FM 18-20

WAR DEPARTMENT FIELD MANUAL

TANK DESTROYER

TACTICAL EMPLOYMENT OF TANK DESTROYER PLATOON SELF-PROPELLED

WAR DEPARTMENT • 8 MAY 1944

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BY ORDER OF THE SECRETARY OF WAR:

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For explanation of symbols see FM 21–6.

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SECTION I

GENERAL

1. **SCOPE.** This manual covers the tactical employment of the self-propelled tank destroyer platoon and includes descriptions of certain techniques that are not covered in other manuals. It is designed as a guide only and does not lay down a set of inflexible rules. All commanders must be encouraged to solve each tactical situation by use of sound principles and not by the blind application of inflexible rules.

2. **EQUIPMENT.** The self-propelled tank destroyer platoon is equipped with four self-propelled guns, two armored utility cars, and a ¼-ton truck. It has six vehicular-mounted caliber .50 machine guns and one caliber .30 light machine gun.

3. **MISSIONS.** a. The primary mission of the platoon is to destroy hostile tanks. It accomplishes this mission by—

(1) Reconnaissance.

(2) Selection of the best available gun positions.

(3) Maximum use of cover, concealment, secrecy, and deception.

(4) Coordination of plans and actions with adjacent tank destroyer platoons and with other nearby troops.

(5) Accurate, surprise gun fire.

b. Secondary missions are described in section IX. Such missions include reinforcing artillery, roving battery, augmenting the fire of armored units, support of infantry by direct fire, beach defense, assault of fortified positions.

4. **TRAINING.** a. Subjects in which the individual soldier must be trained are covered in other manuals. Training as set forth in this manual stresses teamwork of the gun crews and the platoon.

b. The platoon must be trained in marches to protect itself

NOTE.—For definition of military terms not defined in this manual see TM 20–205.

by active and passive security measures, to recognize good ground for tank operation, to select firing positions, and to shoot quickly and accurately. The goal of all training, both unit and individual is to develop proper procedures that will become habitual even under the stress of combat.

c. Terrain appreciation as it applies to tank destroyers, may be taught initially by means of terrain plots and later by tactical walks. However, practice in the recognition of ground passable for tanks and in the selection of good gun positions to cover such ground is continuous.

d. Terrain plots (figs. 1 and 2) may be simple or elaborate, depending only upon the time and material available and the ingenuity of personnel. It is necessary to show only ground forms and to announce a scale so that ranges and locations can be realistic. A little dirt shaped into ground forms or a blanket thrown on a table or floor and crumpled to form hills and valleys, will give good results.

e. By means of tactical walks, men are trained on the ground to recognize avenues for tank approach and to select firing positions. After positions are selected place a destroyer in position then move the men where they can see the position from the enemy's viewpoint.

Figure 1. Elaborate terrain plot.

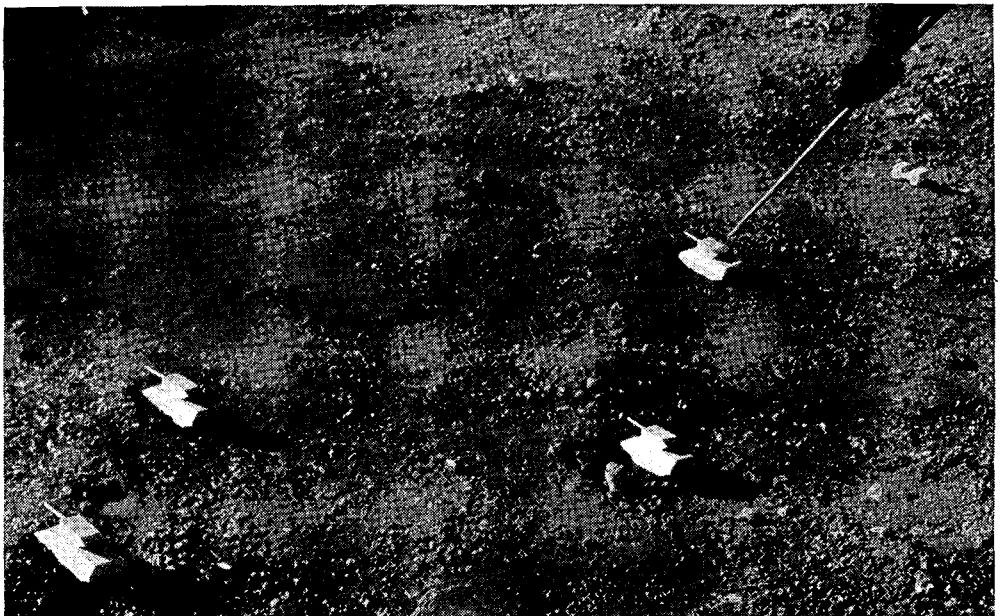


Figure 2. Simple terrain plot.

SECTION II

MOVEMENTS

5. **GENERAL.** Succesful engagements begin with successful marches. The platoon in battle position ready to fight is proof that each responsible individual in the platoon—officer, sergeant, corporal, private—has paid continuous attention to details during the march that brought them there. The overall supervision—contact between all vehicles, control of distances, vehicle operation, conduct of personnel, maintenance, supply, and planning ahead—is the platoon commander's function. Execution, however, depends on the key enlisted personnel. Vehicle commanders must take energetic and active control of their vehicles. They enforce march and light discipline; see that crew maintenance, camouflage, and security are automatic at halts; demand that their vehicles and crews conform in all respects to special instructions or to standing operating procedures; and constantly check to insure that each man in the platoon know what his job is on the march and that he performs it.

6. **MARCH DUTIES.** The following lists of duties before and during movements are a guide and should be amplified or modified as experience warrants.

a. Platoon commander.

(1) Alerts platoon.

(2) Assembles noncommissioned officers and issues orders. Makes certain that all know the situation, route, and destination; issues overlays or sketches of route when time is available.

(3) Gives special instructions on actions in case of surprise attack (ground or air).

(4) Checks—

(*a*) Weapons and equipment, maintenance of vehicles, ammunition, fuel supply, and rations. (These checks are continuous before, during, and after movement.)

(*b*) Radio net.

(*c*) Distance between vehicles.

(*d*) Observance of blackout instructions.

(*e*) Maintenance, refueling, and security at halts.

(*f*) To see that vehicles and men move clear of roads and take advantage of cover and concealment at halts.

(*g*) To see that prescribed speed is maintained.

(5) Keeps oriented as to his location at all times by observation of the terrain, by map, and by noting odometer distances.

(6) At unscheduled halts, checks with the unit ahead as to cause of halt.

(7) Sees that all of his vehicles move out on resumption of marches, especially at night.

b. Platoon sergeant. Assists platoon commander in any of his duties as platoon commander directs.

c. Security sergeant.

(1) Alerts security section.

(2) Informs members of section of platoon commander's orders.

(3) Checks—

(*a*) Weapons and equipment, including a special check to see that machine guns are clean and adjusted, and ready to fire at all times.

(*b*) His vehicles for maintenance, equipment, ammunition, gasoline, and rations.

(*c*) Ammunition trailer.

(*d*) Radio set.

(*e*) That his vehicles are properly concealed at halts.

(*f*) That drivers remain awake at night halts.

(4) Relays visual signals.

(5) Provides security on marches and at halts as directed by platoon commander.

(6) Maintains blackout discipline.

(7) Rotates drivers and observers so that no individual becomes excessively fatigued.

d. Security corporal.

(1) Acts as messenger for platoon commander in alerting platoon and controlling column.

(2) Assists platoon commander to reconnoiter routes, particularly for cross-country or night movement.

(3) Assists security sergeant in any of his duties as sergeant directs.

e. Gun commander.

(1) Alerts gun crew.

(2) Informs members of gun crew of platoon commander's orders.

(3) Keeps crew alert against surprise air or ground attack.

(4) Checks—

(*a*) Equipment of men.

(*b*) Destroyer for maintenance, equipment, ammunition, fuel, and rations prior to march and at halts.

(*c*) That gun and machine gun are clean and adjusted, and ready to fire at all times.

(*d*) That destroyer is clear of road and under cover at halts.

(*e*) Radio set.

(5) Sees that driver maintains proper distance, speed, and road position.

(6) Relays visual signals.

(7) Maintains blackout discipline.

(8) Has driver stay awake at night halts.

(9) Rotates drivers, observers, and air sentinels so that these individuals do not become excessively fatigued.

f. Gunner corporal.

(1) Keeps gun clean, boresighted and otherwise adjusted, ready to fire at all times.

(2) Assists gun commander in above duties as directed.

7. **FORMATIONS.** a. Formations used must be adapted to the ground and to the presence of other troops, both friendly and enemy. Two standard formations, the column and the wedge, are described in FM 18–15. Figure 3 shows the wedge line and echelon formations. Column is used chiefly for road movements, through wooded areas, during darkness, and when other conditions limit visibility. Line formations may be used when the terrain or friendly troops provide security against flank attacks. Echelon formations extend in the direction of an exposed flank and permit quick maneuver in that direction as well as to the front. Wedge formation is used where both flanks are exposed. It facilitates maneuver toward either flank or to the front. In most cases, the wedge is preferable to other formations because it is easy to control and provides medium or wide dispersion.

b. Units that have need of other formations should not hesitate to design them. Formations for getting into battle should not be standardized throughout all tank destroyer units. The use of different formations by various units is a means of de-

ception. Do not be satisfied with merely designing formations; practice and continue to practice them until their execution becomes letter perfect.

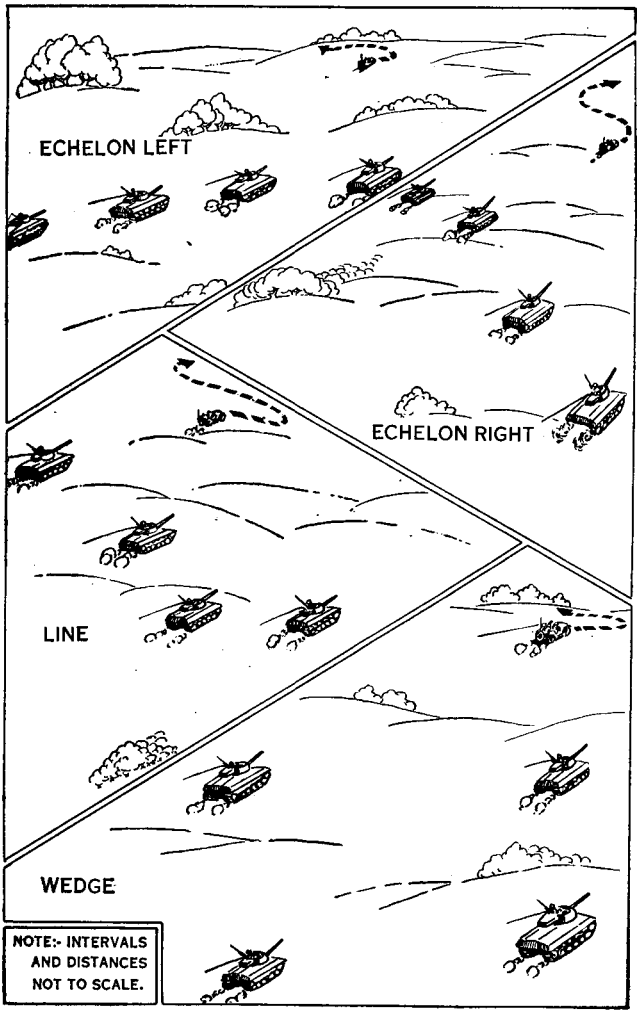


Figure 3. Platoon formations.

8. ADVANCE GUARD FORMATIONS. a. A gun platoon often forms the advance guard for the rest of the company. When the company is the advance guard for the battalion, a platoon will constitute the advance party. The formation used is the same in either case.

b. When terrain permits cross-country travel, a dispersed formation will be employed. Such formation gives flank as well as forward protection. It also enables the leading troops to be in position to execute flanking or encircling fire and movement against an enemy detachment defending a road block.

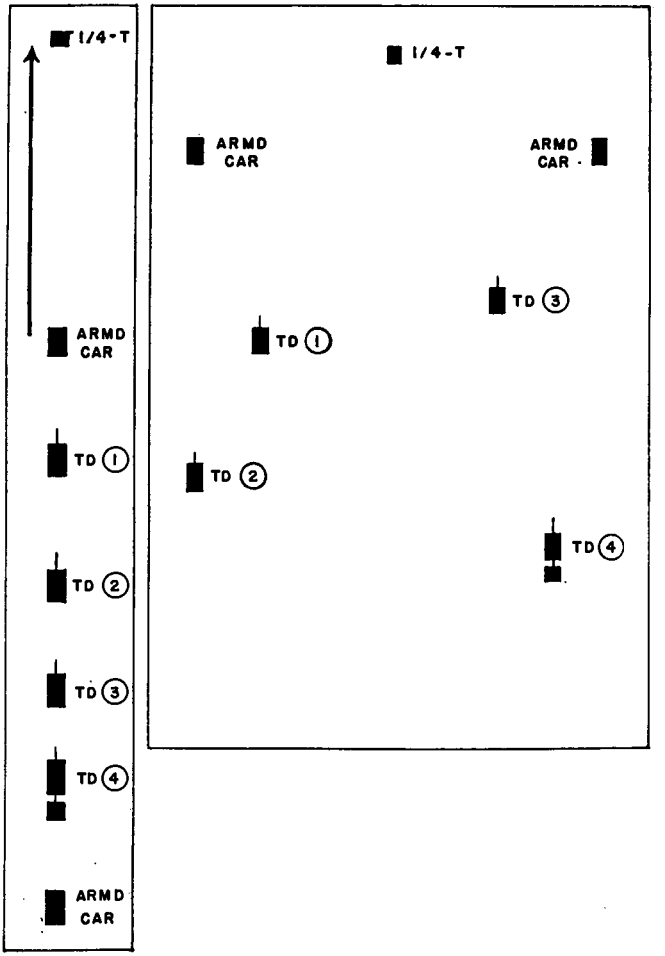
c. Normally the ammunition trailer will be pulled by the No. 4 gun. When the platoon moves into firing position the trailer is dropped off in a defilade position centrally located.

d. When the movement is on a road and the terrain on both sides of the road prohibits cross-country movement at a speed equal to that maintained by the main body, then and then only will the leading platoon remain on the road. For further discussion of advance guard actions see paragraphs 49 and 50.

