

CHAPTER 2

Fighting Positions

GENERAL

When defending, or when temporarily halted while making an attack, you must seek cover from fire and concealment from observation. Cover and concealment are best provided by some type of fighting position. This may be an existing hole, a hastily dug prone shelter, or a well-prepared position with overhead cover. The time available for preparation determines how well you build your position.

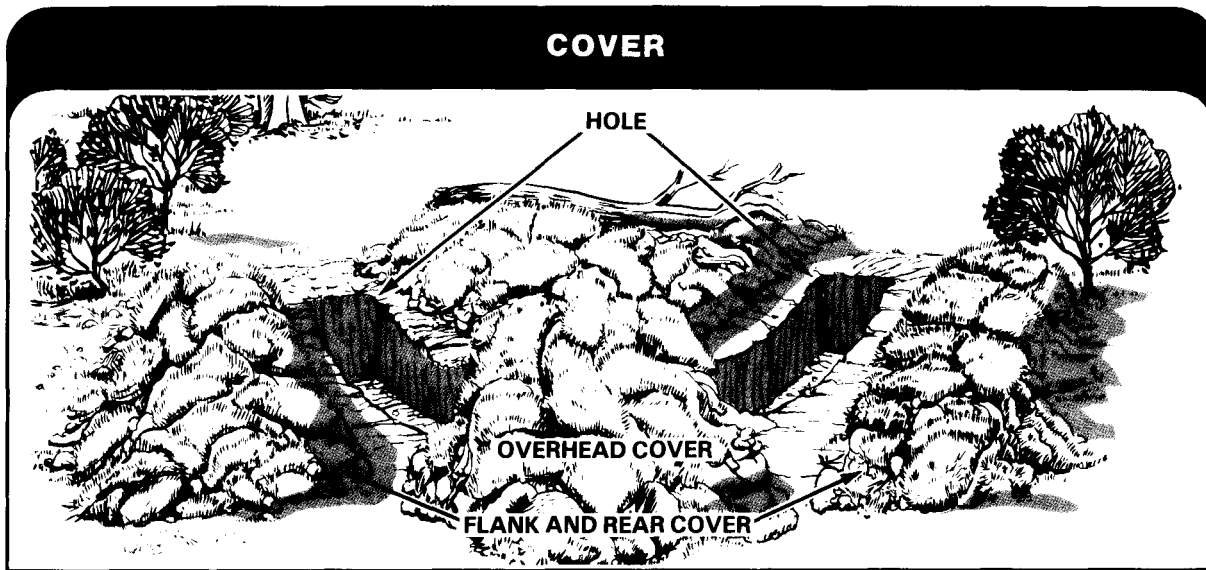
Your fighting position **must**:

- **Allow you to fire.**
- **Protect you from observation and direct and indirect fire.**

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COVER

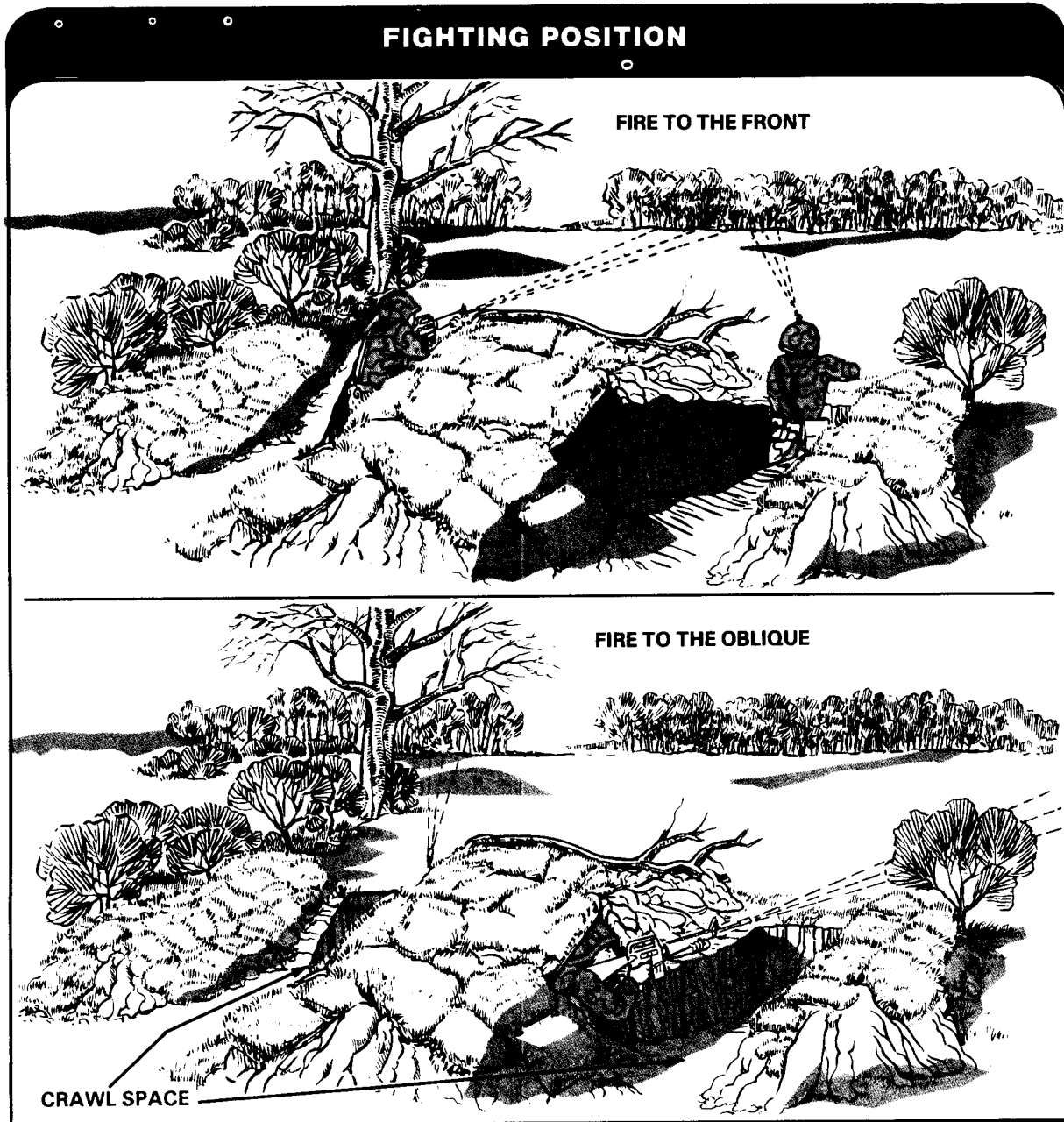
The cover of your fighting position must be strong enough to protect you from small arms fire, indirect fire fragments, and the blast wave of nuclear explosions. The position should have frontal cover to give protection from small arms fire from the front. Natural frontal cover (trees, rocks, logs, and rubble) is best, because it is hard for the enemy to detect a position that is concealed by natural cover. If natural cover is not available, use the dirt taken from the hole you dig to build additional cover. The cover can be improved by putting the dirt in sandbags and then wetting them.



