexpected resistance. Combat aviation also may be employed to provide column cover particularly in pursuit and exploitation or for exposed movements.

431. a. Employment of Army, Navy, and Air Force in joint operations is facilitated by joint planning and training of all units, initiated well in advance in order to provide time for the coordination necessary due to differences in equipment and procedures.

b. To secure efficient coordination of available supporting fires of Army, Navy, and Air Force during a joint operation, a fire support coordination center is established in the artillery headquarters at each echelon of command from battalion to army. Here the representatives of the supporting components confer on the best means to be employed in attacking targets confronting the supported units. The artillery commander is responsible for the coordination of all fire support, including artillery, naval gunfire, and air strikes when command has passed to Army units ashore.

432. Because of the difficulty of establishing and maintaining effective chemical concentrations in mobile operations, use by the attacker of chemical agents other than smoke is limited. Smoke must be employed carefully in respect to both time and space, and must be coordinated closely with other supporting fires and with the action of armor and supporting air. Under favorable conditions of wind and weather, smoke is used to conceal the approach of the attack by blinding hostile observation posts, antitank guns, and infantry supporting weapons. It is especially useful during short periods when troops must cross exposed ground. Chemical agents can be used to neutralize areas the attackers will not move into, to protect flanks, and for counterbattery.

433. a. When conditions limit the ability of the commander to exercise a timely and direct influence on the action, the initiative of subordinates must be relied upon to a great extent. The commander issues less detailed orders to those tactical groupings over whose action he cannot exercise a direct influence, and attaches to them the means necessary to accomplish their tasks. He interests himself primarily in the action of the troops whose mission is of decisive importance to the action.

b. This method of conducting an operation is most prevalent in pursuits, in opening phases of a meeting engagement, during crises of battle, and in envelopments and turning movements in which the main and secondary attacks are separated by wide intervals. The greatest degree of coordination possible is prescribed initially; complete coordination is accomplished as soon as the course of action permits.

434. a. Based upon the commander's decision and plan the attack order is issued. This order includes the necessary measures for the coordination of the attack.

b. Coordination is assured further by command and staff visits to subordinates to see that orders are understood and are being carried out.

Section II. WAR OF MOVEMENT

435. A war of movement is an operational phase offering great freedom of maneuver. Freedom of maneuver frequently characterizes the initiation of hostilities, the opening of a new campaign or a theater, and the exploitation of a successful major attack. During these periods a meeting engagement may result from a collision between two forces neither of which is fully deployed for battle. Utilization of the period of movement to contact, initial contact and subsequent deployment is of vital importance as commanders maneuver their forces to gain a maximum advantage of position before the situation stabilizes.

436. a. During the advance to contact every agency of intelligence, reconnaissance and security is utilized to insure that the main forces are engaged under the most favorable conditions.

b. Reconnaissance aviation is employed to locate and maintain observation of enemy forces. Covering forces, strong in armored cavalry elements, precede and screen the main body whenever the situation permits. This covering force, operating under the direct control of the force commander, in turn precedes its advance by mobile reconnaissance detachments charged with gaining and maintaining contact with the enemy. Reconnaissance and organic aviation operate in close contact with the covering force, furnishing it with the latest information.

c. Behind the covering force the main forces advance on a broad front. Each column precedes its advance with its advance guard, which in turn sends out the necessary mobile reconnaissance elements to the front and flanks. These reconnaissance elements also maintain contact with the covering force. When the main force is not preceded by a general covering force its advance guards normally will be stronger in armored cavalry reconnaissance elements to permit more extended reconnaissance.

437. a. When opposing forces are separated by great distances the covering force normally will advance by bounds. Depending on its mission and the situation it may attack and destroy small parties of the enemy, seize objectives important to the main force

or contain larger enemy units. Airborne or air transported units may be employed in conjunction with the covering force to seize critical terrain features or make early contact with the enemy to restrict his advance. As resistance is developed by the reconnaissance screen, mobile elements of the covering force may be dispatched to strengthen critical localities.

b. Information gained through these initial measures permit the commander to clarify the situation gradually as the main forces approach. Against an aggressive enemy measures must be taken to avoid the defeat of the covering forces before the main force can intervene. Accurate information is essential to prevent the flanks of the covering forces being turned with the result that the main body is taken in flank.

438. a. As contact becomes imminent each advance guard moves forward on a broad front. Based upon the situation developed by the covering force, the advance guard is engaged in accordance with the plan of the commander to extend the action of the covering force, or to seize ground essential to the development of its main body.

b. When a strong covering force has not preceded the advance guard, the advance guard should seize terrain affording the essential observation. Its principal function under these conditions is to take aggressive action to gain the time and space for the development and employment of the main body. The column commanders usually will have had opportunity to communicate to the advance guard commanders their plans for the engagement of the advance guard. At times, when advance information has been lacking, it may be necessary for an advance guard commander to act upon the basis of his general mission.

c. Advance guard actions are characterized by speed and aggressiveness, by broad fronts, and by small or no reserves. The advance guard is reinformed by the attachment of artillery, engineers and armor. Artillery opens long-range fire on enemy columns to force their early deployment, and to interdict the principal routes of approach.

d. These measures, whether taken by the covering force, the advance guard or both, tend to develop the enemy position. The hostile dispositions, particularly the location of his flanks, are important to provide the essential information upon which the commander can base his attack plan. When the security forces lack the strength to develop the situation fully, they may have to be reinforced by elements of the main force to obtain adequate

knowledge of hostile dispositions before the coordinated attack is launched.