9. SECURITY DURING MOVEMENT. a. On the march, security is obtained by dispersion of vehicles, the use of covered and concealed routes the avoidance of dust whenever possible, camouflage discipline, strict compliance with blackout instructions when moving at night, the elimination of all unnecessary noise and traffic, and by the judicious use of the security section.

b. When contact is imminent, the platoon moving alone provides its own security. During cross-country movements in open formation (fig. 4), a platoon security vehicle can be used to cover the front and flanks of the platoon by moving on an irregular course ahead of the platoon. When ont required elsewhere, the platoon commander habitually leads the platoon in a security vehicle.

c. The dispersion of vehicles for security against air attack on the march is the maximum permitted by road space without loss of control. The usual distance between vehicles is about 100 yards; this may be increased to 10 vehicles per mile when enemy airplanes are active. At times, when our forces have air superiority, shorter distances may be directed. Air sentinels are posted in each vehicle and antiaircraft machine guns are manned continuously. Although air attacks may be antici-

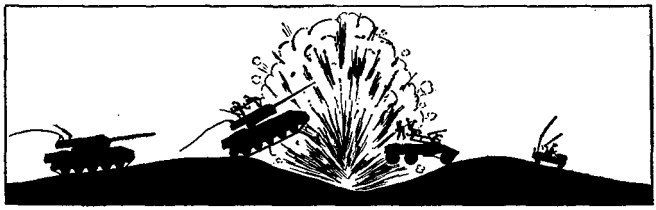


Distances will vary. The point (¼-ton truck) usually will precede the advance party by 500 to 1,000 yards. Other distances between vehicles will be from 200 to 300 yards. Intervals in the cross-country formation are such that it covers a front of 500 to 1,000 yards, or even greater during desert or prairie operations.

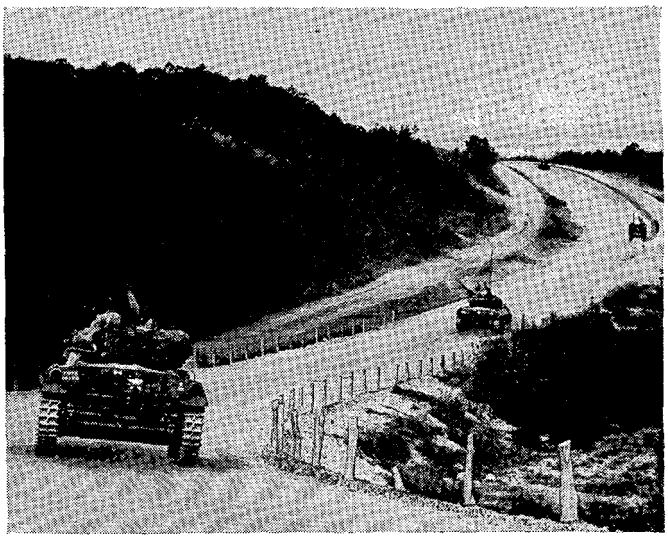
Figure 4. Advance guard formations.

pated at any place, the most dangerous areas are at bridges or defiles.

d. Prior to the beginning of the march, instructions will be issued whether to halt or to keep moving in the event of an air attack. *When troops are to halt during air attack,* vehicles are driven off the road as far as possible and halted under available concealment; troops not manning antiaircraft weapons dismount and disperse; men fire all suitable weapons at the attacking aircraft. *When movement is to be continued during*



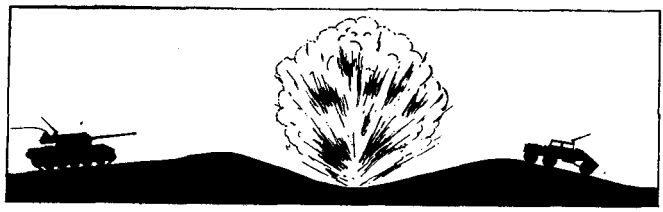
① *Result of careless marching.*



② *Good marching.*

Figure 5. Security on the march.

air attack, vehicular distances are maintained on road or, if terrain permits, vehicles are dispersed laterally while forward movement is continued; the fire of all suitable weapons is directed against the airplanes. The platoon cannot afford to stop every time enemy airplanes appear. Such halting may enable a few airplanes to keep the platoon from performing its assigned mission.



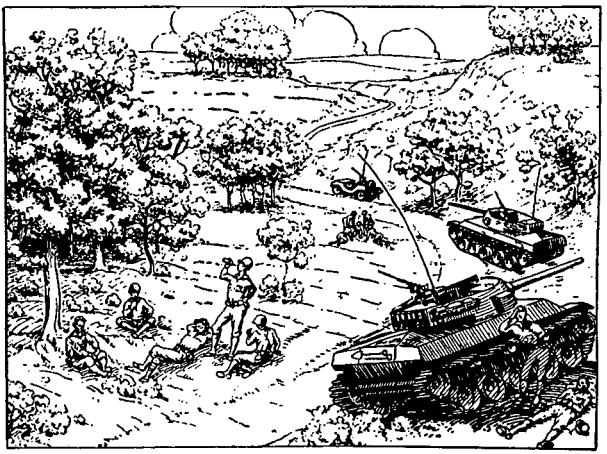
③ *Bombs seldom hurt men who are alert and dispersed.*

Figure 5. Security on the march—Continued.

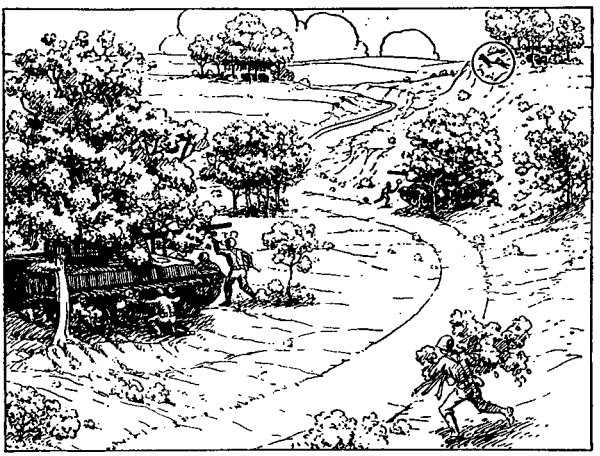
10. HALTS. a. At halts, vehicles are kept at road distance unless the order is given to close up. They are moved off the road or trail, if possible, before halting, and stopped under a tree, against a bush, or behind nearby cover. If possible, they are stopped in a shadow. All platoon personnel will be busy at a halt, unless its purpose is to provide rest; normally, resting is done only in bivouac.

b. The platoon leader immediately checks on the execution of security measures. These measures include dispersion and concealment of vehicles and personnel and, in the presence of the enemy, the establishment of observation posts covering all possible routes of approach. He then checks the condition of all vehicles and the execution of maintenance activities. If enemy attack is imminent, all destroyers will be placed in a firing position, guns boresighted, and completely prepared for action.

c. If the reason for the halt is not clear, the platoon leader will contact forward units. He will maintain contact, particularly at night, with the unit just ahead so that when the march is resumed no time is lost in falling into column.



① *WRONG. Loafing, no observation, bunching in open.*



② *RIGHT. Purposeful activity, observation, dispersion.*

Figure 6. Halts.

SECTION III

BIVOUACS

11. OCCUPATION. a. The essential requirement during movement into bivouac is speed in clearing the road and finding cover and concealment. To facilitate getting into the platoon area quickly, the platoon commander should precede his platoon, meet it at the entrance of the bivouac, and personally point out to the sections their positions. When this cannot be done, a noncommissioned officer should be sent ahead. The object is to clear the road and get under cover. Adjustments may be made later.

b. Occupation of bivouac is facilitated by the use of a standard platoon plan. The destroyers are moved to their assigned positions and halted facing out, the guns being disposed to cover the most likely avenues of enemy approach. Security vehicles are centrally placed facing toward the route out of the bivouac.

c. Should the platoon occupy an interior position where it could not use its guns to cover an edge of the bivouac area, the destroyers are concealed and faced toward the route of egress.

d. The number of tracks which will have to be erased or covered with brush will be reduced if the area is entered in a column formation.

12. SECURITY AND SAFETY IN BIVOUAC. a. For security in general, see FM 18–5. The establishment of security measures—outposts, dispersion, concealment, camouflage, and blackout discipline—should be automatic upon occupation of a bivouac. Other troops usually furnish general security, and the platoon ordinarily is responsible only for local security and for manning that part of the outpost prescribed by the company commander. The security section is responsible for positions some 300 to 600 yards from the perimeter of the bivouac area. Vehicles of the security section are placed in covered positions within the bivouac area.

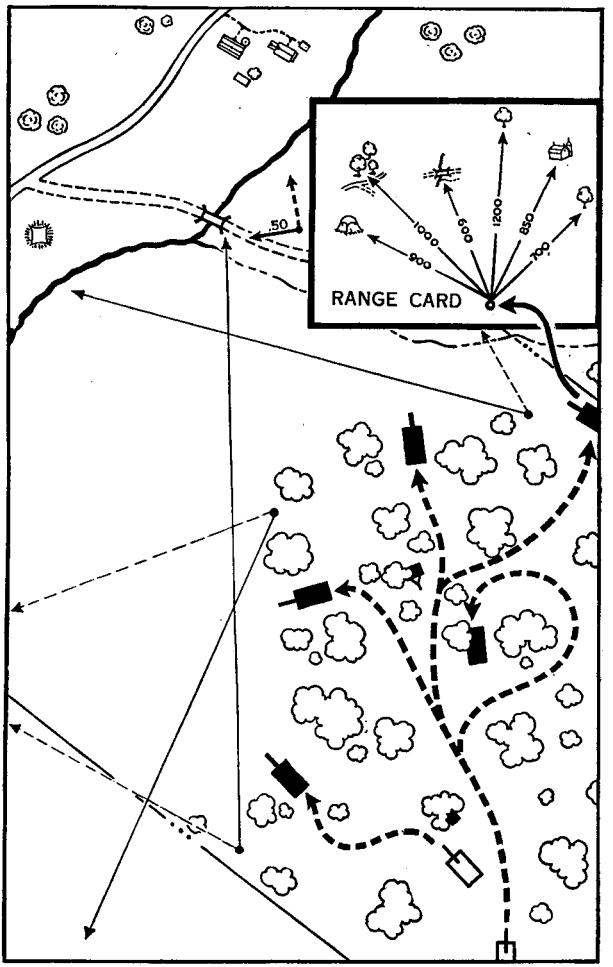


Figure 7. Bivouac area of an exterior platoon. The caliber .50 machine guns may remain mounted on the destroyers or be placed on ground mounts, depending upon the situation.

b. The primary mission of the outposts is to warn of surprise attack by hostile armor. It stops any attack by enemy troops

Figure 8. Security affords safe rest.

which are vulnerable to small-arms fire. Whenever possible, liaison is maintained with more advanced observation and listening posts established by higher headquarters and fields of

fire coordinated with those of adjacent units. (For defense against raids, see par. 13.)

c. Within the platoon area, all vehicles are dispersed under suitable cover and concealment. Guns are sited to cover all tank approaches. An adequate ground, air, and gas warning system is established. Camouflage discipline and the enforcement of blackout instructions are essential.

d. Some blackout safety precautions are:

(1) Individual vehicles moving within the bivouac in blackouts are preceded by a dismounted guide.

(2) Sleeping personnel are checked to see that none are near an engine exhaust.

(3) Before the platoon moves from bivouac in blackout, crews are carefully checked to see that no one is left behind.

13. DEFENSE AGAINST BIVOUAC RAIDS. **a.** A bivouac even when located well to the rear, may be subjected to hostile raids, particularly raids by paratroops or small ground parties that have infiltrated through the front lines. Dependence must not be placed upon other troops in the vicinity. Each bivouac must have its own defensive system. The outpost warns of the approach of hostile ground troops and repels small parties. However, the bivouac itself must be protected by a defensive system of interlocking bands of machine-gun fire. Tank destroyers are located to cover likely avenues of tank approach.

b. The platoon forms part of the defensive system. The company commander designates the platoon sector. The platoon leader reconnoiters the area, makes his plans, designates machine-gun and destroyer positions and coordinates with adjacent platoons. Machine guns are dismounted, placed in position and manned. Directions of fire are designated and the prearranged fires planned. (See FM 23–55 and 23–65.) Destroyers are located to cover likely avenues of approach for tanks. Signals to warn of attack are designated—one signal for attack by hostile foot troops and another for tanks. If available, flares are provided for illuminating the area in case of attack.

c. The enemy will frequently launch night attacks with infantry alone or with infantry supported by tanks. Night tank attacks usually follow clearly defined terrain features to facilitate maintenance of direction. Tank destroyers are located to

cover such approaches. Outposts use rocket launchers to repel tank attacks.

d. When a hostile attack is launched, outposts give warning of the attack as soon as it is discovered and attempt to repel it. If the enemy succeeds in passing the outposts in force, machine guns lay down their prearranged fires. When flares are used to illuminate the foreground, tank destroyers fire on hostile tanks. When flares are not available, small arms may be fired at the tanks. The position of the tank may be discovered by the sharp bounce of the tracer bullets on the armor plate or the hostile tank may return the fire thus disclosing its position. Tank destroyers may then fire on the located tank.

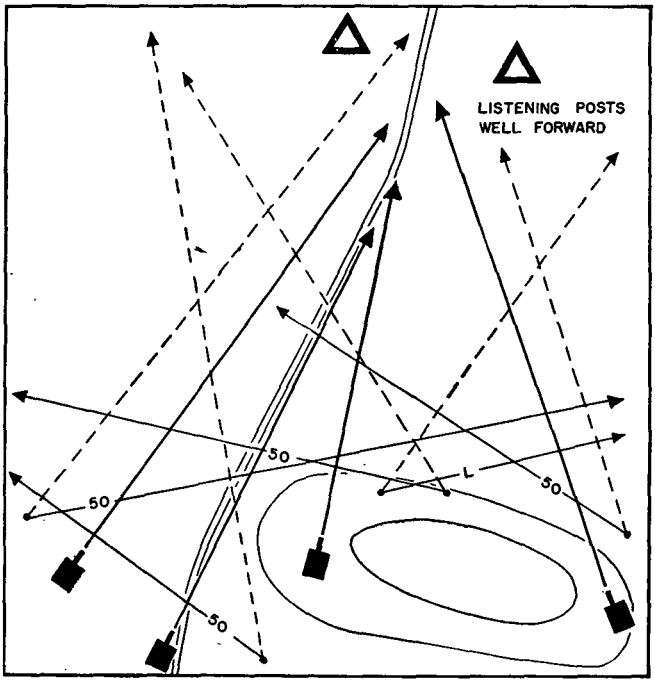


Figure 9. Dispositions for defense against night armored raids. In this instance, four caliber .50 machine guns are removed from destroyers and placed on ground mounts.

14. **DUTIES IN BIVOUAC.** After a bivouac has been occupied and organized for defense, vehicles and weapons are made ready for combat. This must be done before the comfort of individuals is considered. An SOP that will help to insure that the bivouac is a good one and that the platoon is ready for combat, is contained in the following list of questions. Study these questions, learn them and apply them. Modify and amplify them as experience warrants.

a. Security.

(1) Has maximum use been made of old trails and paths in order to avoid making new ones?

(2) If it has been necessary to make new tracks, have they been obliterated?

(3) Are the vehicles dispersed? (50 to 150 yards.)

(4) Have the vehicles been camouflaged?

(5) Have plans been made for defense against raids?

(6) Are the guns covering likely tank approaches?

(7) Do small arms cover likely approaches of foot troops?

(8) Has the security been posted in the platoon sector and is it coordinated with other platoons?

(9) Have reliefs and inspections been arranged for security outposts?

(10) Have blackout instructions been given?

(11) Have fox holes been dug?

(12) Have air and gas sentries been posted?

(13) Are air and antitank warning system signals understood by all?

(14) Do all personnel know the challenge password and reply?

b. Combat readiness.