Frontal cover must be:

- Thick enough (at least 46 cm [18 in] of dirt) to stop small arms fire.
- High enough to protect your head when you fire from behind the cover.
- Far enough in front of the hole to allow room for elbow holes and sector stakes so that you can fire to the oblique.
- Long enough to give you cover and hide the muzzle blast of your rifle when you fire to the oblique.

Your fighting position should be built so that, when you come under direct fire from your front, you can move behind the frontal cover for protection and yet fire to the oblique.



For all-round protection, to include protection from a nuclear attack, your position should also have overhead, flank, and rear cover. The dirt from the hole can also be used to build that cover, which protects against indirect fire that bursts overhead or to the flanks and rear of the position. Cover also guards against the effects of friendly weapons supporting from the rear, such as small arms fire or discarding sabot rounds fired from tanks. You should leave crawl spaces in the rear cover. This lets you enter and leave the position without exposing yourself to the enemy.

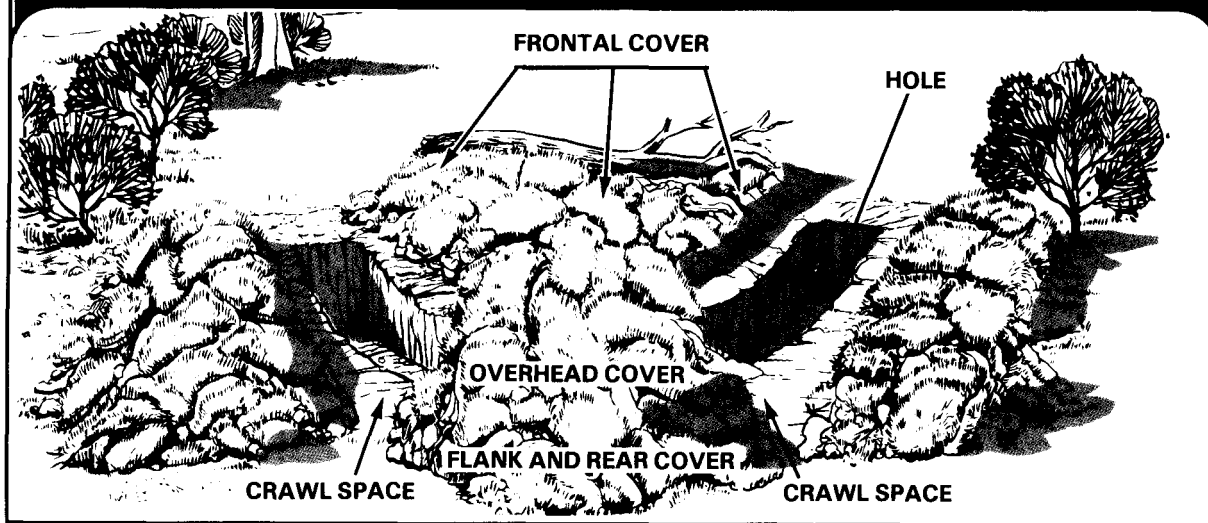
To increase your chances of survival in a nuclear attack, you should insure that your fighting position incorporates the following considerations:

- Rounded walls hold up better against a blast wave than square or rectangular walls, and rounded walls are easier to dig.
- Small openings help keep out radiation. Most nuclear radiation in the

bottom of the position is scattered into the position through the opening.

- Deeper fighting positions place a greater thickness of shielding material or earth between you and the nuclear detonation therefore, deep positions provide greater reduction of initial radiation entering the hole. Radiation is reduced by a factor of two for each 16 inches of hole depth.
- Low body positions put more dirt between you and the source of radiation. Curling upon your side or, better yet, lying on your back with knees drawn up to the chest is best. Tucked-up legs and arms tend to shield the body from radiation.
- Thermal radiation enters your fighting position by line of sight or by reflection off the sides. Dark and rough materials (such as wool blankets and shelter halves) can be used to cover potential reflecting surfaces.

COMPLETED POSITION WITH ALL-ROUND COVER AND CRAWL SPACES



CONCEALMENT

If your position can be detected, it can be hit by enemy fire. If it can be hit, you can be killed in it. Therefore, your position must be so well hidden that the enemy will have a hard time detecting it even after he is in hand-grenade range.

Natural, undisturbed concealment is better than man-made concealment **because:**

- It is already prepared.
- It usually will not attract the enemy's attention.
- It need not be replaced.

While digging your position, try not to disturb the natural concealment around it. Put the unused dirt from the hole behind the position and camouflage it.

CAMOUFLAGED POSITION



Camouflage material that does not have to be replaced (rocks, logs, live bushes, and grass) is best. You should not use so much camouflage that your position looks different from its surroundings.