439. After the reconnaissance units of the covering force and advance guard are withdrawn they may be employed on the flanks to screen our own dispositions or to execute further reconnaissance or harassing action against the hostile flanks and rear. When suitable reconnaissance missions are lacking, reconnaissance units may be held in reserve or used to protect rear areas from airborne or partisan action.

440. When the covering force encounters strong resistance and the initiative rests with the friendly troops, every effort is made to prevent the enemy from stabilizing the situation. The main body is brought forward by the most expeditious means in one or more columns, protected by its advance guards. Based upon the information obtained the force is engaged rapidly and aggressively to attack the enemy before all hostile units are available for action. In such cases exploitation of intelligence, mobility and terrain may permit attacks upon the enemy flanks and rear before he is prepared to counter these envelopments.

441. a. In accordance with his estimate of the situation, the commander develops the main body and organizes a coordinated attack or strikes directly from march column while organizing a more coordinated blow with the remainder of his force. He may attack when necessary with his whole force from march columns as units become available. Such an uncoordinated piecemeal commitment is to be avoided except when rapidity of action is essential and combat superiority at the vital point can be maintained for the time required to assure success.

b. While the main body is deploying for its attack, units in contact continue to develop the enemy position. Their mission is to determine the strength and dispositions of the enemy and the location of his flanks to provide a picture for a workable attack plan.

442. The commander of each attack unit directs its advance in the assigned zone of action to cross the line of departure at the prescribed hour. Each attack unit reconnoiters its zone of action and supports the reconnaissance elements with its supporting weapons. To keep troops in hand prior to contact, a base unit is usually designated on which other units regulate their advance from one terrain line to the next. Terrain features which af-

ford extended observation, or which are otherwise of tactical importance, are the objectives of each bound.

443. a. Regardless of whether the attack is launched from attack positions or directly from march columns, the method of approach to the hostile position is the same. Each battalion of the attack echelon moves to the most advanced position in which it can make its final preparations under cover from small-arms fire.

b. Whether an offensive battle is the result of a meeting engagement or is based on the attack of an organized position, the conduct of the attack from the time the enemy is engaged until he is defeated is essentially the same. What difference there is exists in the coordination, power, and speed developed in the opening phases.

Section III. ATTACK OF AN ORGANIZED POSITION

PRELIMINARY OPERATIONS

444. Ordinarily the defender will attempt to screen his main position and deceive the attacker about his dispositions by the employment of covering forces. A thorough reconnaissance of the hostile position and its foreground is of primary importance. This reconnaissance seeks to determine the location, depth, and extension of the hostile position, the hostile occupation of the position, contaminated areas, including those containing antipersonnel mines, the location of the hostile artillery, and antitank defense, including natural and artificial obstacles. It involves a thorough study of the map and air photographs of the enemy's combat zone, and the use of available air and ground reconnaissance agencies.

445. a. If reconnaissance and advance detachments fail to establish definitely the hostile main position, a reconnaissance in force may be made. An attack is launched against critical points in the enemy's outpost zone to drive in the enemy's covering forces and seize terrain which will permit the proper deployment of the command and afford adequate observation of the hostile battle position.

b. When the leading troops encounter a well organized system of defensive fires of hostile artillery and other supporting weapons, it may be taken as a reliable indication that the hostile battle position has been reached. The leading troops establish themselves on advantageous terrain features and cover the preparation for the attack.

446. During these preliminary operations, ground reconnaissance troops seek to locate the flanks of the hostile position. The leading elements are protected from hostile counterattack by strong supporting fires and by the presence of other units moved to concealed positions within supporting distance. The remainder of the command is held in readiness beyond the range of effective hostile artillery fire. Necessary measures are taken to protect it against air attack and attack by armored units.

447. a. Reconnaissance is continued to obtain information as a basis for the conduct of the attack. This reconnaissance provides more detailed information for the assignment of objectives and serves as a basis for the plan of fire of the artillery and the other supporting weapons.

b. Reconnaissance of the terrain must determine the most favorable routes of approach to the hostile position, the nature and strength of obstacles, location and extent of mine fields, and the possibilities for employment of armored units.

c. Air photographs of the hostile main position are distributed to subordinate commanders.

d. The terrain over which the attack must pass is studied on the ground, from the air, and from air photographs to determine the areas which the defender has organized for defense and which he can cover with defensive fires, and the areas in which the attacker can advance best by fire and maneuver.

e. Artillery conducts reconnaissance to determine the possibilities of artillery observation and fire, and the location of its firing positions and the routes of approach thereto.

448. Determination of the weak points in the enemy dispositions is of vital importance. By fire of artillery and other supporting weapons delivered from different directions, and by feints and raids, effort is made to ascertain the enemy's dispositions and his plan of defensive fires. Against an aggressive enemy a series of attacks may have to be launched before a weak spot is located.

PREPARATIONS FOR ATTACK

449. a. Preparations for the attack include the completion of the signal communication system, organization of the command for combat, provision for ammunition, rations and other supplies, and the control and coordination of supporting fires of all arms. During this period, combat aviation is employed to gain and main-

tain air superiority and to prevent the movement of reserves and supplies into the area.

b. Preparations for the attack also include measures for the extension of signal communication during the attack, resupply at intermediate objectives or at selected times, relief and regroupment of units at specified times or places, and evacuation of prisoners of war, sick, wounded and dead.

c. All preparations for the attack are completed as far as practicable before the occupation of attack positions. Preparatory measures likely to betray the imminence of the attack are carried out secretly or are deferred as long as possible. Restrictions are imposed on those activities within our front lines and in rear areas which may disclose preparations for the attack to hostile reconnaissance. Strict surveillance is imposed on the use of radio communication.

d. During the preparation special consideration is given to measures designed to insure the continuity of the attack. Adequate provision is made for placing in readiness the necessary material and engineer units to clear paths through mine fields and other obstacles, to assist the advance of tanks and heavy weapons, and for the construction of roads connecting our own system with that of the enemy.