(1) Is the platoon familiar with the situation, friendly and enemy?

(2) Has first echelon maintenance been performed?

(3) Have all vehicles been refueled?

(4) Have the guns been cleaned and checked?

(5) Do all vehicles and personnel have basic ammunition loads?

(6) Have all radios been checked?

c. Contacts.

(1) Has liaison been established with adjacent units?

(2) Has a messenger been sent to the company CP?

(3) Has the company commander been informed of the disposition of the platoon?

(4) Do the members of the platoon know the position of the company CP? Of the platoon CP?

(5) Is the location of sleeping personnel known to the key personnel of the platoon?

d. Living in and leaving the bivouac.

(1) Do the vehicles have hard standing?

(2) Have routes of egress been reconnoitered and have they been marked for night movement?

(3) Have latrine facilities been provided?

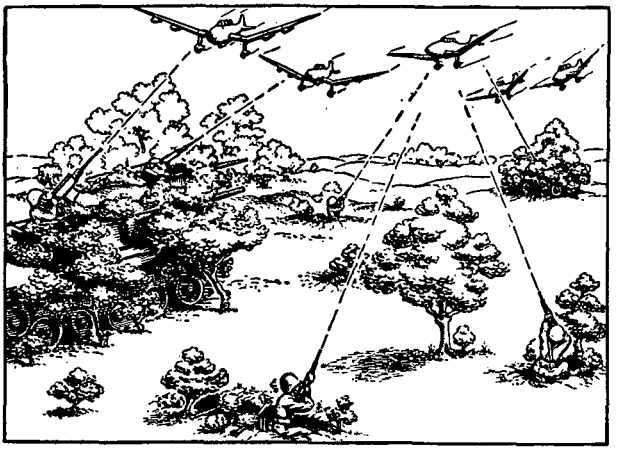
(4) Have the men the best available shelter?

(5) In bad weather are shelter tents ditched?

(6) Is the police of the area satisfactory?

15. DEFENSE AGAINST AIR ATTACKS. a. The platoon is most vulnerable to air attack when moving into or out of bivouac. In moving into bivouac, prescribed distances between vehicles should be maintained. Within the bivouac vehicles are dispersed so that there is at least 50 yards between them. Maximum advantage should be made of natural concealment, tracks are brushed out, and vehicles are camouflaged. In moving into bivouac, use regular roads or trails if practicable. In moving out of bivouac, the platoon leader should coordinate his movement with that of the preceding unit. Vehicles are moved out at prescribed interval. They must not be bunched.

b. In bivouac all individuals dig fox holes. Air sentries are posted. Camouflage discipline is maintained. Hostile airplanes may try to draw fire thus causing the position to be disclosed. Therefore, such airplanes are not fired upon unless they are attacking the bivouac. When the enemy attacks, use all available effective weapons against him.



① *Shoot at enemy airplanes when they attack you.*

② *Hide from airplanes that have not discovered your position.*

Figure 10. Actions during air attack.

SECTION IV

POSITIONS IN READINESS

16. **GENERAL.** A position in readiness is an area which a unit occupies while the battle is developing. Tank destroyers seek combat on terrain that is most disadvantageous to the enemy. The location of the battleground will depend upon the movement of the enemy. This movement is influenced by terrain and obstacles. An estimate of the terrain will indicate the possible areas of combat. The position in readiness should be located so that the platoon can move quickly to the most probable combat areas.

17. **OCCUPATION OF POSITION IN READINESS.** a. A position in readiness might be occupied for an hour or two, or possibly for 2 or 3 days. Troops and vehicles are therefore disposed as in bivouac. The position is continuously improved. Duties of personnel are identical with those in bivouac except that the platoon commander makes last minute preparations for battle and sees that all men know and understand the situation and the part they are to play.

b. While in a position in readiness, the battalion and company commanders and other officers should reconnoiter possible combat areas. When time permits, the platoon commander and some of his noncommissioned officers also reconnoiter combat areas and select gun positions.

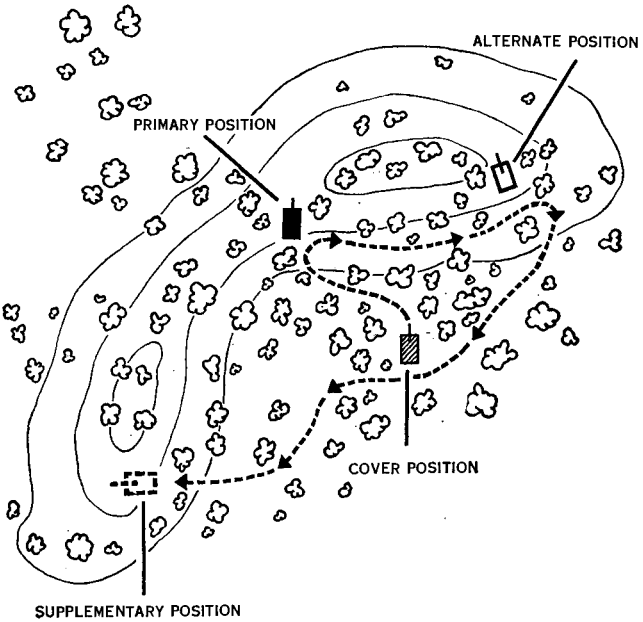


Figure 11. Final preparations for battle.

SECTION V

RECONNAISSANCE OF COMBAT AREA

18. **RECONNAISSANCE PARTY.** Whenever time permits, the platoon combat area and routes thereto are reconnoitered before occupation. The platoon commander usually takes one or more noncommissioned officers with him on reconnaissance. When there is ample time and when a large party will not disclose preparation, all destroyer commanders should be included in the reconnaissance party. Except when friendly troops provide ample security, part of the security section should accompany the reconnaissance party to cover movement from advantageous positions to the front and flanks.

19. **INSTRUCTIONS.** The platoon commander should provide himself with radio communication to the platoon for emergency use and should take a messenger with him. Before leaving, he should inform the senior remaining noncommissioned officer of the situation, the mission, his plans, and expected time of return. This will include the details which he has in mind with reference to the employment of the platoon. If he intends to await the platoon's arrival in the combat area he will give detailed instructions, when possible, regarding its route and method of movement forward, together with the time or upon what signal it will move. If such instructions cannot be given, the platoon leader will send them to the platoon as soon as known.

20. **ACTIONS DURING RECONNAISSANCE.** a. While en route to the combat area, the platoon commander studies routes thereto, noting cover, concealment, and obstacles. Bridges particularly are noted; a ford should be selected if possible, to be used in event the bridge is later demolished. A detail from the platoon can make necessary improvements to the route while the commander completes his reconnaissance.

If the work entailed exceeds the capabilities of the platoon, a report should be sent to the company commander.

b. Upon arrival at the combat area, the platoon commander studies and evaluates the ground; factors to be considered are described in section VI. He contacts friendly troops adjacent to or within his area in order to learn their disposition and plans and to effect coordination of fires and utilization of ground.

c. Time and conditions permitting, the platoon commander reconnoiters the ground over which tanks might advance, looking for possible tank and infantry approaches and studying the combat area from the enemy's viewpoint.

d. Maps should be studied during terrain reconnaissance in order to increase the accuracy of later references to the map.

SECTION VI

POSITIONS

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21. PRIMARY FIRING POSITION. The primary firing position is the firing position from which a unit or weapon executes its primary fire mission.

22. ALTERNATE FIRING POSITION. This is a firing position from which the same fire mission can be executed as from the primary position. It should be selected prior to occupation and with the same care as is given the selection of the primary position; routes to it also are selected. An alternate position may be occupied when the enemy—

a. Brings such heavy fire upon the primary position that to remain in it would probably cause loss of the destroyer.

b. Covers the primary position with smoke.

c. Has been driven off and another attack or an artillery concentration is an enemy capability.

23. SUPPLEMENTARY POSITION. A supplementary position is a firing position assigned a unit or weapon to accomplish missions other than those to be accomplished from primary or alternate positions. Supplementary positions frequently are used by rear guns to counter a flanking movement by the enemy.

24. COVER POSITION. A cover position is a position in the immediate vicinity of the firing position which affords concealment and defilade. A cover position is used when the firing position is inadequate for cover and concealment. An observer is posted near the firing position to signal the destroyer crew when to move into the position.

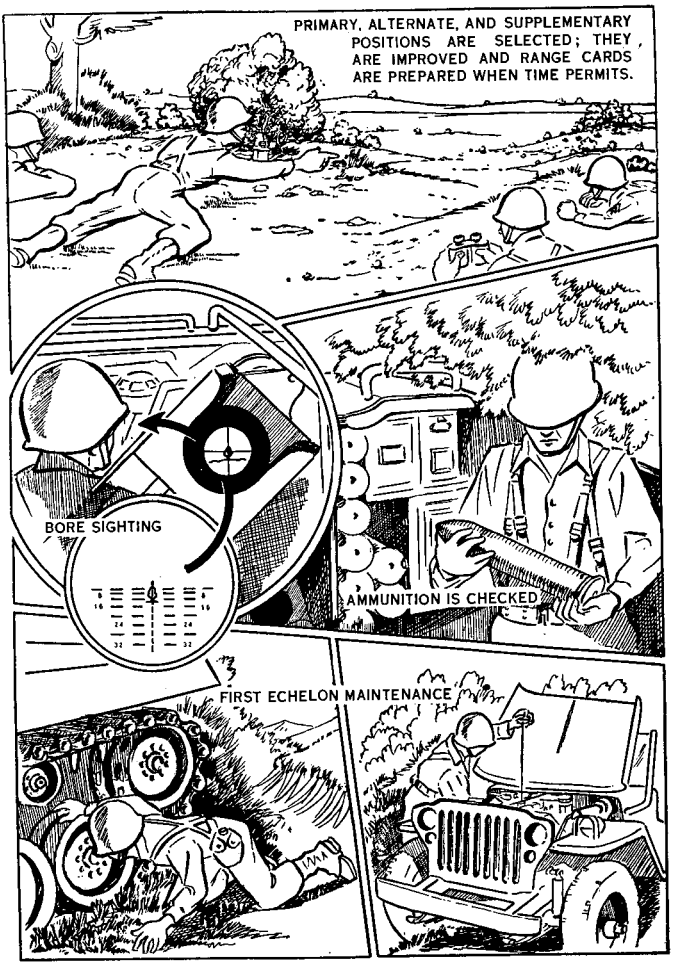


Figure 12. Primary, alternate, supplementary, and cover positions. When time permits, alternate and supplementary positions are carefully selected and prepared in advance. Routes are reconnoitered and improved where necessary. Range cards are prepared for each position.

25. **SELECTION OF GUN POSITIONS.** a. There are five factors to consider in the selection of gun positions. They begin with the letters of the key word FOCOL and are—

(1) Field of fire.
(2) Observaiton.
(3) Cover and concealment.
(4) Obstacles.
(5) Lines (routes) in and out.

b. The selection of good gun positions depends upon knowledge of the five factors and a knowledge of ground. A trained leader can select a good or at least a fairly good position after a quick study of the terrain included in his assigned area. But no one can be sure of selecting the *best* position within an area until he has seen all of the possible positions *at each position itself and from the enemy's viewpoint.* When time permits, the leader should study the immediate position area; whenever possible he should go 500 to 1,500 yards forward of the position to see his area as the enemy will see it. He can then study the advantages and disadvantages of each possible position and make his decision accordingly.

c. When there is a possibility that the enemy will attack suddenly, guns are quickly placed in firing positions. Then, while awaiting the attack, leaders reconnoiter for better positions.

26. **FIELD OF FIRE.** a. **Primary consideration.** Field of fire is the first consideration. The weapon must cover the assigned sector. Regardless of other advantages or disadvantages, the selection of a gun position will revolve primarily about the field of fire. When evaluating a field of fire consider the following:

(1) Can the gun cover all avenues of approach in its assigned sector?

(2) Is the range long enough to enable the gun crew to destroy tanks entering the sector before they can overrun or bypass the position? (This requirement should not be misconstrued. It is not necessary that the field of fire extend as far as the gun's maximum effective range, particularly when the position affords flanking fire.)

(3) Does the gun have any dead space which cannot be covered by another gun?

Figure 13. FOCOL.

b. Hull defilade positions. Careless emplacement of a destroyer in some hull defilade positions will cause a dead

space. Such positions are those which slope uphill. Since the maximum depression of the gun is only 10°, you cannot shoot down a steep slope when your destroyer is sloping upward. In order to hit an enemy below the gun, you can do one of two things: climb on top or over the hill, or dig in your tracks so that the destroyer is level or sloping downward. If you climb up, you lose the protection of the ground and no longer have a hull defilade position. So, when you occupy a hull defilade position, be sure that, as always, you check by sighting through the tube; and, if necessary, dig in your tracks. (See fig. 15.)

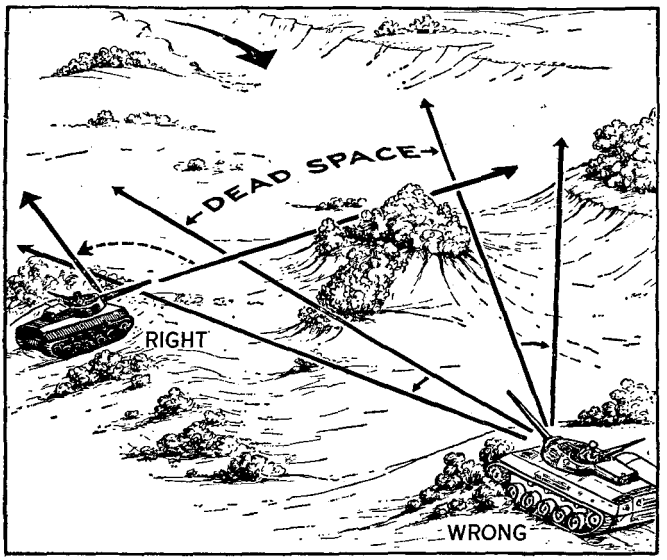


Figure 14. Avoidance of dead space.

c. Locating covered and concealed firing positions. Covered and concealed firing positions that afford a good field of fire often are difficult to locate. But they are there if you know how to find them.

(1) The steep upward slope of a hull defilade position may prevent digging in because of insufficient time. Frequently a position on the forward slope of a hill in rear of the first

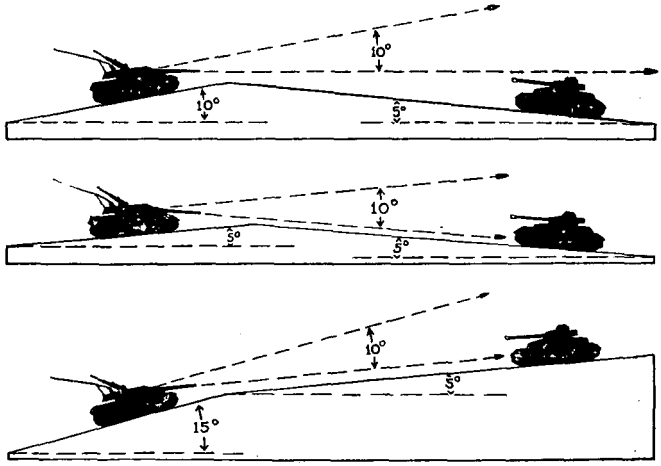
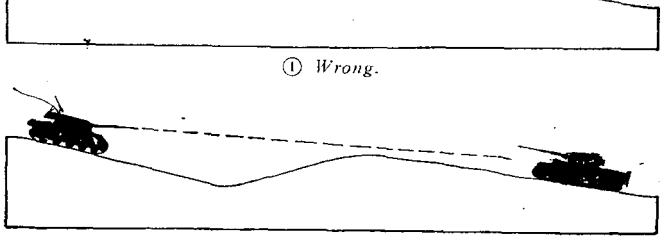


Figure 15. Effect of slope.

one considered may provide hull defilade. Such a position frequently has the disadvantage of excessive dead space. However, it can be used for providing depth when this dead space is covered by other guns. (See fig. 16.)