Your position must be concealed from enemy aircraft as well as from ground troops. If the position is under a bush or tree, or in a building, it is less likely to be seen from above. Leaves, straw, or grass placed on the floor of the hole will keep the fresh earth from contrasting with the ground around it. Do not use sticks, as they may stop grenades from rolling into the grenade sumps.

POSITION CONCEALED FROM AIR



Man-made concealment must blend with its surroundings so that it cannot be detected.

SECTORS AND FIELDS OF FIRE

The sectors of fire are those areas into which you must observe and fire. When your leader assigns you a fighting position, he should also assign you a primary and a secondary sector of fire. The primary sector of fire is to the oblique of your position, and the secondary sector of fire is to the front.



To be able to see and fire into your sectors of fire, you may have to clear some vegetation and other obstructions from them. That is called clearing a field of fire.

When clearing a field of fire:

- Do not disclose your position by careless or too much clearing.
- Leave a thin, natural screen of vegetation to hide your position.
- Cut off lower branches of large, scattered trees in sparsely wooded areas.
- Clear underbrush only where it blocks your view.
- Remove cut brush, limbs, and weeds so the enemy will not spot them.
- Cover cuts on trees and bushes forward of your position with mud, dirt, or snow.
- Leave no trails as clues for the enemy.



A field of fire **to the front** is needed out to the range of your weapon.

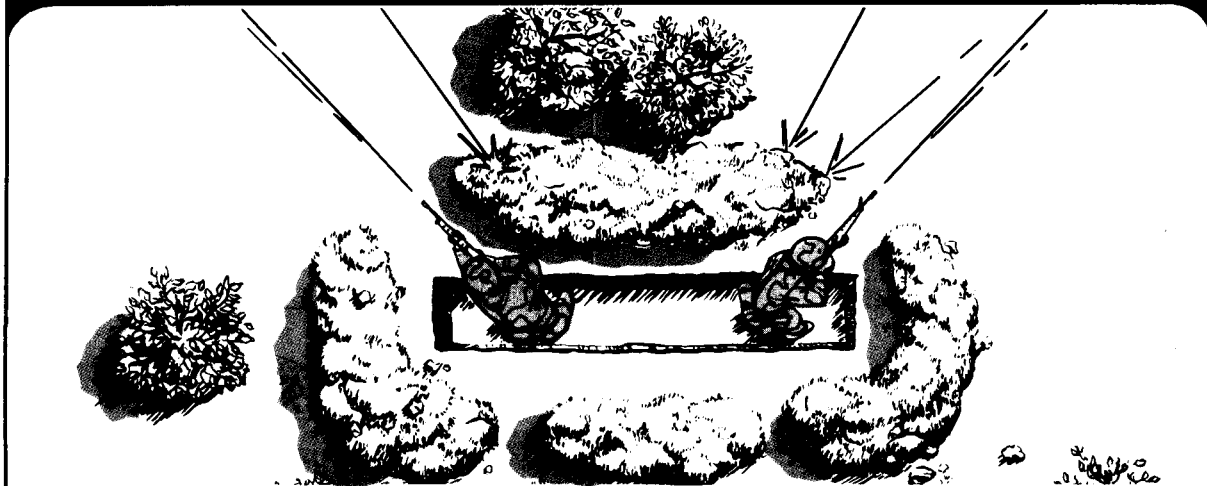
SOLDIERS FIRING TO THE FRONT



A field of fire **to the oblique** lets you hit the attackers from an unexpected angle. It also lets you support the positions next to you. When

fired to the oblique, your fire interlocks with the fire of other positions. That helps create a wall of fire that the enemy must pass through.