450. a. The plan of attack consists of the plan of maneuver and plan of fire including the support of combat aviation. The commanders of the attack unit, the artillery, combat aviation, and other supporting units make detailed arrangements for coordinating the action of their units to carry out the common mission. Fire plans of artillery and other supporting weapons for the defense of each successive objective are prepared before the start of the attack in order that the reorganization of the attacking troops, after seizing the objective, may proceed with benefit of maximum prepared fire support.

b. In coordinating their plans, it is essential that the supported and supporting commanders carefully study the terrain in which hostile resistance may be encountered and identify the successive intermediate objectives of the attack.

c. An agreement is reached relative to the known targets to be engaged by the artillery, other supporting arms, and the supporting combat aviation. Areas to be kept under surveillance for targets appearing after the attack is launched, especially these targets in adjacent zones which are dangerous to the advance, are agreed upon. Associated commanders must arrange for mutual

reinforcement of fire. If targets along the line of contact are to be engaged, every effort must be made to prearrange the details of attack and provide means of identification.

451. a. Attack unit commanders must receive early information of their assembly areas and zones of action, in order that they may make their own reconnaissance and formulate plans.

b. Attack units usually move at night into assembly areas, preparatory to an attack the next morning. Movement of units into their assembly areas by day generally is practicable only when visibility is poor or when overwhelming artillery and combat aviation are available. With favorable wind conditions smoke screens may be employed to cover daylight movement of units into their assembly areas. When smoke is used it should cover a large area with a haze to prevent drawing hostile artillery fire.

c. When armored elements are employed their assembly areas and routes of approach are reconnoitered, marked, and prepared. Tanks are moved into assembly areas and from assembly areas to the attack at the latest practicable time, in order to conceal intentions and to postpone the unmistakable warning given by the noise of tanks in motion.

452. The first mission of the artillery is to cover the assembly areas and the movement into them by attack units. During this phase, hostile artillery and observation posts constitute its principal targets. The artillery gives special consideration to those measures which will attain surprise and gain fire superiority over the hostile artillery.

453. a. Artillery positions are selected so that fire can be concentrated on the objectives of the attack. Defilade, concealment from air reconnaissance, protection by proximity of supported troops, and proximity to observation are sought. Sufficient time must be allowed for the preparation of firing data, establishment of signal communication, and organization of the artillery ammunition supply.

b. Artillery usually moves into position by echelon. The movement is frequently executed at night. Units assigned to positions screened from hostile air reconnaissance are moved first. The movement of artillery is regulated to avoid interfering with the attack echelon in its occupation of the areas where final attack preparations are made. Long-range artillery is placed well forward to be able to take under fire the most distant echelons of the defender's light and medium artillery.

454. a. During the advance of the attack echelon from assembly areas to attack positions, the hostile artillery constitutes the principal target of our artillery fire. Superiority over the hostile artillery is indispensable for the success of the attack.

b. Located hostile batteries must be neutralized or destroyed early in the artillery action. Their neutralization is maintained by a portion of the artillery in order that the mass may be employed on other missions, until again required for counterbattery fire as new hostile batteries are located. Neutralization of the hostile observation is of great importance in attaining superiority in artillery.

455. a. Artillery fires prior to the hour of attack may be limited to normal fires already in progress or the attack may be preceded by an artillery preparation.

b. The force commander decides whether a preparation is to be fired. He considers whether a sufficient number of remunerative targets will be located in time to prepare the fires, the probable effect of the preparation, the attendant loss of surprise, and the effect on the ammunition supply.

c. The force commander also decides the duration of the preparation. In general, a preparation should be long enough to accomplish the effect sought, but not so long as to permit the enemy to change his major tactical dispositions in time to meet the attack. The duration of the preparation may be governed by the ammunition supply. It may vary from a few minutes to several hours.

456. a. The nature of the artillery preparation depends upon its mission. Concentration of effect is greatly favored by dividing the preparation into phases.

b. The object of the first phase of the preparation is to neutralize the defender's artillery, destroy the most important hostile agencies of command and fire control, isolate the defender's forces from the rear, disrupt assembled hostile mechanized forces, and protect our troops from the enemy's counterpreparation fires. Artillery fire of the first phase comprises counterbattery fire; destruction fire on command posts, observation posts, and signal communication installations; interdiction and destruction fire on enemy routes of communication; destruction fire on mine fields and hostile obstacles; and concentrations on the hostile defense areas and assembled mechanized units.

c. In the subsequent phase of the preparation, sufficient artillery continues counterbattery fire to maintain neutralization of the

hostile artillery. The fire of the mass of the remaining artillery is concentrated on the hostile defense areas. Hostile observation should be covered with smoke to prevent observation of the movements of the attacker and render adjustment of hostile artillery fires difficult. If the terrain does not afford good cover for attacking troops, smoke may be placed upon the forward elements of the defensive position to prevent the enemy from using aimed small arms fire.

457. During the entire preparation, supporting weapons fire on sensitive points in the zone of resistance. Massed air action on the immediate front selected for the main attack may be used to soften resistance. Combat aviation is concentrated against signal communication centers and reserves, with particular attention to artillery and armored units which cannot be covered effectively by artillery. Whenever the situation permits, friendly air strikes in close support should be supported by ground fire on enemy antiaircraft weapons.