(2) It may be necessary to sacrifice a desirable characteristic of good gun positions in order to obtain a field of fire. For instance, although a position which affords flanking fire is highly desirable, the need for an open field of fire might outweigh the advantage of flanking fire.



① *Wrong.*

② *Right.*

Figure 16. Hull defilade obtained by occupying a forward slope.

(3) Desired characteristics frequently can be obtained by combining positions of different characteristics. A combination of positions which afford open fields of fire for some guns and flanking fire for others is an effective method of organizing combat areas.

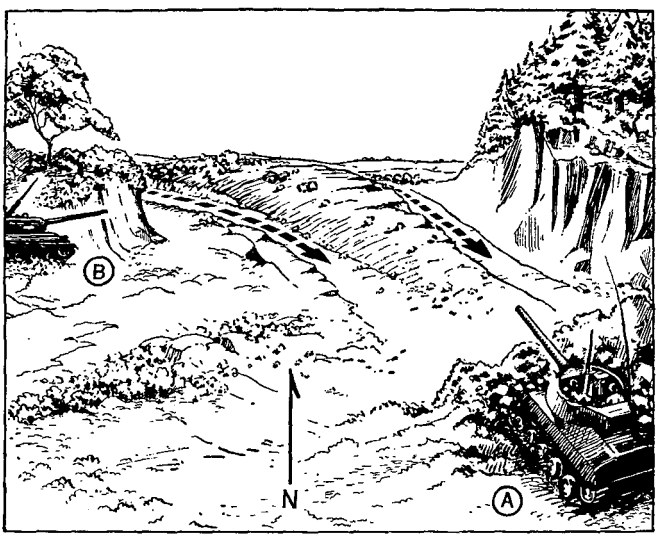


Figure 17. Fields of fire. Position (A) affords long range fields of fire covering both approaches; however, it provides only for frontal fire. Position (B) offers only a short field of fire covering the west approach and none covering the east approach.

d. Hillcrest positions. It may be necessary to occupy a hillcrest position in order to obtain a good field of fire. Such positions are ordinarily avoided because destroyers may be silhouetted against the sky. However, they have the advantage of good observation. Furthermore, the enemy will have difficulty in adjusting artillery fire on top of the hill and enemy tanks and infantry cannot climb the hill rapidly.

e. Final selection of positions. Always, in the search for positions that afford good fields of fire, the advantages and disadvantages of each possible position must be weighed carefully before final selection is made.

Figure 18. Hillcrest position.

27. **OBSERVATION.** a. Usually a gun position that has a good field of fire also affords good observation. However, dust and smoke from muzzle blast and the sun affect observation. For observation a good gun position has the following characteristics:

(1) Vegetation to lessen the amount of dust.

(2) A cross wind to carry away dust and smoke.

(3) A point nearby, upwind from the gun, from which the gun commander can observe the field of fire.

b. When practicable, the platoon commander should select a platoon observation post from which he can see each gun position as well as the actions of the enmy. When such a position is not available, the platoon commander establishes two or more observation posts from which observers report actions direct to him. Possible tank and infantry approaches from flanks and rear should be carefully observed.

c. Observation afforded the enemy also is a consideration. All possible measures should be taken to avoid being seen by the enemy; a particularly good means is to distract his attention by carelessly camouflaged dummy positions or guns. To be effective, dummy guns must be emplaced in logical positions and the carelessness of camouflage must not be exaggerated. They must be placed so that fire brought upon them will not endanger nearby guns or other installations.

28. COVER AND CONCEALMENT. a. Cover is protection from fire; concealment is protection from hostile observation, either ground, air, or both.

b. Natural *cover* is afforded by ground forms. When operating over featureless terrain, guns are given additional cover by digging them in whenever time permits. Desirable cover would find the destroyer's hull in complete defilade at least from the front.

c. *Concealment* is gained by the use of terrain features and by camouflage. Positions defiladed from enemy observation, well dug in and camouflaged are highly desirable; a hull defilade or dug-in position gives a large measure of concealment from ground observation.

d. Full use of concealment must be made of terrain features other than the mere form of the ground. Seek a background with which the gun will blend and merge, rather than one against which it will stand out. Trees, woods, and clumps of bushes offer concealment from both ground and air observation. Buildings, ruins, and derelict vehicles may furnish concealment. Rarely will a position offer complete concealment; natural or artificial camouflage measures usually will be needed. For the principles of concealment and camouflage see FM 5-20 and TM 5-267.

e. For both concealment and cover, avoid the obvious; avoid *prominent* terrain features and isolated landmarks. They usually attract attention and fire.

f. **Reverse slope positions.** A reverse slope position is one on a slope away from the enemy. It usually provides excellent cover and concealment from enemy small arms and observed artillery fire. Such positions may be used to fire directly up the slope, to fire against the enemy rear, or to fire to a flank.

(1) Firing directly up the hill is effective when the terrain indicates a tank approach over the crest of the hill. Tanks advancing over the crest are caught by surprise and often cannot return fire until they move down the slope a bit. In the meantime, their soft under sides are exposed. However, this type of position may have an undesirably short range.

(2) Firing against the enemy from his rear usually provides the greatest surprise possible. It is best used when friendly troops protect the gun position; the absence of covering fires

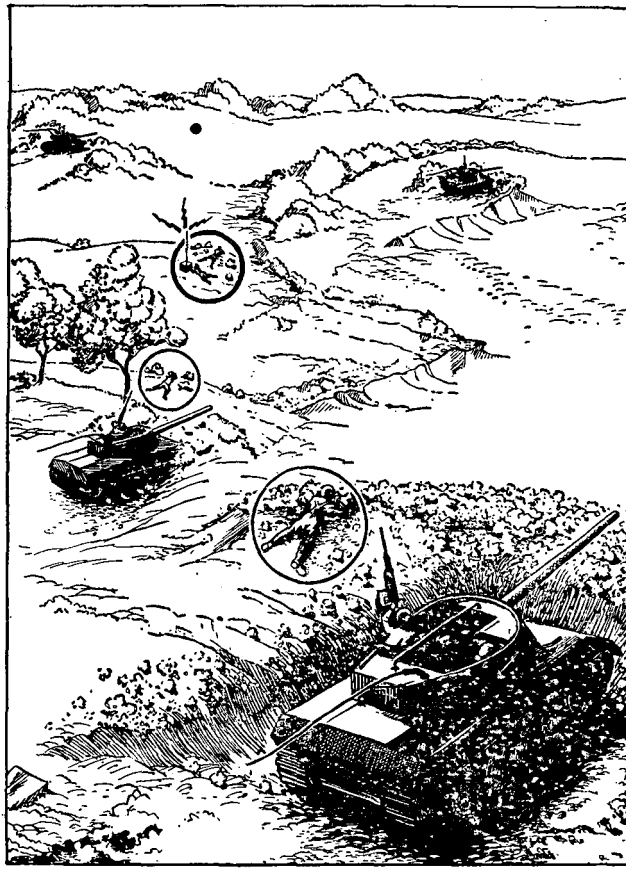


Figure 19. Observation.

might enable the enemy foot troops to overrun the position before hostile tanks come within the gun's field of fire.

(3) Flanking fire from a reverse slope is illustrated in figure 21 and by the locations of guns (1) and (3) in figure 25. These positions are particularly advantageous because they lend themselves to flanking fire and mutual support. Also cross fire from the rear of one hill to the front of the other provides surprise fire from a well-concealed position.

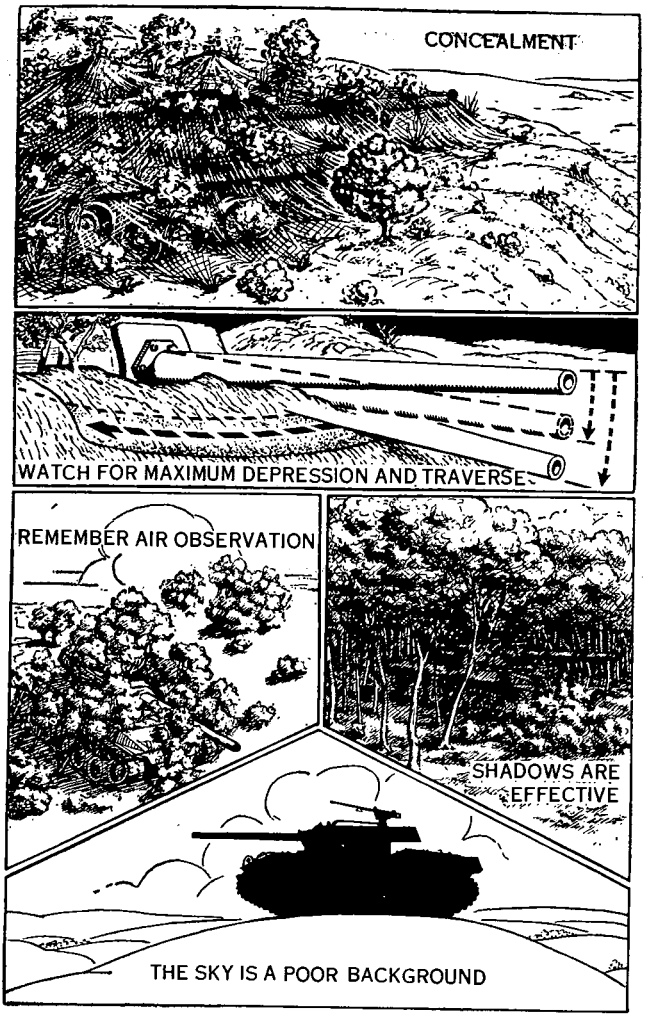
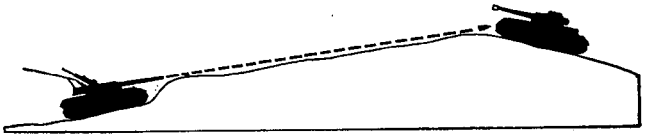


Figure 20. Cover and concealment.



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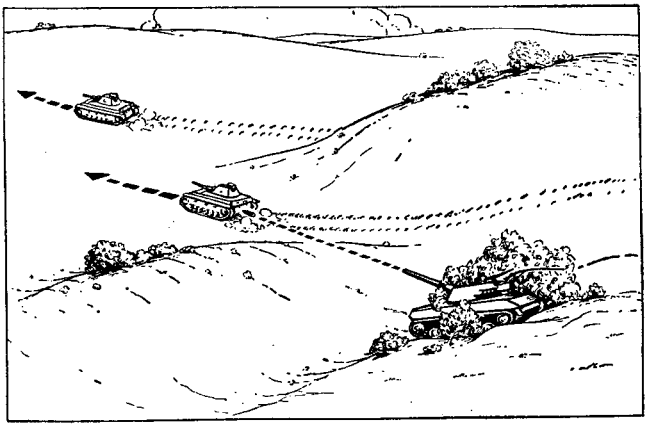

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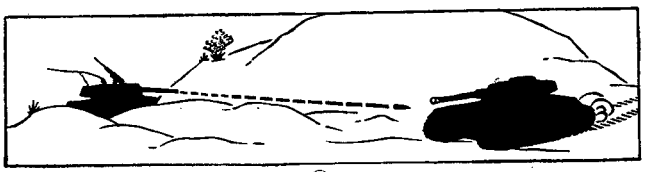

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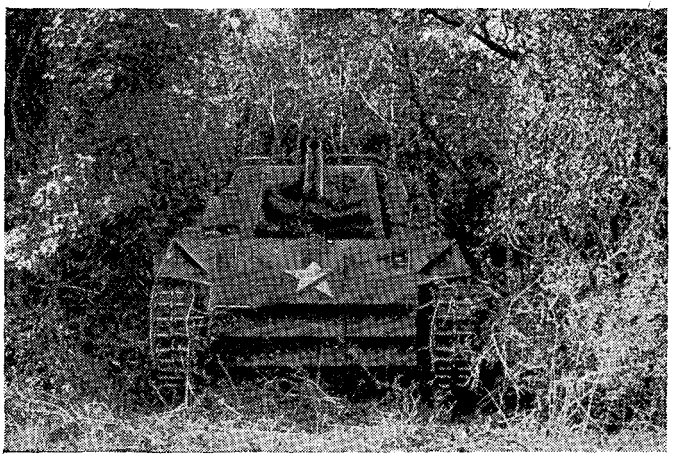
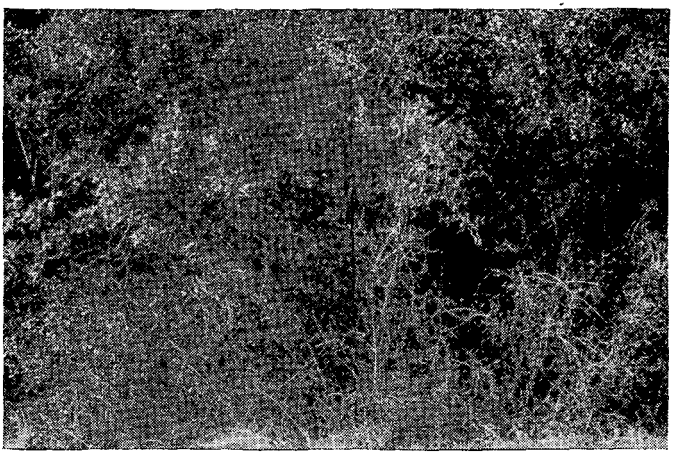
Figure 21. Reverse slope positions.