SOLDIERS FIRING TO THE OBLIQUE WHILE UNDER FIRE

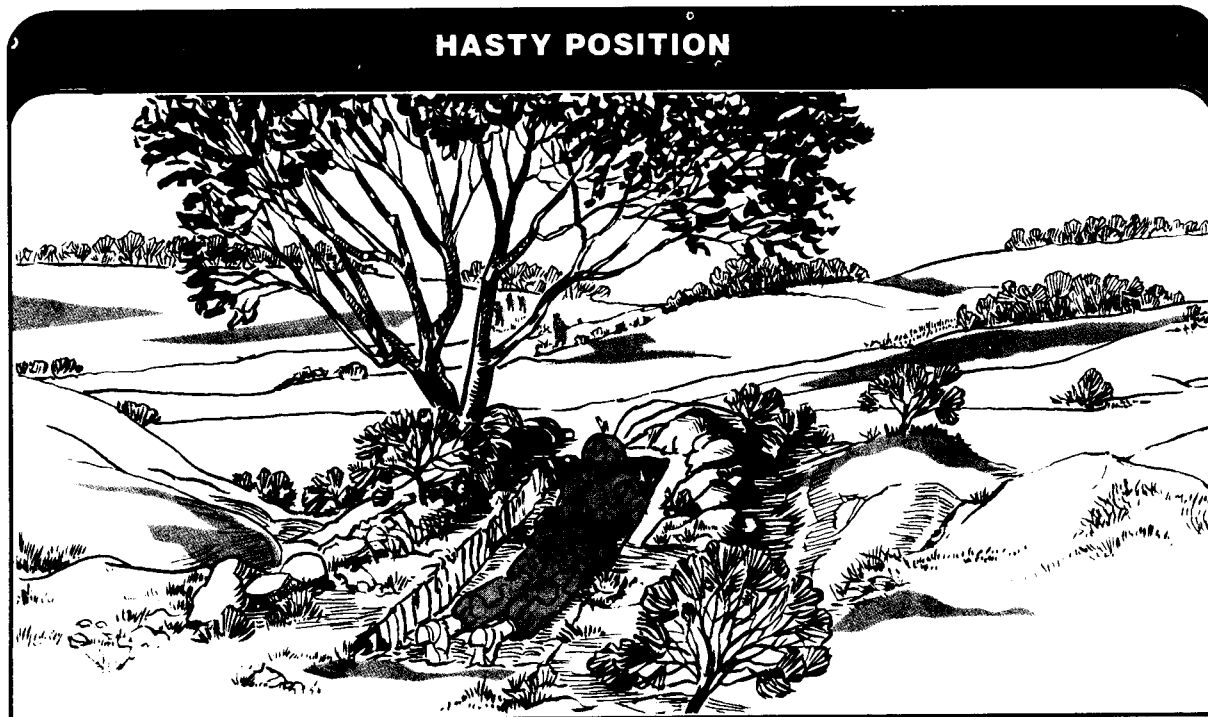


HOW TO BUILD FIGHTING POSITIONS

HASTY FIGHTING POSITION

When there is little time for preparation, build a hasty fighting position. It should be behind whatever cover is available. It should give frontal cover from enemy direct fire but allow firing to the front and the oblique. The term **hasty** does not mean that there is no digging.

If there is a natural hole or ditch available, use it. If not, dig a prone shelter that will give some protection. The hole should be about one-half meter (18 to 20 in) deep. Use the dirt from the hole to build cover around the edge of the position.

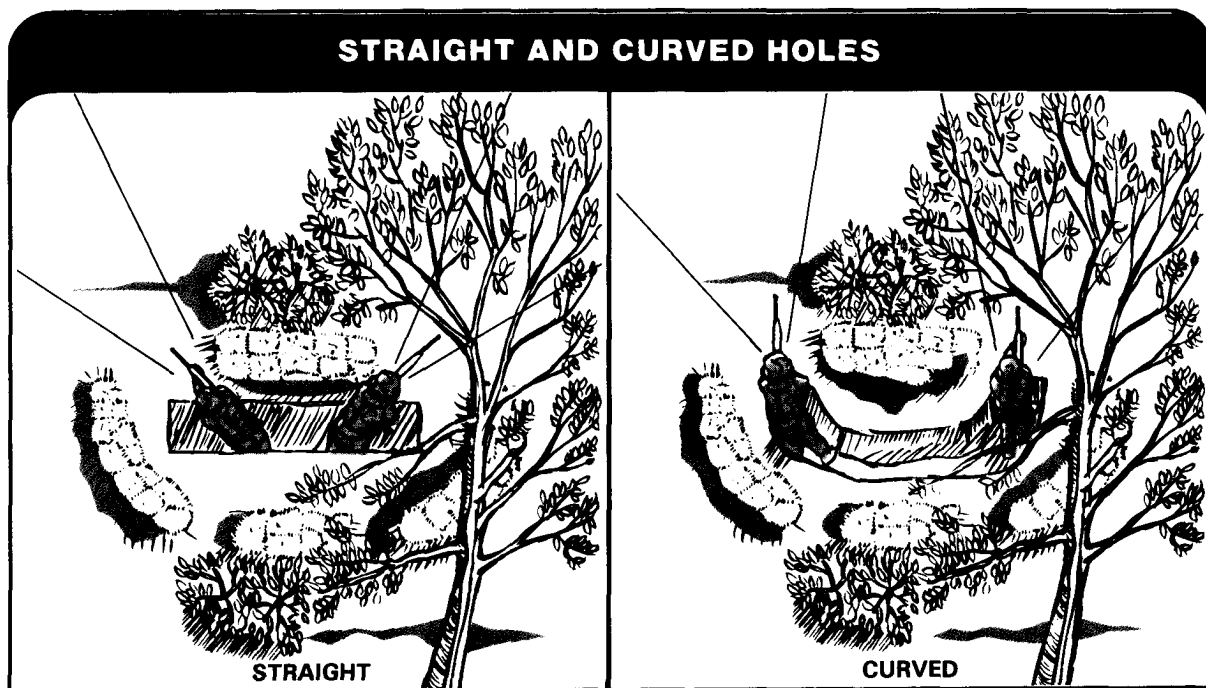


TWO-MAN FIGHTING POSITION

In the defense, you and another soldier will build a two-man fighting position. Improve your position as time permits.

Keep the hole small. The smaller the hole, the less likely it is that rounds, grenades, or airburst fragments will get into it. It should be large enough for you and your buddy in full combat gear. It should extend beyond the edges of the frontal cover enough to let you and your buddy observe and fire to the front. The hole is usually dug straight, but it may be curved around the frontal cover.

Curving the hole around the frontal cover may be necessary in close terrain to allow better observation and fire to the front and to the next flank position. To curve the hole, simply extend one or both ends of it around the frontal cover.



A curved hole lets one of you watch for the enemy to the front while the other sleeps or eats. Also, you can observe and fire to the front when not being fired at, and move back behind the frontal cover when under heavy fire.