CONDUCT OF THE ATTACK

453. The attack is characterized by the positive action of fire and maneuver, combined and controlled to create a preponderance of force in the decisive direction.

459. The attacking echelon advances from its attack positions so as to cross the line of departure at the prescribed time. Any mass formation of units runs grave risks of incurring heavy losses from hostile fires and air attack. When fire superiority has been gained, the attacking echelon closes to assaulting distance.

460. a. Superiority of fire rests chiefly upon the support of artillery, combat aviation, and other supporting armored or infantry elements, in conjunction with the mutual support of adjacent elements of the attacking echelon. It depends not only on volume of fire but also on its direction and accuracy and the close coordination of all fires with the movement of the attack echelon.

b. Fire effect is increased by enfilade action. Flanking or oblique fire is especially effective when frontal fire is delivered simultaneously against the same objective. A convergent fire forces the enemy to defend himself against attack from several directions and creates a powerful morale as well as material effect.

c. Units seek to gain flanking fire by enveloping action. Flanking fire is also secured through the lateral echelonment of support-

ing weapons with respect to the units they support. Heavy machine guns, from positions in adjacent zones of action, deliver oblique fire over the troops in their front and protect the flanks of troops in the attack echelon. Machine guns of rifle units follow the leading elements closely in order to take advantage of and deliver flanking fire through the gaps along the front. Units which have succeeded in gaining advanced positions deliver flanking fire across the front of adjacent rearward units.

d. Lateral echelonment of artillery for purposes of flanking fire increases the difficulties of fire control and of liaison between the artillery and supported units. The fire of supporting artillery is more reliable and effective when its positions and observation posts are in the zone of action of the supported unit.

461. The attacking echelon advances to assaulting distance of the hostile position under its own and supporting fires. Until the main hostile resistance is broken, attack units advance by bounds to successive terrain features. Fire and maneuver are alternated in such manner that an attack unit, whose advance is made possible by the combined fire of adjacent and supporting units, moves forward to an advanced position, and by its fire from that position assists the advance of the adjacent units.

462. Airborne troops may be employed to seize and hold or destroy objectives which are important to the success of the main attack. These troops may be reinforced by air transported troops.

463. Artillery and other supporting weapons insure continuity of support by displacing forward by echelon, while the bulk remains in position and maintains fire. Fire is lifted successively to more distant targets as the attacking echelon becomes endangered by it. When supporting fires are lifted from the hostile position to permit the attacking echelon to close with the enemy, the loss of this support must be compensated for by the increased fire of the lighter weapons and tank action.

464. a. Artillery supports the attack through the depth of the hostile position by successive concentrations in accordance with the requests of the supported comanders. Concentrations of artillery fire are regulated to bring the greatest possible volume of fire on objectives of decisive importance at the critical moments of the attack. Attack units must follow closely the artillery fires in order to take immediate advantage of artillery fire effect to gain ground to the front. The artillery is prepared for early movement forward to maintain close support as the attack prog-

resses. Essential fire missions of units being displaced are distributed to units in position.

b. Combat aviation can be used during this period to insure the momentum of the attack by prearranged missions against targets which cannot be engaged by artillery.

465. Artillery must employ all means at its disposal (observers, liaison sections, airplanes, radar, wire and radio communication) to obtain exact information on the location of the hostile defensive position and location of the forward elements of the attack. The attacking units must cooperate by employing all means of transmitting information to the artillery. When uncertain as to the location of the attack echelon, direct support artillery takes immediate steps to establish close contact with those elements.

466. a. The primary purpose of close supporting fire is to prevent the enemy from manning his defensive works in time to meet the assault, and to neutralize or destroy those targets which impede the progress of the supported troops. Its progression to successive objectives is arranged between supporting and supported commanders.

b. Other fire is placed on critical points in the hostile position to protect the attack echelon from hostile long-range and flanking fires and from counterattack. It is lifted to correspond with the advance of the attacking echelon.

467. Each attack unit uses the close supporting fires of its artillery and other supporting weapons to close with the enemy and to push on to its successive objectives without deviating from the prescribed general direction of attack.

468. It is desirable that combat aviation support the attack through the depth of the hostile position by concentrated attacks on that part of the front where the attack seeks decisive results.

469. The attacker must not permit the advance to be long arrested by hostile chemical concentrations, or areas containing mines. Contaminated terrain which cannot be avoided is posted and passed with the assistance of gas masks and protective clothing. Mined areas may be posted and bypassed, or breached, by supporting engineers or by organic mine clearing teams.

470. Whether the main attack is based upon an envelopment or a penetration, the battle generally develops into local conflicts along

the opposing fronts. During the course of battle, the combat action of units may undergo a change as between envelopment and penetration. A force that has successfully enveloped the enemy's flank may have to make a frontal attack to defeat a hostile reserve, or may find a favorable opportunity to attack the hostile resistance in flank. In a penetration, once minor resistances have been overrun, the outflanking action of small units is the most effective means of reducing the stronger hostile defense areas.

471. An attack seldom is executed exactly as planned. As long as the enemy has any freedom of action, unexpected difficulties are encountered which culminate in a crisis. The approach of this critical phase of the attack must be recognized by the commander so that timely measures can be taken to shape the course of action to secure a favorable outcome.

472. As the attack progresses, more control of necessity will have to be decentralized to subordinate commanders to permit them to meet the rapidly shifting situation. Means must be provided these commanders to permit execution of the mission assigned them.