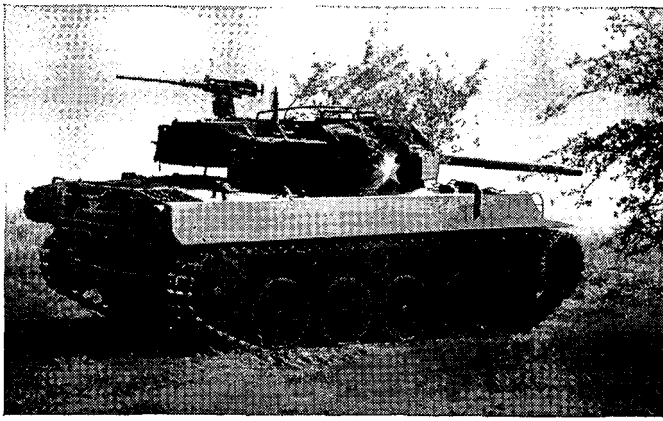


① *Before camouflage.*

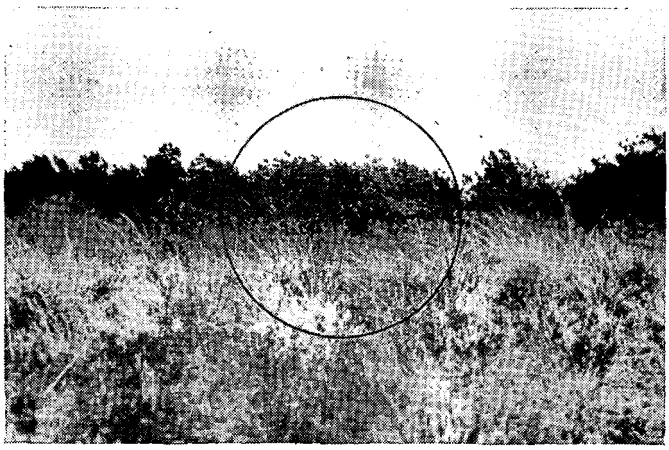


② *After camouflage.*

Figure 22. Natural camouflage.



① *A firing position in the open—*



② *—but from the enemy's viewpoint, good background and defilade cause this position to be concealed.*

Figure 23. Use of background as camouflage.

29. OBSTACLES. Obstacles, both natural and artificial, influence the approach of hostile tanks and limit the enemy's maneuvers after the fire fight has begun. For these reasons

they are important considerations in the selection of a gun position. Hill masses, streams, ditches, heavy woods, villages, and swamps, as well as mine fields and artificially created tank traps, can all be used to stop or delay the enemy, or force him into a desired field of fire. Consider the enemy's point of view. How will the obstacles influence his approach and maneuver? What can he do to avoid or overcome the obstacles? Obstacles also restrict your own movements. Consider particularly how those on *your* flanks and to the rear will affect your movements to alternate and supplementary positions:

30. **ROUTES (LINES) IN AND OUT.** Covered or concealed routes leading from the immediate rear to destroyer positions are selected and improved as necessary. This should also be done for alternate and supplementary positions.

31. **FLANKING FIRE, MUTUAL SUPPORT, DEPTH.** a. Flanking fire, mutual support, and depth are habitually sought in platoon positions. Assignments of the same sector of fire to two guns in depth is generally advisable.

b. Positions which afford *flanking fire* are most desirable because—

(1) Flanking fire surprises the enemy.

(2) The enemy has difficulty in locating guns to his flank.

(3) It is difficult to maneuver against, or withdraw from, flanking fire.

(4) The largest part of the tank is exposed to the fire of the tank destroyer gun.

(5) The side armor of most tanks is lighter than the front armor.

c. Frequently a firing position will have a certain amount of dead space caused by terrain irregularities. Destroyers placed to cover the dead space of others are said to be in *mutual support.* Since the guns are covering the same general sector, they can provide each other with covering fire during a movement.

d. Guns placed in *depth* are the best guarantee against successful flanking maneuver by the enemy. They also cause a hostile attack to spend itself before accomplishing a breakthrough.

Figure 24. Lines (routes) in and out.

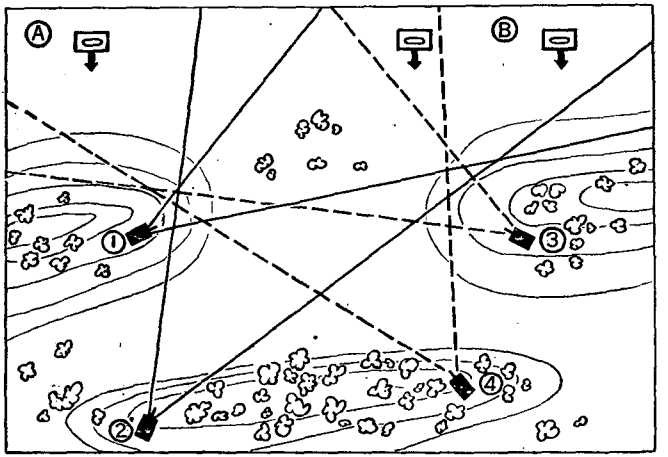


Figure 25. Flanking fire, mutual support, depth.

Flanking fire. Gun (1) brings flanking fire against tanks approaching from (B). Gun (3) shoots against the flanks of tanks at (A).

Mutual support. Tanks at (A) can approach guns (1) and (2) over an area in which these guns cannot fire; guns (3) and (4) protect guns (1) and (2). Likewise, tanks at (B) cannot be fired on by guns (3) and (4); guns (1) and (2) can protect guns (3) and (4).

Depth. Guns (1) and 2) cover the same general sector from positions in depth. Guns (3) and (4) also have depth and approximately the same sector of fire.

Most areas that are suitable for the employment of flanking fire, mutual support, and depth will not be as evident as the area illustrated. The platoon commander must study ground carefully and must use his imagination to find a solution to a situation which at first may appear obscure.

32. SECURITY SECTION POSITIONS. a. The security section operates generally as does infantry. (See FM 7–10.) It selects and occupies positions to—

(1) Protect the platoon from hostile foot troops.

(2) Man platoon observation posts.

(3) Destroy with rocket launchers tanks approaching by covered routes.

b. Protection from hostile foot troops. (1) The machine guns are sited primarily to destroy hostile foot troops approaching the platoon area. Alternate and supplementary positions are selected. Machine guns are sited for grazing

fire and should always be dug in. The positions selected are similar to the gun positions in that flanking fire depth and mutual support are essential.

(2) When one or both of the platoon's flanks are exposed to attack by foot troops, machine guns are sited to cover the exposed flank or flanks. When not covered by other troops, destroyers fire high explosives against infantry advancing from the front. In all situations, the security section covers avenues of approach that cannot be covered by the destroyers. When the platoon's flanks are protected, the machine guns are sited to cover the front.

c. Platoon observation posts. The security section mans one or more platoon observation posts; extra men are used for reliefs and to act as messengers. The OP detail may be mobile, first occupying a forward position prior to the approach of the enemy and later moving in rear or to a flank of the guns. The function of the OP is to give warning of the approach of enemy tanks, infantry, and reconnaissance units by prearranged signal.

d. Rocket launcher positions. Primary rocket launcher positions are selected to cover ground over which the tank can closely approach the platoon area without coming under the fire of the destroyers. These positions should be improved to afford both cover and concealment. Because of the launcher's short range, alternate and supplementary positions are selected and prepared in advance. Wherever possible, routes to these positions afford cover or concealment, preferably both.

33. COOPERATION WITH INFANTRY. The tank destroyer platoon, either alone or as part of the tank destroyer company, will often operate with infantry. The platoon commander must coordinate closely with the infantry.

a. Offensive. In the attack, the tank destroyer platoon when cooperating with infantry usually follows the infantry closely, prepared to assist in repelling an armored counterattack and to assist the infantry advance by fire. The platoon leader contacts the infantry commander, learns the mission and plans of the infantry, and arranges for necessary coordination. The platoon will usually advance by bounds. When practicable one section should be in position to cover the advance of the other. When the infantry seizes its objective the tank destroyers select positions from which they may assist in the defense against armored attack. This must be done

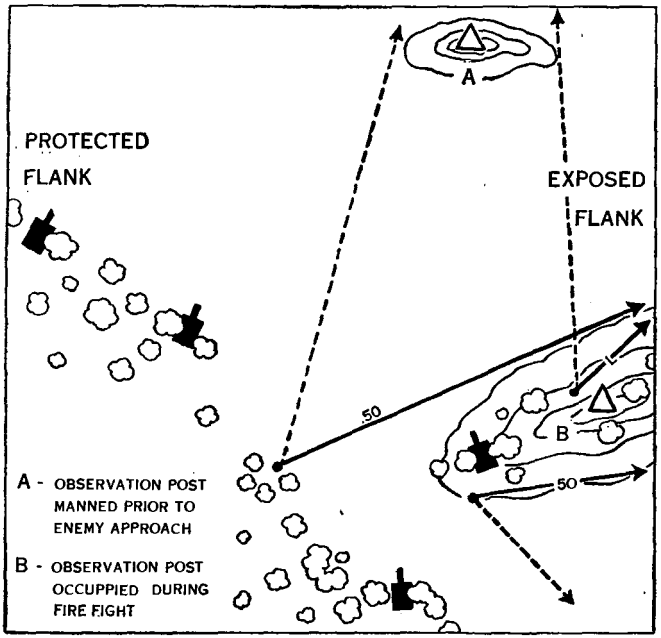


Figure 26. A security section position.

quickly. The positions are coordinated with those of the infantry antitank guns.

b. Defensive. In the defensive, the tank destroyer platoon may be used to deepen the antitank defense of the infantry and may be within an infantry company defense area. The platoon leader contacts the infantry commander and learns the plan of defense particularly as it applies to the location of the infantry antitank guns. He selects positions for his destroyer and coordinates these positions with the infantry commander. Generally, because of longer range, tank destroyers will be emplaced in rear of infantry antitank guns. The time of opening fire must be determined. This will usually be determined by the infantry commander. The tank destroyers, if fire is opened prematurely, may disclose the defensive position. Usually the infantry antitank guns will fire first. However, this is not a rule.

34. COORDINATION WITH OTHER TANK DESTROYERS. a. Close coordination between tank destroyer units is essential. The battalion commander coordinates the plans of the gun companies and each company commander coordinates the plans and actions of his three platoons. However, the details of obtaining cooperation and coordination must be mutually arranged for by the commanders of adjacent platoons.

b. Wherever the terrain permits, each gun is sited so that it has a field of fire of 360°. However, positions that afford cover and concealment frequently provide only limited sectors of fire. Guns that can be overrun by tanks approaching through an area outside their fields of fire must be protected by other guns. The platoon commander endeavors to site his own guns so that the platoon is self-protecting when he needs assistance, he requests and adjacent platoon to cover the dangerous area. Likewise, he gives assistance to adjacent platoons.

35. DELIBERATE OCCUPATION OF POSITION. a. Deliberate occupation of position is preceded by thorough reconnaissance. Key personnel are assembled for receipt of orders, preferably at a location which commands a view of the platoon area. The key word IDEALS serves as a check for the platoon commander's order; see FM 18-5 for type orders. The order includes

(1) **I** Information of the enemy and friendly troops.

(2) **D** Decision, mission, or general plan of employment of the platoon.

(3) **E** Employment (details) of the platoon—how it is to move from its position in readiness to the firing positions—routes to be used. Whether primary positions or nearby cover positions are to be occupied. Primary sectors of fire and frontages to be covered. The range at which fire is to be opened. Coordination with other units. General instructions as to displacement. Location of platoon OP.

(4) **A** Administrative details, such as location of vehicles other than destroyers, supply of extra ammunition.

(5) **L** Location of the platoon and company command posts.

(6) **S** SOI (signals), such as time for opening radio net or instructions as to radio silence.

b. The platoon occupies and organizes the position according to the platoon commander's order. The gun commanders

see that all available natural cover and concealment are used, and add artificial camouflage where needed. Guns are dug in if necessary and checked for maximum depression, boresighted, and working parts are cleaned and checked; range cards are prepared; maintenance of the destroyer is checked. Ammunition is inspected as to serviceability, type to be used, and availability. All obstacles which might interfere with sighting or traversing the guns are removed. Measures to reduce the effect of muzzle blasts are taken, and track marks are erased or covered with brush. At the first opportunity, the gun commander inspects the gun position from the enemy point of view, both with respect to its fields of fire and for its concealment and cover.

c. Preparations are made for firing on probable tank approaches in the event the gun positions are covered by smoke. These preparations include the placing of aiming stakes, recording quadrant elevations and azimuth indicator readings on range cards, and posting forward observers. In such a situation, the destroyers should move to alternate positions, if practicable.

d. When cover positions are occupied during daylight and enemy ground or air observation commands the combat area, preparation of firing positions is held to the bare minimum until dark, at which time work on the positions, including camouflage, is completed.

e. Usually in a deliberate occupation, it is possible to prepare completely the principal alternate and supplementary gun positions and routes thereto. Range cards are made for all positions.

f. While gun positions are being prepared and organized, the platoon commander checks each gun for its field of fire, coverage of its sector, dead space, mutual support, interlocking fire, and the work of the crews.

g. The security section occupies its assigned positions while the destroyer positions are being prepared. Establishment of observation posts has first priority. Fox holes are dug and weapons are emplaced. (See FM 5–15.)

h. When available, mines are laid.

i. Plans are prepared for night combat. (See par. 13.)

j. When the platoon is in position, the platoon commander sends a sketch or overlay of the disposition of his platoon to the company commander.

k. When the gun positions are finally prepared, the platoon commander makes a final check to see that all of his instructions have been carried out. He sees that all crew members know the situation, platoon mission, and the location of the platoon CP, and that they are ready for combat. He also checks with adjacent platoons and other nearby friendly troops to insure mutual support and to see that all fires are coordinated against both tanks and infantry.

l. A platoon can always improve its position, even after several days' work. Therefore, the platoon commander continuously inspects to find ways of improvement.

m. Gun commanders and gunners should use the catechism in FM 18–15 as a guide to check on their duties in the occupation and organization of positions. Copies of the gun commander's and gunner's catechism should be posted in each destroyer.

36. CHECK LIST FOR OCCUPATION OF POSITION.

a. Reconnaissance and selection.

(1) Routes from position in readiness to combat area.

(2) Avoidance of movements that disclose actions to the enemy.

(3) Enemy capabilities on this terrain.

(4) Study of positions from enemy viewpoint.

(5) Advantages and disadvantages of all available positions.

b. Occupation and organization.

(1) Avoidance of movements that disclose actions and positions to the enemy.

(2) Security during occupation of position.

(3) Destroyer and machine-gun positions.

(*a*) Primary sectors of fire.

(*b*) Coverage of dead space.

(*c*) Mutual support.

(*d*) Provisions for prearranged machine-gun fires during darkness or when covered by smoke. (See FM 23–55 and 23–65.)

(*e*) Boresighting (destroyers only).

(*f*) Range cards.

(*g*) Alternate and supplementary positions.

(*h*) Routes to alternate and supplementary positions.

(*i*) Range and conditions when fire is to be opened.
(*j*) Cover, concealment, and camouflage (from enemy's point of view when possible).

c. Observation.

(1) OP covering approaches to platoon area.
(2) Forward OP when fields of fire are short.
(3) Air sentinels.
(4) Observer at each destroyer.
(5) Observer with each machine-gun crew.

d. General.

(1) Ammunition, fuel, water, rations.
(2) Liaison with adjacent and nearby troops.
(3) Information of enemy and friendly situation to entire platoon.
(4) Disposition of vehicles.
(5) Preparation for combat at night.
(6) Plans for anticipated or probable future actions.