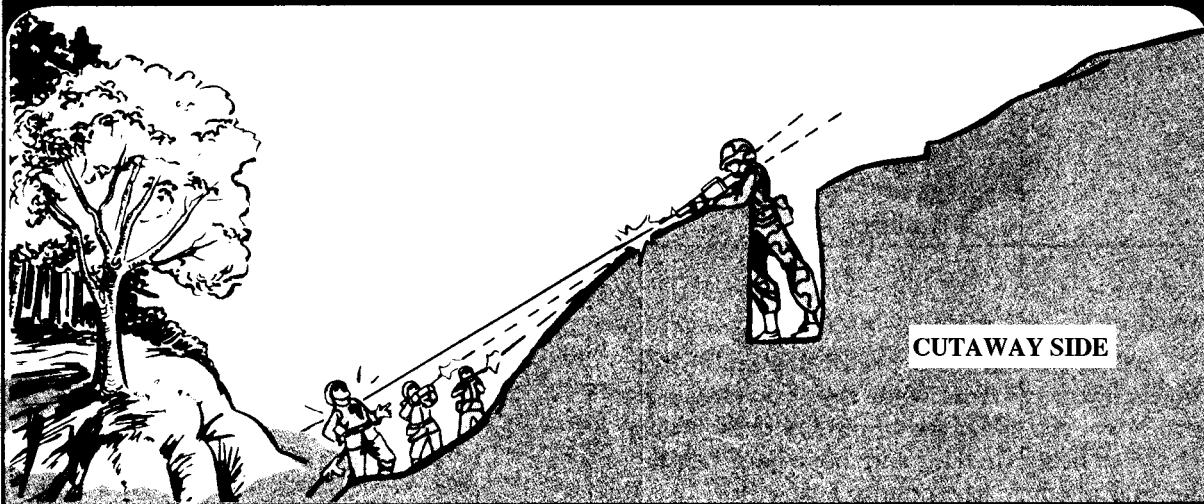
MOVING BACK TO FRONT



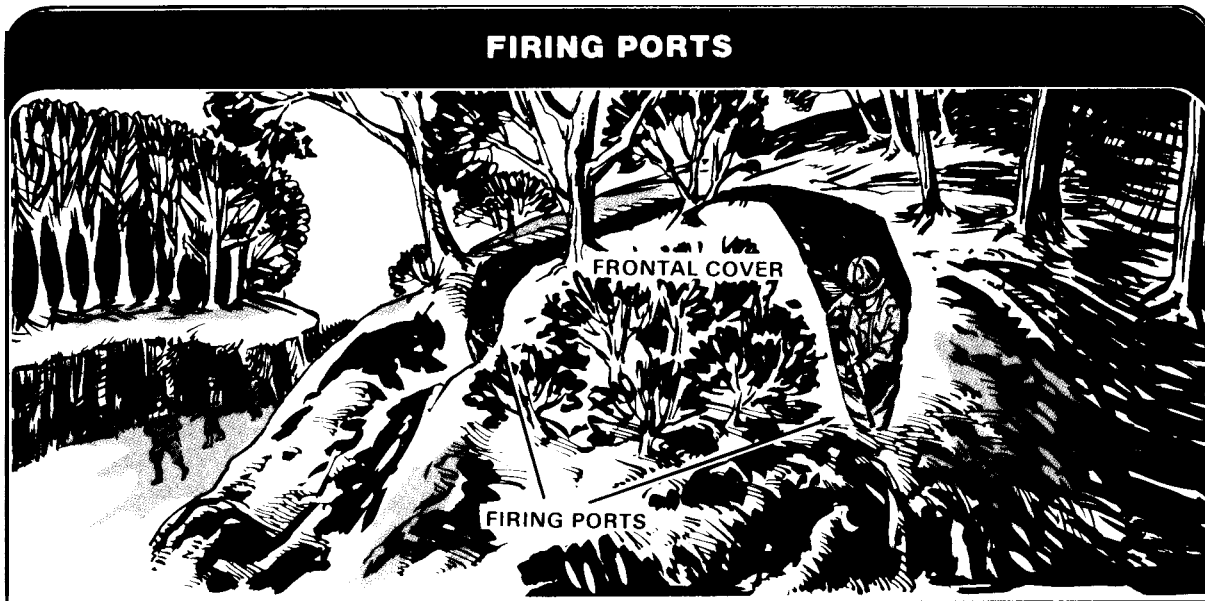
On a steep slope, a straight hole may not let you stay behind frontal cover and fire

at attackers. You may have to stand up and expose yourself to the attackers' fire.

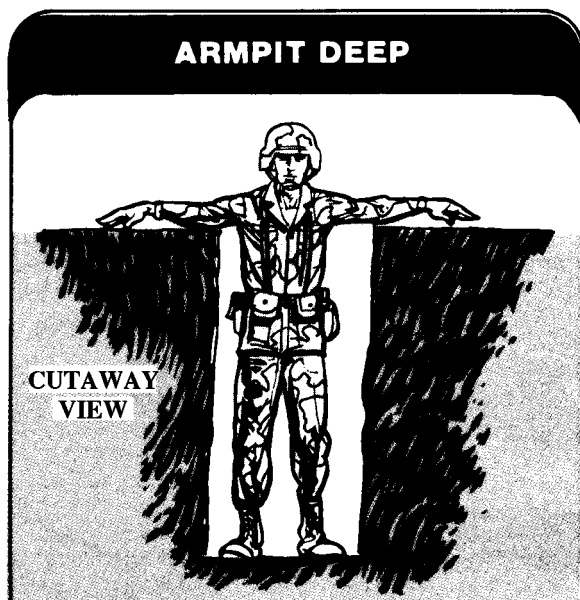
THE EFFECT OF A STEEP SLOPE



To avoid such exposure, dig firing ports in each end of the hole. The ground between the firing ports will then be additional frontal cover.



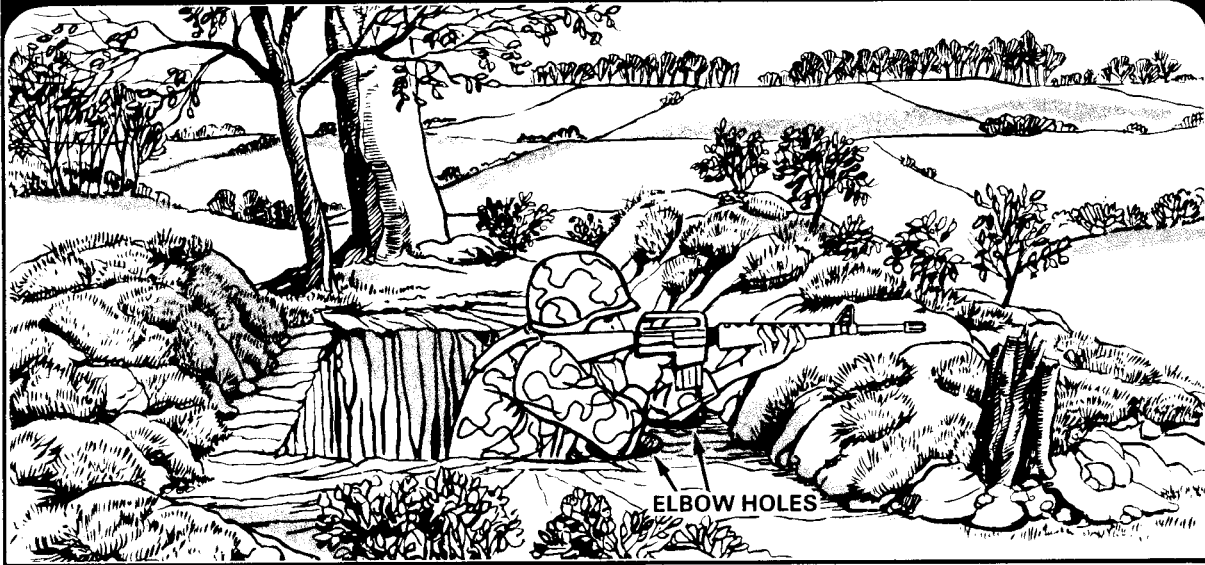
Dig the hole armpit deep. This lowers your profile and still lets you fire. Other dimensions should be the length of two M16s and the width of two bayonets.