473. Every means of signal communication including reconnaissance aviation must continue to inform commanders concerning developments farther in rear of the battle front, such as shifting of hostile reserves, arrival of reinforcements, and any indication of any enemy withdrawal. From these reports and other information, commanders direct the movements of reserves toward those portions of the hostile front that offer the greatest prospects for decisive success. Combat aviation and artillery may be effectively employed to attack enemy reserves and counterattacking forces.

474. In an attack of a stabilized front, the approach has already been effected and the attack opens with a coordinated assault. The hour of the assault is fixed by the commander of the whole front from which the assault is to be launched. The exact day and hour are kept secret until the latest practicable moment. Subordinate commanders must be afforded sufficient time for reconnaissance and briefing of units.

475. On a stabilized front, more detailed information of the enemy's defensive dispositions usually is available. The completeness of information will depend upon the length of time the front has been stabilized and the efficiency of intelligence meas-

naissance, conducted in such manner that the appearance of normal activity is maintained. Information is disseminated in the form of intelligence summaries, maps, and annotated air photos.

THE ASSAULT

476. a. Against a strong resistance and well-organized defense, the commander will prepare the assault by concentrating the fire-power of all supporting weapons to neutralize the enemy and wear down his power of resistance before launching the assault. The commander of the unit will notify the supporting weapons, by a prearranged signal, or other means, that he is about to assault. The intensity of supporting fires is increased. Under cover of the supporting fire, the assault unit advances close to its objective. When the supporting fires are lifted from the objective, the assault unit overruns the hostile resistance.

b. Any delay in launching the assault after the fires lift allows the enemy to man his defenses. A series of brief lifts and resumptions of fire prior to the final lift preceding the assault will tend to discourage prompt manning of the defenses. In favorable situations tanks operating under artillery air bursts may be employed in advance of infantry.

CONTINUATION OF THE ATTACK

477. a. After the assault of an organized position, the attack often breaks up into a series of separate engagements which are continued throughout the depth of the hostile position. These engagements are directed by subordinate commanders within their zones of action and are supported by all the means at their disposal. The first task is to capture assigned objectives. Areas of resistance are reduced by fire, overrun or outflanked.

b. Reserves usually are disposed in positions from which they may best be employed to exploit a success or to protect the flanks of the attacking units. All reconnaissance agencies search for probable assembly areas of hostile reserves, so that enemy preparation for the counterattack may be broken up by artillery fire and air attack. As the attack progresses each intermediate objective is promptly organized for defense and held until the attack is continued.

478. a. Road conditions, the possibility of maintaining ammunition supply, and the enemy's reaction following our successful

assault determine when and in what strength the artillery will be moved into advanced positions. Artillery executes its missions with the fewest possible changes of position. Frequent changes of position reduce the volume of fire support. The occupation of new positions and renewal of fire require considerable time. Nevertheless, change of position should be made unhesitatingly when fire effect or deficiency in liaison with the attacking echelon requires it. Changes of position generally are affected by echelon after timely reconnaissance of advanced positions.

b. Artillery promptly fires upon enemy troop assemblies, troops forming for countrattack, and on any rearward position on which the enemy attempts to reconstitute his defense.

479. a. If the tide of battle turns against the enemy, he may endeaver to disengage his forces and renew the defense on a rearward position, or he may fight a delaying action until battle can be renewed under conditions more favorable to him. Ordinarily, it is to be expected that the enemy will strive to hold out until nightfall and effect his withdrawal under cover of darkness.

b. The enemy may disclose his intentions to withdraw. Attacking troops must exercise great vigilance in observing the conduct of the enemy in their front, press their attack with energy, and maintain close contact with him. Reconnaissance aviation searches the rear areas for indications of retrograde movements of artillery and trains.

430. a. If the enemy succeeds in withdrawing his major forces from action, the commander intensifies reconnaissance to obtain the necessary information upon which to decide what line of action to follow. Aggressive action may prevent the enemy from reconstituting his defense on a rearward position. If the enemy succeeds in occupying a new position during darkness, it may be necessary to delay a renewal of the attack in force until daylight.

b. It may be of great advantage to regroup the attack forces during the advance to the new position and launch the main attack on another part of the front. Effort is made to exploit the moral ascendency by a quick and powerful blow before the enemy can reconstitute his defense. The action of armor and combat aviation at this time may be decisive.

81. If the enemy is fighting a delaying action on an extended front, the objective ordinarily will be attained more quickly by concentrating on a decisive part of the front and attacking with energy and dispatch. An attack pushed deeply and energetically

through the hostile front may isolate strong hostile elements and force the enemy to an early evacuation of the whole line.

482. In case of a break-through, armored units penetrate deeply into the hostile position and attack the enemy's reserves, artillery and command and communication centers. The gap is widened by attacking its flanks. Other mobile forces are sent through the gap to exploit the advantages gained and to attack the enemy in rear and prevent his escape. At this time the maximum efforts of combat aviation should be concentrated in cooperation with the ground forces in exploiting the break-through.

483. When the attack does not reach its objective or does not break through the hostile position during the day, the leading elements of the infantry intrench at the points reached. If possible, reserve units pass through these leading elements to continue the offensive by night attack. By attacking in depth, a commander can maintain continuous pressure day and night, and thereby can keep the enemy off balance. At the same time, the enemy's fatigue is greatly increased with resultant decrease of his effectiveness. When a night attack is impossible, the night is utilized to reorganize and resupply. Units also may be relieved to facilitate continuation of the attack the following day.