37. HASTY OCCUPATION OF POSITIONS. a. There will be times when sudden meeting engagements or changes in the situation will cause the platoon to move rapidly into a fighting position on unreconnoitered ground. Hasty occupation of position is facilitated by well practiced combat, or extended order, formations. (See par. 7 and FM 18–15.) For example, a position could be occupied quickly from a wedge formation by the command FIRST SECTION ON HILL TO LEFT, REAR SECTION AND SECURITY IN WOODS TO RIGHT. Training in such maneuvers is essential for smooth performance.

b. There will be times when a platoon hastily occupies a a position and finds that the enemy does not appear at once. At such times, every minute is valuable for the improvement of the position. Leaders energetically execute as many of the duties of deliberate occupation as time permits. Better primary positions can often be found and should be occupied without hesitation if time permits. Alternate and possibly supplementary positions are selected. Coordination is effected between guns, between elements of the security section, and also with adjacent units. Camouflage is improved.

c. To avoid being ruined by a surprise attack during a movement, the platoon commander should continuously study the terrain. He should ask himself, "What would I do if I should

suddenly be attacked here?" Successive answers to this question will enable him to make a decision which may mean the difference between victory and defeat.

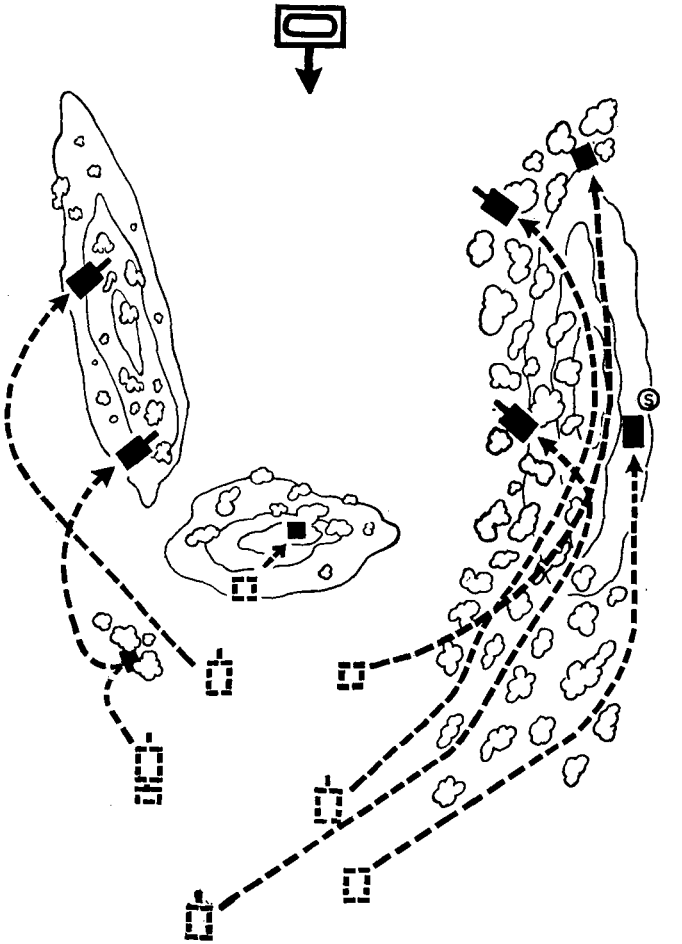


Figure 27. Rapid maneuver into position.

SECTION VII

THE FIRE FIGHT

38. **PSYCHOLOGICAL FACTORS.** a. **The test.** All training leads to the pay-off—the fire fight. It is in this phase that the platoon passes or fails the final test. Success is largely dependent upon the men's confidence in themselves and in their leaders. To obtain this confidence, all leaders—platoon commander and noncommissioned officers—must be steadfast and self-composed at all times; they must be competent to make sound decisions based upon tactical and technical knowledge.

b. **Avoidance of nervousness.** A soldier's nervousness before combat is similar to an athlete's discomfort before a contest. Concentration on accomplishing assigned tasks will have a tendency to so occupy the mind that personal danger ceases to be important. Therefore, to avoid fear and nervousness, *work* and *fight.*

c. **Initiative.** When the situation is different from that anticipated, when the unexpected occurs, a poor leader is likely to do nothing. On the other hand, the real leader quickly studies the conditions, considers possible ways of improving the situation, arrives at a decision, and takes energetic measures to accomplish his mission. A good leader never quits nor does he passively await help. In the absence of orders, he finds a way of carrying on the fight. To fight skillfully and effectively without detailed orders during the confusion of battle shows real initiative.

39. **HOSTILE FOOT TROOPS.** Prior to the fire fight, final precautions must be taken. The enemy capability of leading his tank attack with infantry must be considered. He will do this if he suspects a strong antitank defense. The four destroyers employing high explosive with ricochet fire and the security section machine guns, assisted by the few riflemen available, are effective against moderate infantry attacks.

40. **COUNTERRECONNAISSANCE.** a. It is essential that no movement occur that will disclose the gun positions. Tank commanders usually reconnoiter on foot when planning their attack. When friendly units are not covering the platoon area, an observer should be placed well forward to report all enemy reconnaissance activity.

b. Should enemy reconnaissance consist of lightly armored vehicles, the caliber .50 machine guns only should be used. The large guns will fire on these elements only as a last resort to prevent a penetration of the position. Should the positions of any destroyers or machine guns be disclosed, they should be moved to alternate positions when the movement can be made undetected by the enemy. If daytime displacements are not practical, disclosed guns should move when night comes, or under cover of smoke.

41. **DECEPTION.** a. Plans for deception are made prior to the fire fight. The virtual annihilation of the enemy may be planned when an enemy tank attack will be canalized by the terrain, provided the fields of fire completely cover the approach. The platoon commander must issue strict orders to all gun commanders to open fire only as directed. Then, with guns sited in depth for flanking fire, the prearranged signal for opening fire should be given only when the enemy tanks present the most effective target.

b. (1) By skillful planning the opening of fire, hostile tanks may be lead into traps. This planning is particularly important when the tank attack will not be canalized by obstacles. One effective method is to place one gun so that when it opens fire, the hostile tanks may maneuver against its flank. Other guns are placed to open fire on these tanks at an opportune time.

(2) When infantry antitank guns are nearby, the platoon may withhold its fire until the tank attack has been committed against these infantry guns. Or the infantry guns may remain silent until the tanks concentrate on the destroyers. Close coordination between infantry and tank destroyers is necessary.

(3) Deception may be based upon the use of fougasses to simulate the fire of dummy guns. (See FM 18–24 (when published).)

(4) The platoon commander may permit tanks to maneuver against rear guns before opening fire with his forward guns. For example, in the situation illustrated in figure 25, guns (2) and (4) may open fire first, while guns (1) and (3) withhold their fire in order to later deliver the knockout blow.

(5) Actions of the enemy may provide an opportunity for deception. In one case, the enemy's nightly efforts to clear a gap through a mine field apparently escaped detection. Actually, the enemy's actions were discovered; several guns were moved to hidden positions near the mine field; the enemy tanks were destroyed when they came through the gap.

c. By studying conditions, by remaining calm, and by the use of imagination, a platoon commander may find other ways of obtaining deception.

42. **TANK APPROACH.** When hostile tanks are discovered by the observer, he will report their number, location, speed, and direction of movement. If destroyers are in cover positions, the platoon commander will order them to their primary positions. He should allow sufficient time for the guns to be prepared for action and for all movement to be stopped and dust to settle before the tanks appear within the field of fire. If concealment is not possible, movement will be executed at the last possible moment to prevent premature disclosure of firing positions.

43. **OPENING FIRE.** a. *In a defensive position it is essential that tank destroyers do not disclose the position by premature opening of fire.* Therefore, the tank destroyer commander will carefully coordinate his fire plan with that of the unit he is supporting and will call upon the supported unit commander for instructions as to what ranges or under what conditions fire will be opened.

b. Upon the appearance of tanks within effective range, or the range at which fire is to be opened (see a above), fire is usually delivered in the following order of priority: tanks threatening the gun positions; covering tanks (halted); and tanks nearest cover. Effective range varies with visibility, and will normally be 1,000 yards or less.

c. The platoon commander should control the time of opening fire unless tanks appear closer than 600 yards. Other factors which control the time of opening fire are number of

hostile vehicles which are exposed, the degree of concealment afforded the destroyers, proximity of cover to which the target might resort, and the tactical plan which the platoon leader has in mind. The platoon commander commits only the number of guns required to deal with the number of tanks seen. Thus, in his order for opening fire, he may assign one gun the covering tanks and another the maneuvering tanks. As more tanks appear, he will commit more guns to the fire fight.

d. In case large numbers of tanks appear suddenly, necessitating that all guns open fire, a prearranged plan should be followed. One suggested method is for the right gun to engage the left flank of the formation, the left gun to engage the right flank, the right center gun to engage the left center tanks, and the left center gun the right center tanks. This provides cross-fire and flanking fire to a greater extent than if each gun engaged tanks directly to its front.

44. **CONTROL.** During an engagement the platoon commander should place himself in a position from which he can observe his platoon sector and all his destroyers. He does not remain in one of the destroyers. By the use of radio he can communicate with and control his entire platoon. The radio may be left in the vehicle if it is possible to conceal the ¼-ton truck. The platoon sergeant should act as an executive to function in the platoon commander's absence.

45. **FORWARD DISPLACEMENT.** a. In certain situations, the terrain and tactics employed by the enemy may make a forward displacement possible and permit the platoon to gain an advantage. After an enemy attack bogs down, he may withdraw behind a terrain feature for several hours to conduct additional reconnaissance and prepare new plans.

b. After sufficient reconnaissance has been made to indicate definitely that no ambush is laid, and that destroyers can move by a covered route to new positions, the platoon commander may move forward while the destroyers remain in their assigned positions. Authority must be obtained from the company commander before leaving the area assigned to the platoon. Before deciding on this move, however, the platoon commander must answer this question, "Can I move my platoon without detection and arrive in my new firing positions before the tanks attack?"

c. If the move can be made under these circumstances, permission should be obtained from the company commander and the platoon commander should then move his destroyers by section bounds, each section covering the advance of the other. Only when the platoon is completely covered by adjacent platoons may it move out as a unit. The new positions should be located to permit the platoon to engage the tanks with fire in flank or rear.

46. **MOVEMENTS AND WITHDRAWALS.** a. Movements to alternate and supplementary positions and withdrawals are facilitated by the use of smoke. Smoke laid on the enemy is more effective than a screen placed immediately in front of the destroyers. Therefore, when smoke shells are available, the enemy positions may be smoked.

b. When the soil is very dry and loose, and when there is a light wind, high explosive ammunition will raise an effective dust cloud in front of the enemy. Always lay the smoke or dust screen up wind from the enemy target. When the enemy cannot be screened, platoon movements may be concealed with smoke candles.

c. During large scale actions, the platoon should not use smoke indiscriminately. Smoke placed on the enemy may obscure the tanks from the observed fire of other units. Candle smoke used to hide a platoon movement may blind adjacent troops. Therefore, the platoon commander will order the use of smoke only when its use is coordinated or when it is apparent that smoke will not interfere with the actions of other troops.

d. The tank destroyer platoon will withdraw from its assigned area of responsibility *only* on orders from higher authority. Before a withdrawal is started, all friendly units in the vicinity should be informed of the intention and the plan for its execution. In the event such orders are received while in contact with the enemy or when a sudden enemy armored thrust is a capability, the maneuver will be executed by leapfrogging sections or platoons to the rear. A platoon operating independently will withdraw one section to the next terrain feature within range while the other section covers its withdrawal. Then, when in position and ready to fire, the section in rear covers the withdrawal of the forward section. If this maneuver is executed under company control, one platoon may

cover the withdrawal of the other two platoons in a similar manner. Complete disengagement should be attempted only at night and then with strong rear and flank guards.

47. **REORGANIZATION.** a. Immediately following each phase of the fire fight, the platoon leader reorganizes his unit, usually without moving from the platoon area. He takes positive steps to eliminate the confusion inherent to battle and, in the absence of instructions to the contrary, prepares his platoon for further fighting in the same area by the occupation of alternate positions. After determining that the platoon security, particularly observation, is still functioning so that reorganization can proceed in safety, he takes an inventory of the effects of the fire fight upon the platoon. Destroyer commanders and the security sergeant report their situation to him as regards—

(1) Casualties.
(2) Ammunition supply.
(3) Fuel situation.
(4) Damage to vehicles and weapons.

b. The platoon leader sends a consolidated report together with the enemy situation to the company commander. He then provides for—

(1) First aid and the evacuation of the wounded.
(2) Readjustments due to casualties.
(3) Ammunition and fuel replenishment.
(4) Disposition of damaged vehicles.

c. Generally the *wounded* are given immediate first aid and those who must be evacuated are moved to a covered location on the axis of evacuation a short distance to the rear, where they can wait for a forward area ambulance or other transportation. For details, see FM 18–5 and 21–11.

d. *Readjustments due to casualties* are made so that each destroyer has sufficient personnel for operation and none of the areas assigned to the security section is left uncovered. The platoon leader makes adjustments in sectors of fire or gun positions as necessitated by guns being put out of action.

e. The platoon commander's report of *ammunition supply* automatically calls for supply from company headquarters. In the meantime, the platoon commander can improve the status of ammunition by equalizing the amount between destroyers

and by removing ammunition from disabled vehicles before they are sent to the rear.

f. *Damaged vehicles* incapable of fighting or moving are usually towed to a covered position in rear where they await the company recovery vehicle. In cases where the fire power of every destroyer will be urgently needed, disabled destroyers which are still capable of firing but which cannot move under their own power should be emplaced hull down in firing position.

g. If alternate positions were not occupied during the fire fight, movement to them usually should be made. In particular, all guns that disclosed their positions by fire or movement must be moved to alternate positions. After these are occupied, new alternate positions are selected.

h. During a reorganization, time and the situation permitting, the platoon leader visits each gun position and the security section. He can thus best inform himself of the details of the condition of the platoon and needs of the men; his presence also will have a stabilizing effect upon the members of the platoon. As soon as the platoon reorganization is under way, the platoon commander should contact adjacent unit commanders in order to coordinate plans.

i. Noncommissioned officers are trained to report the situation in their units immediately after the fire fight and to proceed with the reorganization of their units on their own initiative.

j. Constructive activity and purposeful action during reorganization aid in relieving nervous tension. This activity reduces to a minimum the unsettling effects of exultation due to success or of depression caused by casualties in the fire fight.

k. Reorganization, like everything else, must be practiced. Its execution cannot depend on battlefield intuition. In unit training and on maneuvers, casualties of key personnel and of matériel should be simulated. Reorganization training under disorganized and difficult conditions should be stressed.

SECTION VIII

SEPARATE MISSIONS

48. **GENERAL.** a. The platoon may be assigned missions which call for semi-independent action. Examples of such missions are:

(1) Advance guard.
(2) Flank guard.
(3) Rear guard.
(4) Outpost.

b. The fundamental types of formations and methods of combat are generally the same, regardless of whether the platoon is alone or operating with other troops. The platoon is more vulnerable when alone and therefore security measures must be more complete.

c. Movements of the platoon are best executed by bounds when alone in the vicinity of the enemy. Such movements, skillfully executed, will lessen, and possibly obviate, casualties caused by an enemy in ambush.

d. When the troops in rear of the platoon must move rapidly to arrive at their destination on time, the platoon cannot take the time required for movement by bounds. In such situations, the platoon protects itself from ambush by extended forward and lateral dispersion.