Leave enough distance between the hole and the frontal cover to make a shelf where you

can put your elbows when firing.

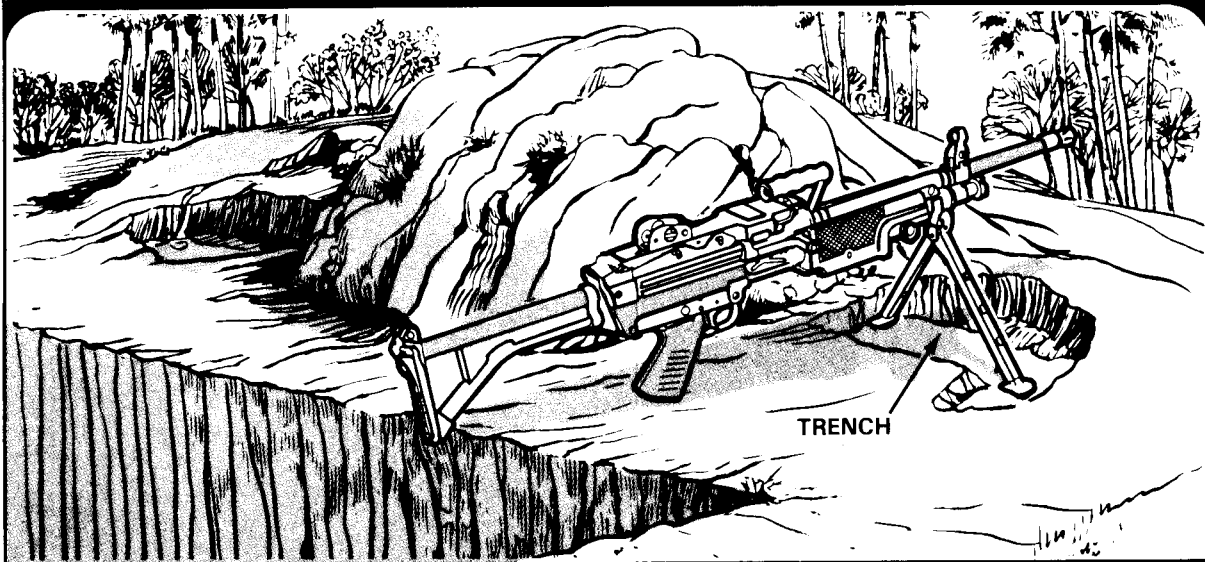
ELBOW HOLES



Dig elbow holes to keep your elbows from moving around when you fire. Your fire will then be more accurate.

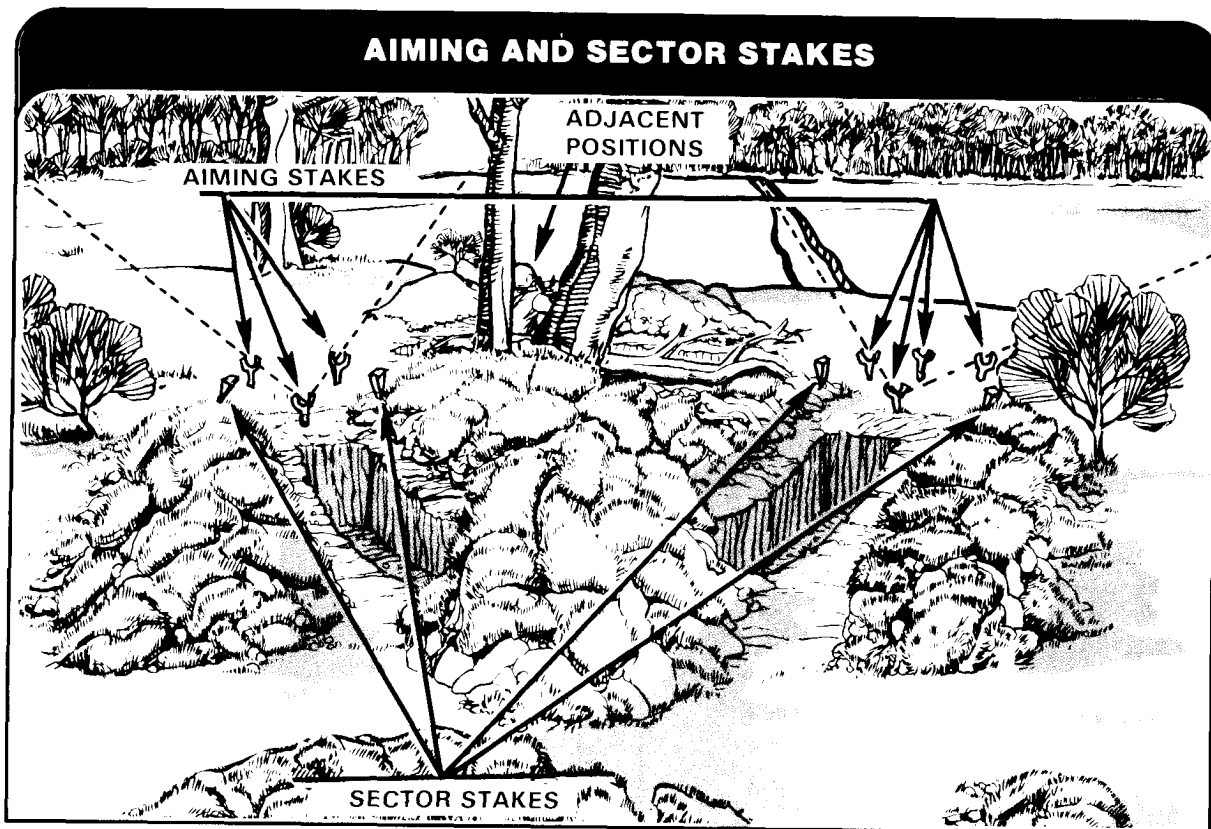
If you or your buddy has an automatic rifle, dig a small trench to stabilize its bipod legs.