RELIEF OF COMMITTED UNITS

484. In offensive combat it may be necessary to relieve units in contact with the enemy by executing a relief in place or a passage of lines. Either of these operations may be desirable in order to continue the momentum of the attack with fresh troops, to change the direction of the attack, to exploit a weakness in the enemy position with reserve forces, or to initiate an offensive on a front where stabilization has existed.

485. When a relief in place or a passage of lines is to be made, warning orders are issued by the commanders of the higher unit, the relieving or unit passing through, and the unit to be relieved. Warning orders include—the approximate hour the movement for the relief or passage of lines is to begin; the zones in which relieving or passing units are to operate; and the restrictions imposed upon reconnaissance parties as to size, routes, and hours of operation.

486. Personal reconnaissance by the commander and staff of the relieving or passing unit, and prior conferences with the commander and staff of the relieved unit are highly important.

487. A plan is formulated and orders are issued covering the movement of relieving or passing units. Fundamentally, either operation is the same as the development of a command for combat. In the preparation of the plan, restrictions imposed by higher authority because of other traffic in the zone of advance, the greater road spaces that may be required because of increased distances between units, the road net, and the practicability of cross-country movement must be considered. The plan must be flexible as to times and routes of movement. The size of the unit involved and the speed with which the relief or passage must be conducted will govern the thoroughness with which the details of the plan are prepared.

488. In accordance with the plan of the higher commander, commanders and staffs of both the relieving or passing units and relieved units arrange and agree upon such details as guides, use of roads, fire support to be furnished for the incoming troops by the unit to be relieved or passed through, transfer of the existing signal communication system, administrative matters, and the condition under which command passes to the relieving or passing unit.

489. Units to be relieved or passed through furnish guides. Individuals selected as guides should be capable and carefully rehearsed in their duties. They meet the relieving or passing unit before it enters the area and conduct it to assembly areas. Whenever possible, guides are furnished for units down to and including the platoon.

490. To disclose the fact that a relief in place or passage of lines is in progress invites heavy bombardment by air and artillery, a counterattack, or both, at a time when congestion and traffic circulation are doubled. Woods, fog, and defilade are utilized in the approach when the relief or passage is made in daylight. Smoke is placed on hostile observation posts and hostile forward elements. Mobility, ruses, feints, and demonstrations are exploited.

491. For reliefs in place on a scale large enough to require more than a single night, troops and transport of the relieving unit are concealed during periods of good visibility. The relief is carried out by echelon from rear to front, front-line units being the last elements relieved.

492. *a.* The plans for executing a relief in place must be in harmony with the plans for continuing the attack. It may be desir-

able that the positions of the relieved unit be occupied by a portion of the relieving unit in order to make the remainder of the relieving unit available to organize for the continuance of the attack. To relieve in place and attack with the same troops may take the relieving troops out of the desired attack formation.

b. The time of execution of a relief depends on such factors as characteristics of the enemy, weather, terrain, and air superiority. Front-line troops should be relieved in small groups and infiltrated to the rear. When the relief is executed in darkness, troops relieved are withdrawn promptly from the zone of action. Artillery of the relieved unit, and frequently other supporting weapons should be held in position to support the attack when resumed.

493. During the course of the relief in place, artillery maintains its normal fires, but is prepared to execute counterbattery and protective fires along the front of the relief in the event of an attack by the enemy. During a night relief, artillery fires may be so timed as to conceal noise of vehicles moving into position.

494. The execution of the relief in place is under the direction of the commander of the unit being relieved. He remains responsible for the defense of the sector until the relief has been completed. The actual passage of command takes place upon agreement between the commanders concerned with approval of higher headquarters.

495. The principal task involved in a passage of lines is in the preparation for continuing the attack. Where both units involved are infantry, the incoming commander will normally assume command of the zone of action before his troops reach their attack positions. Normally the time interval between the commencement of a passage of lines and the initiation of the attack is brief and allows little time for any readjustment of his troops by the relieving commander prior to the attack. The time factor plus the necessity for strict fire control makes the passage of command desirable at an early stage in the operation.

496. When executing a passage of lines at night, and the exact location of forward elements to be passed through is known, the line of departure for the attack is the line held by the forward elements. When the exact location of the most advanced elements of the unit to be passed through is unknown, the line of departure must not be forward of the line held by the most advanced elements whose location is known. In daylight, terrain permitting, a line of departure between the forward elements to be passed

through and a covered position close in their rear may be better than a line coinciding with the front-line element.

497. Lightly held positions and gaps in the front lines of the unit which is passed through should be utilized by the passing unit to the greatest extent consistent with its scheme of maneuver. This is particularly true when armored elements execute the passage of lines.

498. a. The passage of a major armored unit through an infantry element frequently will occur after a break-through of an organized position by the infantry. In any case a passage of lines by armor through infantry involves certain differences inherent in the characteristics of armor.

b. Normally a passage of command in the zone involved is unnecessary in view of the different missions of the units. Close coordination is essential between the commanders concerned. Liaison officers may be exchanged between the armored and infantry units.

c. In view of the length of the armored columns, every measure must be taken to expedite the passage. Detailed coordination between the participating units must be arranged. This includes the coordination of fires. Priority on roads must be assigned to the armor without crippling the traffic essential to the support of other units. The infantry units holding the sector may have to readjust their positions to facilitate the passage. Usually, because of the difficulty of operating armor at night, the operation is executed in daylight on a relatively narrow front.

499. Regardless of whether a passage of lines is executed in daylight or darkness, the units in contact and the artillery passed through remain in position and furnish all possible fire to support the attacking unit. When the attack has progressed far enough to prevent undue casualties to the relieved troops, they are assembled and reorganized.