49. **ADVANCE GUARD.** a. Two suitable advance guard formations are shown in figure 4. The formation illustrated in figure 29 also can be used.

b. A small advance guard usually consists of a *point* and an *advance party.* For example, when a platoon is an advance guard for its company, a ¼-ton truck or a destroyer may be the point while the rest of the platoon is the *advance party.* The point is not necessarily one vehicle; two or more in column, line, or other formation may be used.

c. Larger advance guards have a *support.* For example, when the company is the advance guard for the battalion, a

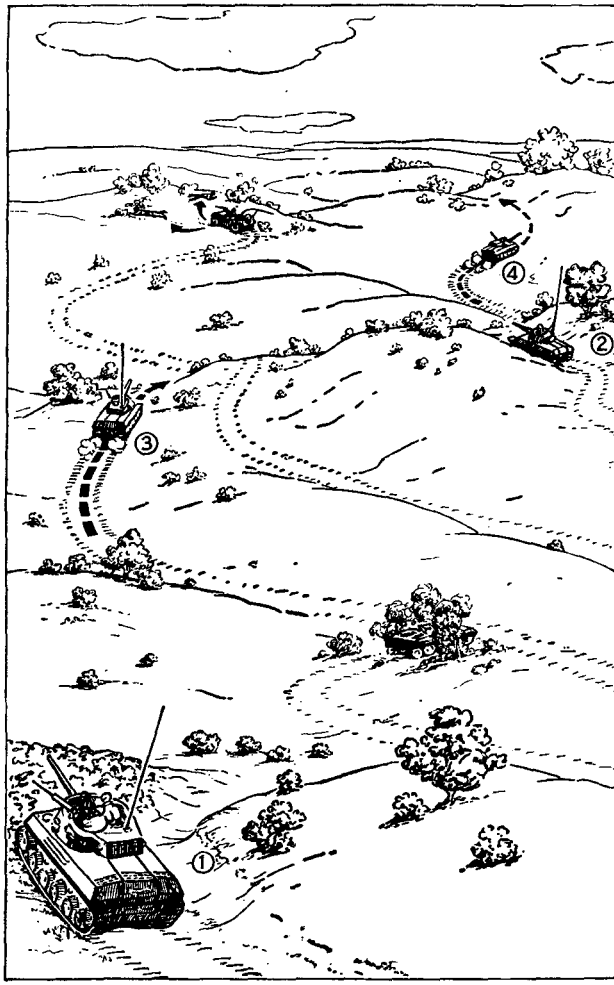


Figure 28. Movement by bounds. Destroyers (1) and (2) are halted in firing positions while destroyers (3) and (4) are moving to the next crest after this crest has been reconnoitered by the crew of the ¼-ton truck.

platoon will usually form the advance party and the point with the rest of the company constituting the support.

d. Advance guards are deployed in width as well as extended in column when the terrain permits.

e. The main mission of a tank destroyer advance guard is to keep the *main body* from being surprised. Another mission is to keep small bodies of the enemy from delaying the march of the main body. These two missions are accomplished by—

(1) Investigation of possible hidden enemy position within direct fire range.

(2) Attacking any enemy encountered, to drive him away if he is weak or to make him diclose his positions if he is strong.

50. PLATOON AS PART OF AN INFANTRY ADVANCE GUARD. a. The platoon may be part of an advance guard composed principally of infantry. Under such conditions, the conduct and actions of the platoon will depend on the mission assigned by the advance guard commander. The platoon may be part of the support. The location in the column and the method of advance—whether by bounds, in column on the road, or in open formation—will be as ordered by the advance guard commander.

b. Because of the difference in rates of march and the inadvisability of mixing tracked vehicles with marching foot troops, the platoon normally will not march within the column of a dismounted infantry advance guard. It is better to proceed by bounds on the down wind side of the infantry.

51. PURSUIT. a. Tank destroyers may be part of a pursuing force. As such they operate in close coordination with other troops. Their primary mission is to destroy enemy armor impeding the advance. They do not chase tanks. They may perform secondary missions when such operations will not interfere with their primary mission.

b. In pursuit the tank destroyer platoon must be prepared to move quickly to firing positions. Little time will be available for thorough reconnaissance. Frequently, approximate positions will be selected from the map and final selection hastily made when the area is reached. The security detachment precedes the platoon.

52. **FLANK GUARD.** a. The mission of a flank guard is similar to that of an advance guard, differing only in that it protects a marching column against flank attacks.

b. There are two ways in which flank guards provide protection:

(1) Marching on parallel routes.

(2) Movement by bounds or leap-frogging to cover successive approaches by which the enemy can interfere with the main body.

c. When the ground to a flank is open so that enemy tanks can approach at any place, a flank guard marches parallel to the main body. Any dispersed formation, except line, is suitable.

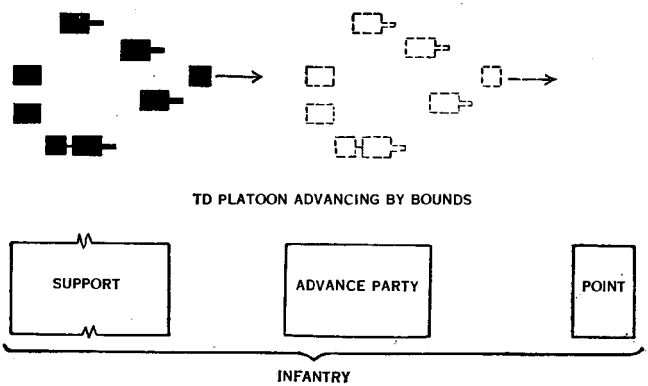


Figure 29. Platoon with infantry advance guard.

d. Often the terrain is such that the enemy can move rapidly against the main body only by way of various approaches along the route of march. Then a flank guard should be divided. One element covers an approach while the main body is passing. At the same time, the other element is moving to the next approach. Occupation of high ground for observation is obtained wherever possible.

e. Flank guard movements often must be made rapidly over rough terrain—so rapidly that wheeled vehicles cannot keep up with the destroyers. In such situations, the destroyers only are sent to the flanks; the rest of the platoon remains with the main body.

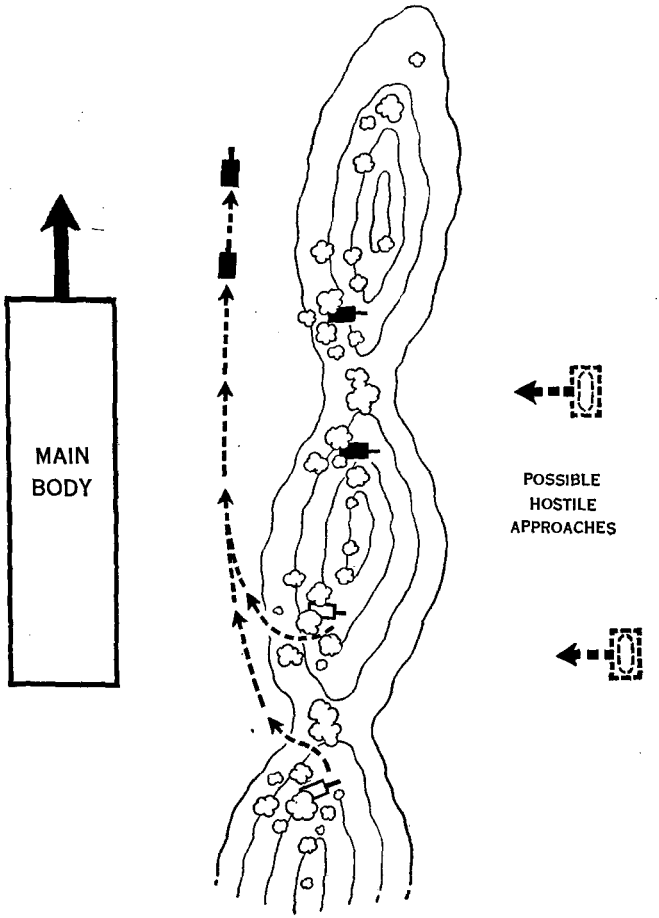


Figure 30. Sections leap-frogging from position to position in order to cover possible hostile approaches.

53. **REAR GUARD.** a. A rear guard formation is similar to a reversed advance guard. The last element is the *rear point.* The next to last element is the *rear party.*

b. During retrograde movements when there are no friendly troops between the tank destroyer unit and the enemy, the

rear guard will be large. In such situations, the platoon will fight a series of delaying actions from successive delaying positions. While the platoon, and possibly the company, holds the enemy at one delaying position, another platoon or company will be occupying another delaying position in the rear. The enemy will be held until a certain designated time or until he reaches a certain position; the platoon then will withdraw, passing through or around the unit in rear to occupy another delaying position.

c. A good delaying position is one which affords distant observation, long fields of fire and a covered route for withdrawal. Road blocks, mine fields, and other obstacles in the field of fire strengthen a delaying position. A delaying position is organized the same as any other platoon firing position except that depth may be sacrificed in order to provide long-range fields of fire for all guns.

d. Fire may be opened at long range to cause the enemy maximum delay. When the pursuing force is composed of armored units, smoke may be fired to good effect. Smoke blinds tanks and causes them to lose direction. It also silhouettes the tanks as they emerge from the smoked area and slows up the hostile attack. (See par. 46.)

e. Withdrawals are made on order from the company commander or at a certain specified time. The entire platoon should not move out at once; withdrawals should be by section or by individual guns. To coordinate withdrawals, close liaison is maintained with all nearby troops.

f. Ruses or tricks have great value. For example, one gun may remain silent and well concealed during the fire fight. After the rest of the platoon has withdrawn, this hidden gun may have the opportunity of destroying several enemy tanks. This will contribute materially to delaying the enemy by making him more cautious.

g. At least one vehicle of the platoon, preferably a ¼-ton, should be used to maintain contact with the enemy until the platoon is covered by other troops.

h. Gaps must be located in order to avoid mines and booby traps laid by other friendly troops during general withdrawals.

54. **OUTPOSTS.** **a.** A platoon may be detailed to establish a strong outpost covering an approach leading to a bivouac, position of readiness, or defensive position.

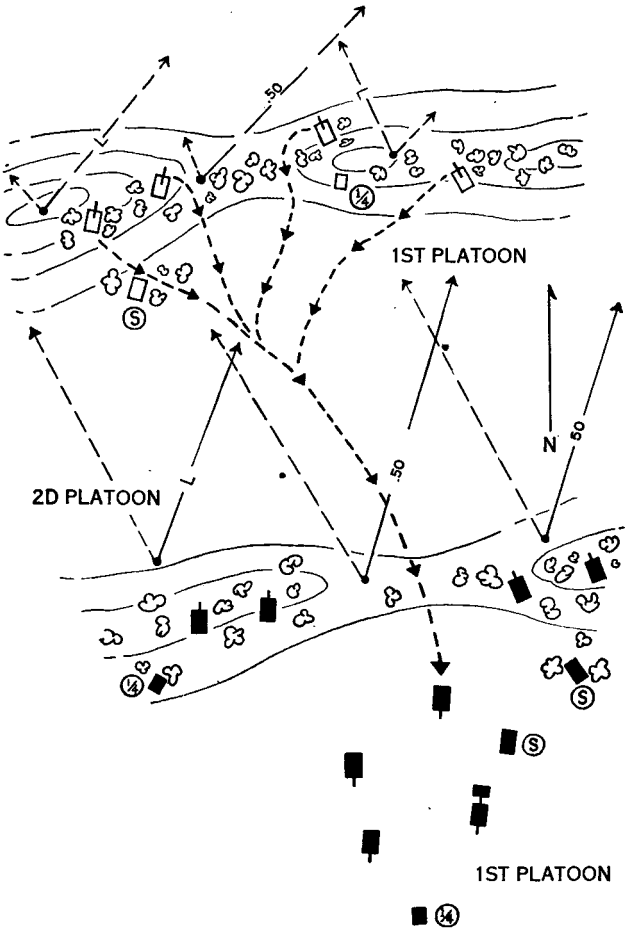


Figure 31. Platoon leap-frogging to rear. The 1st platoon has withdrawn from the north hill and has passed through the 2d platoon holding the south hill. In this instance, machine guns are placed on high ground for obtaining maximum delay by long range fire.

b. The factors that are covered by the key word FOCOL (par. 25) govern the selection of outpost positions. Observation is particularly important to prevent the outpost from being surprised.

c. Most approaches cannot be covered by day and by night from the same position. Previously selected night positions are occupied immediately after dark. (For a description of the factors to be considered in selecting night positions, see par. 13.) Just prior to dawn, daytime positions are reoccupied. Observation at night is provided by listening posts placed well forward; the approach of the enemy is signaled by prearranged flares, a series of shots, or other signals.

d. A schedule of reliefs must be arranged for rest and for feeding. Lack of use of such a schedule results in the men becoming unduly tired and failure to function properly in an emergency.

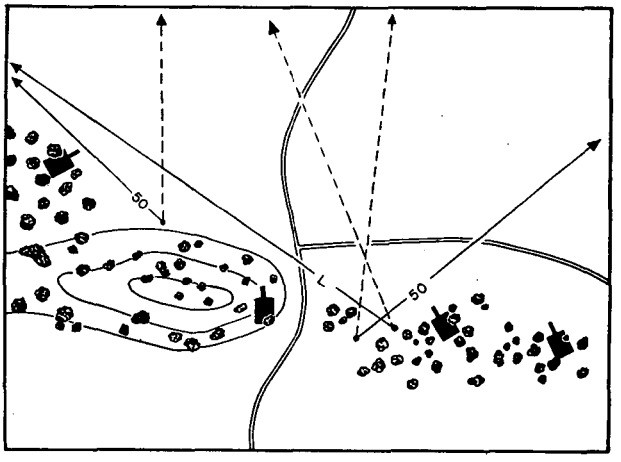


Figure 32. Day outpost position.

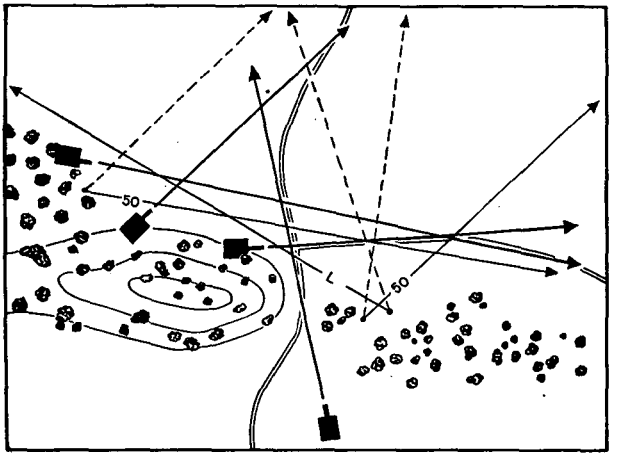


Figure 33. Night outpost position.

SECTION IX

SECONDARY MISSIONS

55. **GENERAL.** a. When the platoon engages tanks, it is employed on the tank destroyer *primary* mission. Other missions, such as augmenting artillery fires, direct fire against emplacements, and beach defense are *secondary* missions.

b. The platoon will be employed many times in the execution of secondary missions. These missions are described in subsequent paragraphs and in FM 18–5.