TRENCH FOR BIPOD LEGS



Hammer in **sector stakes** (right and left) to define your sectors of fire. Sector stakes prevent accidental firing into friendly positions. Tree limbs about 46 cm (18 in) long make good stakes. The stakes must be sturdy and must stick out of the ground high enough to keep your rifle from being pointed out of your sector.

Hammer in **aiming stakes** to help you fire into dangerous approaches at night and at other times when visibility is poor. Forked tree limbs about 30 cm (12 in) long make good stakes. Put one stake near the edge of the hole to rest the stock of your rifle on. Then put another stake forward of the rear (first) stake toward each dangerous approach. The forward stakes are used to hold the rifle barrel. To change the direction of your fire from one approach to another, move the rifle barrel from one forward stake to another. Leave the stock of the rifle on the rear stake.

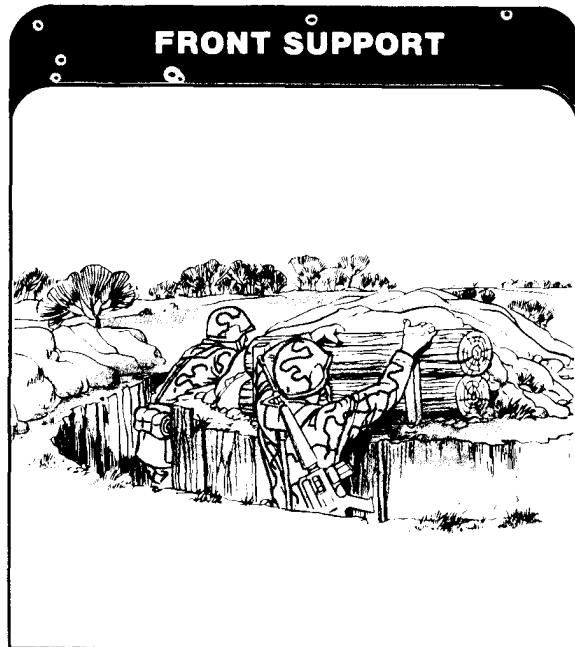
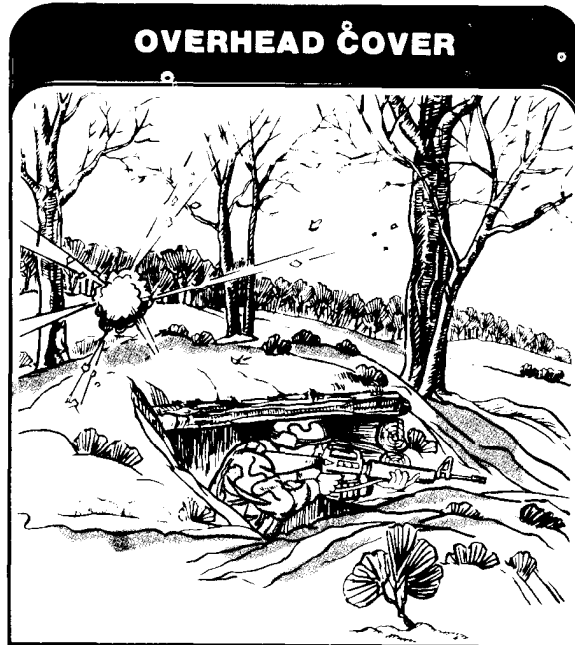
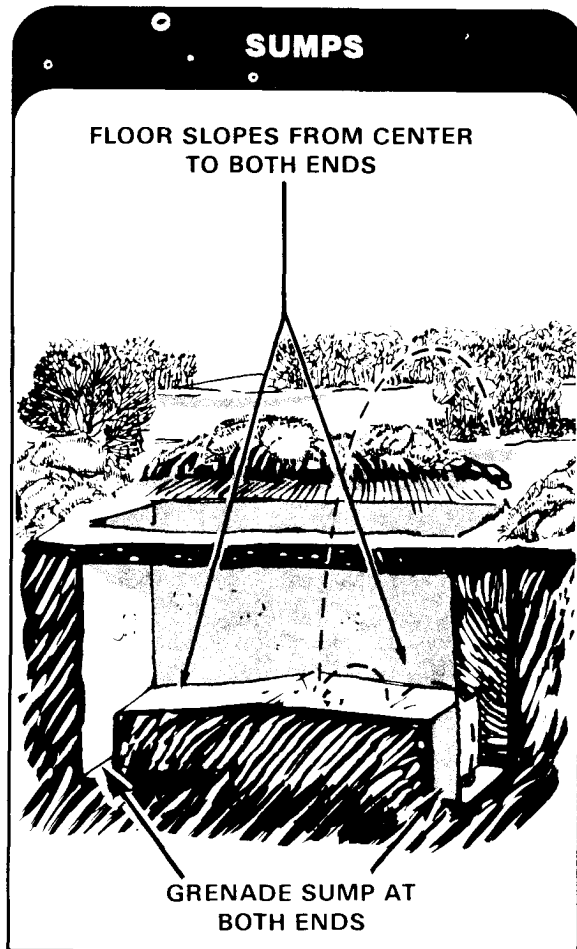


Dig two **grenade sumps** in the floor (one on each end). If the enemy throws a grenade into the hole, kick or throw it into one of the sumps. The sump will absorb most of the blast. The rest of the blast will be directed straight up and out of the hole. **Dig the grenade sumps:**

- As wide as the entrenching tool blade.
- At least as deep as an entrenching tool.
- As long as the position floor is wide.