Section IV. ATTACK FROM THE DEFENSIVE

PLANNED DEFENSIVE-OFFENSIVE

500. a. A commander with an offensive mission may decide to assume the defensive initially because of temporary combat inferiority or to create a situation which will place the enemy at a tactical disadvantage and offer opportunity for a decisive counteroffensive. In either case, an early resumption of the offensive to

attain the objective is contemplated. By inducing the enemy to attack first, the commander hopes to fix and exhaust him and then, when he is disorganized, to launch the counteroffensive. (See ch. 9).

b. This type of action demands the highest type of leadership and tactical skill and troops with a high order of training. The major problem for the commander lies in timing the attack.

501. Organization of the ground may not be as complete as is required for a protracted defense. Larger reserves also may be maintained, concealed in a position favoring the execution of the contemplated counteroffensive.

502. Once the purpose of the initial defense has been accomplished, the counteroffensive is launched. Thereafter, the conduct of the action is that of the attack.

503. a. A defending force frequently has an opportunity to adopt the offensive. When a general counterattack launched by the defender throws the attacker back following an apparently successful advance, or when a hostile attack breaks down, the enemy seldom will be able to withstand a determined counteroffensive.

b. The enemy artillery fire still may be superior but his attacking echelon will be disorganized. If the defender seizes the initiative and passes to an offensive before the attacker can recover from his disorganization and can properly dispose and employ his reserves, results often are decisive. The defense must be prepared to pass to the offensive and exploit the result of successful defensive action.

504. The general doctrines governing the preparation for and conduct of an attack are applicable to the counteroffensive.

Section V. PURSUIT

505. The pursuit is launched when the enemy is no longer able to maintain his position and endeavors to escape. A commander recognizes a weakening enemy by the continued advance of his troops in a decisive direction; the capture of critical objectives; by the number and morale of captured prisoners; by the number of abandoned weapons; by the number of hostile dead; by the diminution of hostile artillery fire; and by the diminution or cessation of hostile countermeasures.

506. When a commander recognizes that the enemy is having difficulty in maintaining his position, he utilizes all means to maintain

the continuity of the attack and to exert a relentless pressure on the defeated enemy.

507. Effective pursuit requires leadership and exercise of initiative to the highest degree in all echelons of command. All commanders in the attack echelon spur on their troops and clinch the advantage with their reserves. Pursuit of a defeated enemy is pushed to the utmost limit of endurance of troops, vehicles, and other transportation. Abandoned enemy matériel is promptly put into use to augment that of the pursuing force or to replace losses. No opportunity is given the enemy to reorganize his forces and reconstitute his defense.

508. a. The object of the pursuit is the annihilation of the hostile forces. This seldom can be accomplished by a straight pushing back of the hostile forces on their lines of communications. Direct pressure against the retreating forces must be combined with an enveloping or encircling maneuver to place troops across the enemy's lines of retreat. Encirclement of both flanks of the retreating forces or of their separate elements is attempted wherever conditions permit.

b. Armored forces are particularly suited for this purpose. At times the objectives assigned such armored forces may be other than the pursuit of the beaten force. Such objectives can only be assigned when the attacker's margin of superiority warrants the early assignment of an exploitation mission other than the destruction of the hostile force.

c. By the coordinated employment of every available agency of destruction and terrorization, the shaken morale of the defeated enemy is converted into panic. The incipient dissolution of his organization is transformed into rout.

509. In anticipation of launching a pursuit, the commander causes preparatory measures to be taken. These measures include necessary plans and orders in all echelons. Reserves are regrouped and motorized. Artillery and engineers and other necessary units are attached to the direct pressure forces for the pursuit. Engineer combat units are placed well forward in columns of direct pressure forces to facilitate rapid stream crossing. Distant objectives are assigned to the principal tactical groupings. Missions are assigned to the field artillery in general support to obstruct movement on hostile avenues of withdrawal. Combat aviation is employed against those targets of opportunity and other objectives which will contribute most to the success of the pursuit.

510. The pursuit is conducted on a broad front. Motor transportation, including transportation captured from the enemy or abandoned by him, is employed to expedite the movement of foot troops. Troops before whom the enemy is giving way send in their reserves to gain his flank and rear or to break through his covering troops.

511. The forces engaged in the direct pressure and in the encircling maneuvers are assigned directions, zones of action, and objectives designed to bring the pursuit to a decisive conclusion. Such directions and zones of action may be around the flanks or through the wider gaps which defeat has opened in the hostile dispositions, or may be a continuation of the existing zones of action.

512. Combat aviation concentrates on critical points on lines of communication in the enemy's rear area, on hostile columns in retreat, and on hostile reserves endeavoring to reconstitute the defense. It attacks defiles on the enemy's line of retreat and disrupts traffic on the main roads and railroads in the enemy's rear area. Reconnaissance aviation reconnoiters vital points along the roads in the enemy's zone of retreat to keep contact with retreating columns and to locate any movement of hostile reinforcements, and keeps ground commanders informed of the hostile activities and movements within their zones of action.

513. a. The enemy's attempts to organize his retreat under the cover of darkness must be frustrated. Under no circumstances is he allowed to break contact. Units which have advanced without serious opposition continue their march during the night. Other units organize successive limited objective attacks against the enemy in their front.

b. During a night pursuit, the leading detachments push their advance along all available roads, followed by the main pursuing forces. The attached and supporting artillery advance by echelon, going into successive postions from which they can interdict the enemy's routes of retreat by map firing or by fire directed by observers which accompany the leading detachments. Prompt report is made when objectives are reached so that artillery fires may be coordinated.

c. Combat aviation searches enemy routes of retreat with flares, and attacks enemy columns and critical points in the enemy's rear area.