56. **REINFORCING ARTILLERY.** a. **Mission.** (1) tank destroyers acting as field artillery will perform the role traditionally filled by reinforcing artillery, that is, fire the scheduled or prearranged fires asked for by the reinforced artillery. The fire unit is the platoon which corresponds to the field artillery battery. Firing data are furnished the platoon commander by company headquarters. Wire communication between platoon and company normally will be used when executing indirect fire missions.

(2) The general location of the platoon position will be indicated by the company commander. The platoon commander also will be assigned targets and informed of the minimum ranges to be used. The mission of the platoon is to deliver effective fire on the prescribed targets.

b. **Reconnaissance and selection of positions.** Indirect fire positions will be selected by a consideration of the following:

(1) *Mission* (*range and direction of fire*). Guns must be located so that they can clear hills to the front (mask) and, at the same time, be able to fire at the minimum range which the mission requires. In addition, the position must be within range of the most distant assigned target.

(2) *Routes in and out.* Routes in and out of position should follow existing roads or trails. The creation of new paths or trails is likely to disclose the positions of the platoon and other troops. Movements should follow the existing

traffic plan. Routes are required for transporting supplies to the position. The platoon must be able to move out quickly, without interfering with other units, should its mission be changed.

(3) *Alternate and supplementary positions.* Hostile counter battery fires may necessitate movement to an alternate position. Supplementary direct fire positions should be selected for occupation in event of an enemy tank attack. The original reconnaissance should include the selection of such positions.

(4) *Soil.* Destroyers usually will be dug in; they should not be placed on hard, rocky soil where digging will be difficult.

(5) *Security.* The position selected should provide cover against enemy direct fire and observation of muzzle flashes. Natural foliage is sought for concealment. If the entire assigned area is in the open, select a position in which artificial camouflage will blend with the surroundings. Avoid prominent terrain features which might become enemy artillery registration points. Disperse destroyers in order to reduce losses from enemy artillery and air attack. Dispersion in depth will provide better all around defense in case of a surprise tank attack. Vehicles other than destroyers should be parked where enemy fire placed on the position will not hit them.

c. Occupation and organization of positions. (1) Indirect fire positions are occupied as ordered by higher authority. Occupation will usually take place during darkness; therefore, a guide should be provided to lead each destroyer to its position.

(2) Guns are laid, ready to fire. Positions are camouflaged and destroyer pits dug before daylight. The security section outposts the position, following the same general principles as for direct fire positions. Gas and air warning sentinels are posted. Energetic measures are taken at the earliest possible moment to conceal all evidences of the occupation of the position.

(3) Normal dispersion of the four guns of the platoon will require special measures for effective control by the platoon commander. This must be a matter of prior planning and ingenuity if no communication system is provided between the platoon commander and the guns. Some possible measures are:

(*a*) Megaphones.

(*b*) Sound-powered or battery telephones on a party line.

(*c*) Extensions to destroyer interphones brought as close as possible to the platoon commander, and commands relayed thereby.

(*d*) Vehicular radios when silence is not ordered and when channels and frequencies permit.

(4) Normally ammunition supply will not be the responsibility of the platoon commander. Tank destroyer basic ammunition loads remain intact. The battalion ammunition train, having dumped its organic load in the position area, will usually provide the ammunition for extended indirect fire missions. When the employment of tank destroyers in a secondary role cannot be anticipated sufficiently far in advance to permit this arrangement, higher headquarters may allot sufficient transportation from other sources.

d. Delivery of fire. (1) The platoon leader is responsible for the fire of his platoon. To obtain accurate prearranged fires, the artillery will provide target area survey. Position area survey will be tied into convenient place marks, these place marks being established by the artillery. The field artillery will execute fire direction by designating targets, time of firing, and number of rounds to be fired. Data for these fires will be computed by company headquarters; these data may reach the platoon in the form of a prearranged data card. Accurate delivery of fires is the responsibility of the platoon commander.

(2) On occasion, the platoon may deliver observed fires based on data received from the artillery, or on sensings received from observers using forward observer methods.

(3) The platoon commander may be ordered to use his platoon for the delivery of indirect fire against targets of opportunity, adjusting and conducting fire from an observation post using forward observer methods. He provides his own observer and his own executive at the gun positions—himself or a qualified noncommissioned officer—and his own radio communication.

(4) For the technique of conducting indirect fire, see FM 18–30 (when published).

57. ROVING BATTERY. a. Mission. When directed by higher headquarters, the platoon may be employed as a roving battery of field artillery. When so employed, the platoon should be placed in defiladed positions, usually well forward. It engages targets by simple indirect-fire methods and

displaces by covered routes to previously selected alternate positions with sufficient frequency to avoid hostile counterbattery fire. Thus the impression is created that many guns are being employed. Missions usually will be harassing fires and the engagement of targets of opportunity. Within the limits of general instructions from higher headquarters, the platoon commander will engage with fire all enemy targets observed and may displace to alternate positions when the situation requires.

b. Selection and occupation of positions. Considerations governing the selection and occupation of positions are generally the same as described in paragraph 56 except that greater secrecy must be achieved in the occupation of the positions because of their closer proximity to the enemy. Although the time in each position will not ordinarily permit or require complete organization of the positions every advantage should be taken of cover, concealment, and camouflage.

c. Conduct of fire. Conduct of fire for the platoon is the responsibility of the platoon commander. The platoon commander himself, or a selected noncommissioned officer, occupies a forward observation post and observes and conducts fire by forward observation methods. Radio communication is used between the observation post and the guns. Sensings from the forward observer are converted to fire commands at the guns, and fire is quickly brought to bear on targets of opportunity. For the general technique of forward observer methods, conversion of sensings to fire commands, and methods of adjustment and attack of targets, see FM 18–30 (when published).

d. Coordination. The use of tank destroyer platoons as roving batteries requires close coordination with the infantry. The platoon commander must be fully aware of the situation in his sector of fire, of the location of forward infantry units and their scheme of maneuver or plan of defense. Measures for such coordination will usually be indicated by the higher headquarters. Coordination may be effected by the platoon leader or forward observer directly with the infantry, or through the field artillery unit supervising the use of the tank destroyers as roving batteries.

e. Ammunition. Organic platoon ammunition loads should remain intact. Ammunition for indirect fire missions is supplied by the headquarters ordering the missions. The

platoon ammunition vehicle, augmented by vehicles from the tank destroyer company or battalion, and by vehicles of the platoon security section, may be used to assist in ammunition supply. Ammunition resupply of roving batteries will normally be accomplished at night because of the forward location of positions.

58. DIRECT FIRE, SECONDARY MISSIONS. These are covered in paragraph 33. FM 17–25 contains a description of assault gun actions that, in part, is applicable to the self-propelled tank destroyer platoon. The platoon commander should use FM 17–25 as a guide when instructing the platoon since it amplifies certain subjects that are discussed briefly in this manual.

59. AUGMENTING FIRE POWER OF ARMORED UNITS. When attached to an armored unit, self-propelled tank destroyers usually occupy successive positions in readiness during an advance, being prepared to execute their primary mission. However, when the enemy is incapable of executing an armored counterattack from a flank, tank destroyers may follow one of the leading tank or infantry battalions. Movements are made by bounds from the cover of one terrain feature to the next. Gun positions are reconnoitered and selected at each halt. When the friendly units ahead meet resistance from enemy tanks or antitank guns, the platoon moves into firing position. Wherever possible, hull defiladed positions are used. The movement into position will be covered by the fire of friendly weapons and usually by the dust and smoke of battle. Once in position, the platoon will form part of a base of fire in support of the attack.

60. DEFENSE OF BEACHES. a. Tank destroyer platoons assigned to defense of beaches will comprise a part of a coordinated system of defense involving combined arms. Positions, specific missions, and defense measures will be directed by the local commander.

b. Platoons may occupy firing positions, prepared to move rapidly to other positions upon orders, or may be held in readiness for the occupation of any one of several previously selected positions. Routes are carefully reconnoitered and the

platoon should practice day and night movements to assigned positions.

c. Alternate, supplementary, and dummy positions are selected and prepared.

d. Guns should be sited in pairs. Usually they should be near water level in order to take maximum advantage of their flat trajectories; the desirability of low positions frequently will

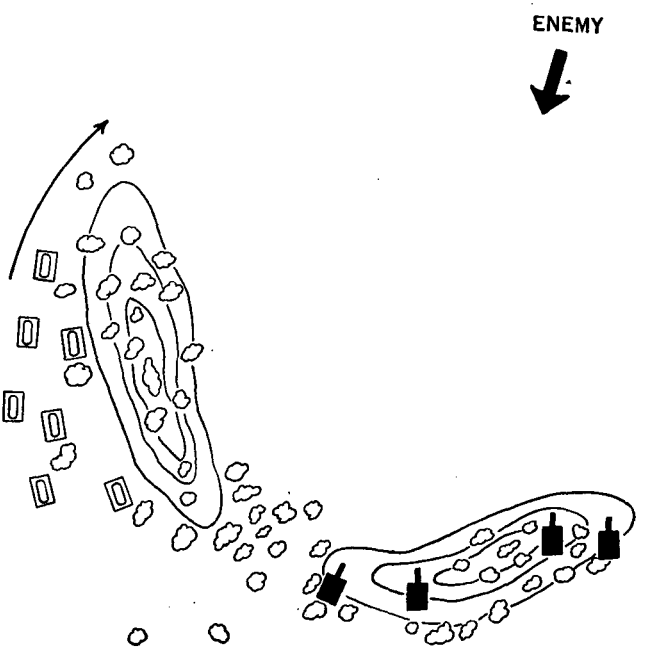


Figure 34. Destroyers forming a base of fire.

cause the gun positions to be close to the beach. Low positions are particularly effective for fire against waterborne targets because "shorts" may ricochet into the target. Because landings are often preceded by intensive naval bombardments, cover positions well back of the beach usually are occupied initially when the terrain permits. Movement to firing positions is made when the amphibious force approaches the beach causing the naval gunfire to lift.

e. Security sections are located to assist in observation, to place machine-gun fire on the landing craft, and to destroy enemy troops gaining the beaches.

f. The platoon might be assigned a mission of destroying enemy troops who have effected a landing on one or more

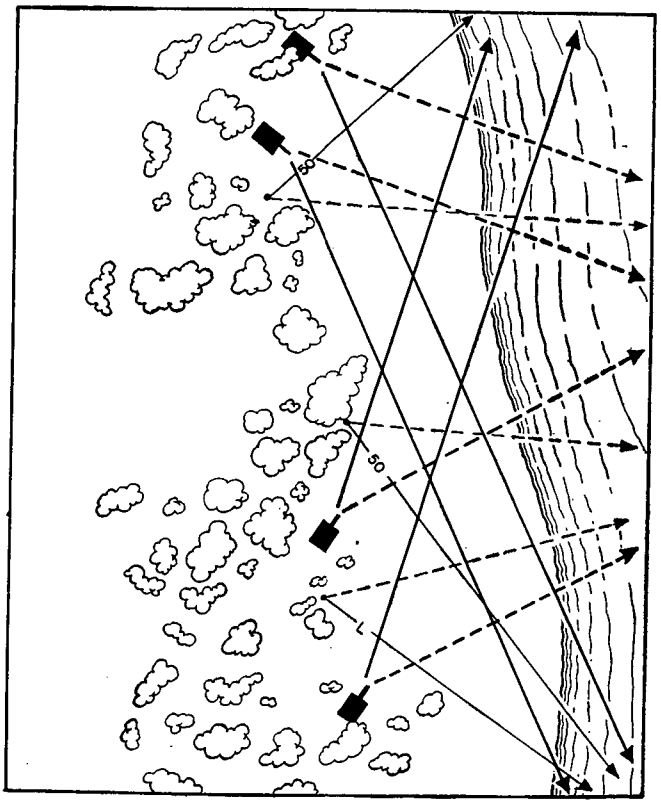


Figure 35. Beach defense primary positions.

beaches. This mission can be accomplished by either direct or indirect fire from previously selected positions well back from the assigned beach or beaches. Range cards for direct fire and data for indirect fire are prepared in advance.

61. ASSAULT OF FORTIFIED POSITIONS (FM 31–50).

a. The successful assault of a fortified position held by a determined enemy requires the coordinated actions of a force of different arms. Field artillery fire will be placed on the area to be assaulted to destroy or pin down the enemy, to make shell holes that afford cover for the advancing infantry and engineers, to destroy barbed wire obstacles and to uncover the camouflage on fortifications. Direct fire will be directed at embrasures to prevent return fire from the fortifications; high velocity guns are used to destroy the concrete and steel emplacements. Infantry and engineers will advance under cover of these fires to capture the enemy fortifications.

b. Tank destroyer guns are well adapted for the destruction of permanent fortifications.

c. Assault plans will vary with different situations. The following plan and actions can be used as a guide:

(1) The platoon is assigned one or two primary targets and an area from which to engage these targets. Secondary targets also will be assigned. These secondary targets will have been assigned primarily to another platoon. Each platoon may shift to the aid of the other after its primary mission has been accomplished.

(2) Since the position area will be 1,000 to 1,500 yards from the fortification, reconnaissance will be difficult. The platoon commander should reconnoiter the platoon area before the assault; during or after his reconnaissance, he contacts commanders of nearby troops in order to arrange for coordination. He carefully determines the ranges from each position to each assigned target. After the platoon commander has completed his plans, the situation and mission are explained to the platoon sergeant and gun commanders. If possible, they are taken to the position area where the gun positions and targets are pointed out to them. The plans are then explained to all of the gun crews. A terrain plot picturing the ground over which the action will be fought should be used during the explanation, especially when rehearsals are not held. (See f below.)

(3) Where practicable, personnel of the platoon prepare dug-in emplacements for the four destroyers under cover of darkness, fog, or smoke. The digging may require 2 or 3 nights. During the digging-in process, positions should be

camouflaged to prevent them being located by aerial or ground observation.

(4) The destroyers usually are emplaced and camouflaged before dawn of the day of the attack. The security section vehicles remain in a rear area unless they are needed to transport extra ammunition. At a prearranged time shortly after dawn, fire will be opened against the designated targets. Since both the platoon and the enemy positions will be covered with dust or smoke or both, provisions should be made to continue accurate fire after observation from the gun is obscured.

d. All or part of the platoon may be called upon to lay smoke on the enemy at certain specified times and locations. The platoon will not use smoke unless directed because the necessity for observation requires coordination of the use of this agency.

e. When the situation prevents the guns from being dug-in within range of the assigned targets, the destroyers closely follow the leading infantry elements until they arrive at predetermined firing positions. They should occupy positions behind the best cover available to engage their targets. Reconnaissance by the platoon commander usually will be limited to a map study augmented by observation from a vantage point overlooking the platoon's assigned area. Explanation of the situation and planned action should be presented to all personnel on a carefully modeled terrain plot.

f. The success of an assault depends largely upon careful plannning and the coordinated actions of all participating troops. When practicable, assaults are rehearsed over rear area terrain which closely resembles the area to be assaulted. In the absence of a rehearsal, the platoon commander must learn the parts to be played by the other troops in his vicinity, as well as his own part, in order that the actions of his platoon will be completely coordinated with the general plan. He especially must know all prearranged signals for lifting or ceasing fire.

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