514. a. The employment of artillery is based upon the maximum exploitation of the mobility of lighter pieces and the long range

of the heavier types. So long as the withdrawing enemy can be engaged with observed and planned fire, a portion of the artillery remains in position to fire on the more distant targets.

b. The artillery attached to the pursuing forces, in addition to its supporting action, fires on hostile elements attempting to form columns in rear of the enemy's covering troops, and gradually takes over the missions of the artillery in process of displacing forward.

515. a. The purpose of the encircling maneuver is to get in rear of the defeated enemy and block his retreat so that he may be destroyed between the direct pressure and encircling forces.

b. When practicable, mobile forces, in the encircling maneuvers, advance along roads paralleling the enemy's line of retreat to cut him off at defiles, bridges, and other critical points. When the encircling forces cannot outdistance the enemy, they push through to a critical locality and engage the enemy's main forces in flank.

c. Armored and motorized units are employed in the encircling maneuvers and combat aviation may be coordinated with these maneuvers. The employment of airborne troops to seize defiles or other critical terrain objectives deep in the hostile rear, pending the arrival of more powerful mobile encircling forces, may contribute decisively to a successful pursuit.

516. a. The advance in the decisive direction must be maintained. Hostile rear guards or forces on flank positions must not turn pursuing forces from the decisive direction. Every effort must be made to block the main hostile force. When necessary, a new encircling force to continue the pursuit is constituted.

b. When the enemy succeeds in establishing himself in a position from which he cannot be passed or disloged quickly, the commander takes prompt measures to coordinate the attack again, supporting it with all available means.

517. Pursuit requires extensive reliance upon radio for communication with the leading troops. The construction of wire lines is concentrated along the more important axes. Command posts or advance message centers are established close behind the leading troops. Light aircraft are a valuable means of observation, communication, and liaison.

518. Adequate provision for the supply of ammunition and motor fuel to the pursuing troops is essential to the success of the pursuit. Every opportunity must be seized to augment supplies of all

kinds from captured or abandoned stocks. The commander endeavors to relieve the pursuing columns of all worries concerning supply and evacuation. All available transport, including air, should be utilized to assist in supply and evacuation.

Section VI. SECURITY IN THE OFFENSIVE

519. Success or failure of an offensive is dependent in a large measure upon the action taken to protect the command from hostile reaction. Open flanks are highly vulnerable. The best security is to keep the enemy so heavily involved that he has not time or means available to endanger the success of the attack. Security of attack forces is assured by a timely search for information in all directions from which a hostile threat may come, by the proper disposition of security forces of ample mobility and combat power, and by prompt dispatch of accurate information and orders to security forces. This is particularly true in security against hostile forces of great mobility such as air, motorized, and armored units.

520. In offensive operations, the mass of available means for defense against air and armored attack is disposed to favor the main attack. The combat means for defense against air attack are supplemented by utilization to the maximum of cover, concealment, camouflage, defilade, dispersion, and night movements. The combat means for defense against attack by armored forces are supplemented by utilization of natural and artificial obstacles to protect the flanks and rear of the command, by dispersion, and by night movements.

521. Antitank weapons in each echelon of troops are disposed to cover the most likely avenues of approach of hostile armored units. Protection against an armored attack is best assured by armored reserves and by obstacles located on likely avenues of approach. These obstacles must be strengthened by demolitions and mines and protected by mobile antitank weapons supported by every available and effective means of fire support, particularly that of artillery. Such action isolates and destroys the hostile armored forces.

522. In offensive operations, the greatest need for security exists during critical phases of the battle. Security is enhanced by meeting possible threats with heavy fire before they can develop. The action of combat aviation against threats is particularly effective, especially if hostile troops or vehicles are in close formation.

523. As in earlier stages of the advance, reconnaissance missions by combat aviation constitute an important security measure. Armed reconnaissance missions both distant and close are charged with obtaining information of vital security importance. Missions flown just prior to darkness or immediately after daylight are frequently advisable. Where observation of specific areas can be indicated, night missions are justified and at times mandatory. (See ch. 6.)

Section VII. TERMINATION OF THE OFFENSE

524. a. An offensive action once begun is halted only by hostile reaction or by other elements in the situation which demand it. If, during the course of an attack, it becomes necessary to pass to the defensive, the leading foot elements entrench themselves on the ground held. The leading echelon then is thinned out and forces are redistributed to organize the defense in depth. It may be necessary to move some elements to the front or rear for short distances to establish the defense on favorable terrain and secure flanking fire. Since any major adjustments attempted in daylight will probably result in heavy casualties, the general position of attacking units is maintained until darkness, when the selected defense position is occupied and organized.

b. If the situation demands major adjustments in daylight, they are accomplished under protection of smoke, and maximum fire support by artillery and other supporting weapons. Combat aviation may be employed in coordination with the other forces.

c. After an objective is taken, the enemy may attempt to retake the positions by one or several counterattacks during the period when fatigue and disorganization render the position vulnerable. Reaction by the enemy must be anticipated and measures promptly taken to consolidate the position and reorganize the units. Provisions made to defend the newly gained ground will include the maintenance of contact with the enemy, the establishment of observation posts, posting of observers for field artillery and other supporting weapons, the organization of a counterattacking force, and the avoidance of undue relaxation after a successful attack.

525. If, during the course of an attack, it becomes necessary to break off the action and withdraw, the command initially passes to the defensive. The completeness of the defense is dependent upon the situation and whether the initial defensive and the withdrawal must be executed in daylight or darkness.