For **water drainage**, slope the floor of the hole toward the grenade sumps. This may also cause grenades to roll into the sumps.

Build **overhead cover** for protection against airburst fragments. Build the overhead cover either across the center of the hole or off to its flanks.



When center overhead cover would not make a position easy to detect, build it. Put support logs 10 to 15 cm (4 to 6 in) in diameter on top of each other along the entire length of

the frontal and rear cover.

Put logs 10 to 15 cm (4 to 6 in) in diameter side by side across the support logs as the base for the overhead cover.

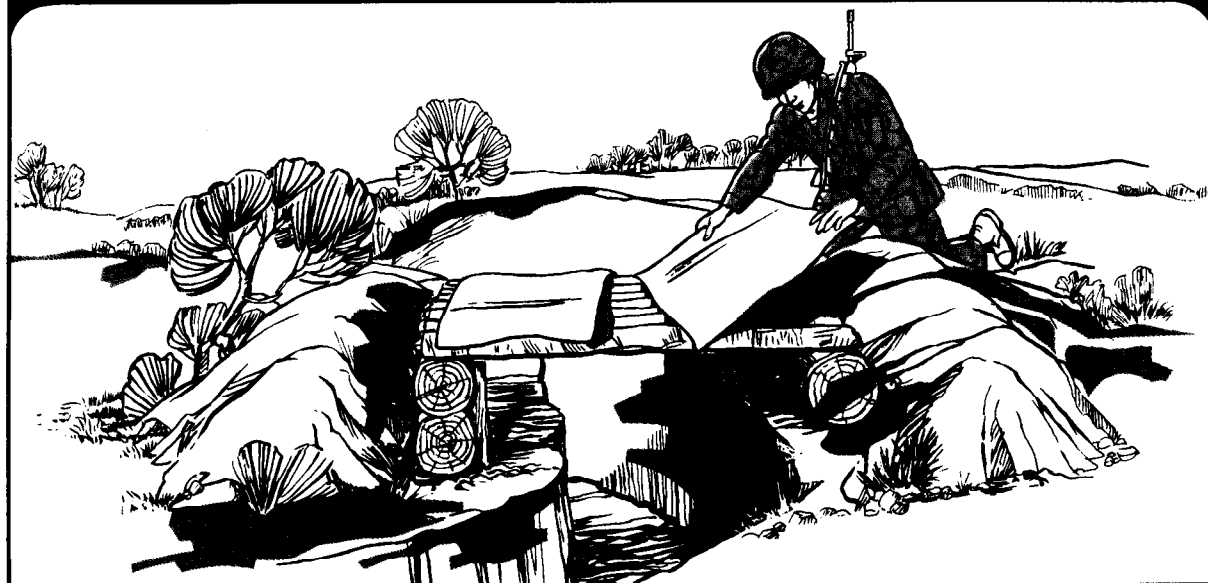
BUILDING CENTER OVERHEAD COVER



Put a water-repellent layer, such as C-ration boxes or a poncho, over the base logs.

This helps keep water from leaking through the overhead cover.

WATERPROOFING



Then put 15 to 20 cm (6 to 8 in) of dirt on top of the waterproofing material. Finally, mold and camouflage the cover to blend with the terrain.

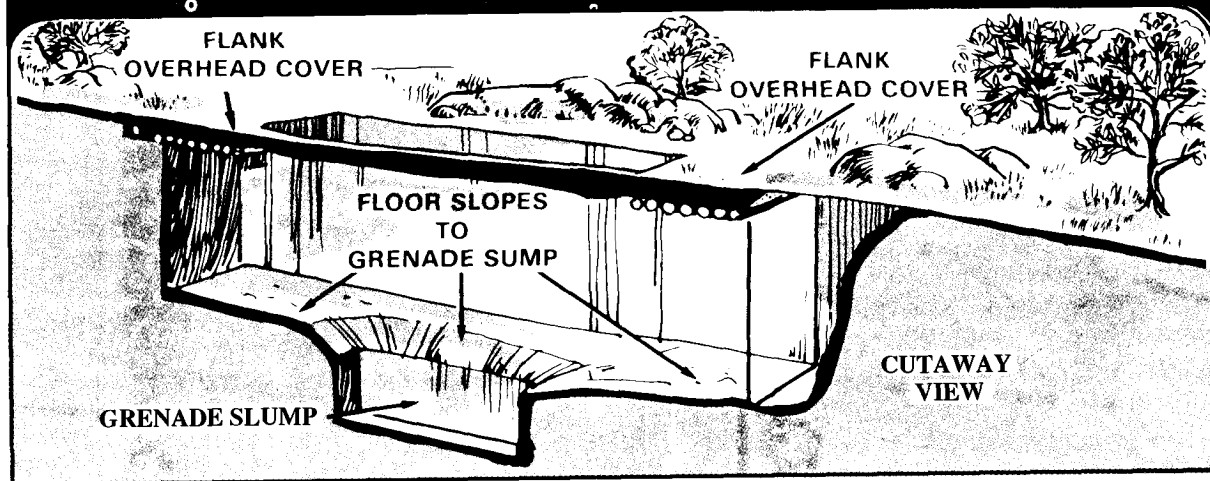
CAMOUFLAGED OVERHEAD COVER



When center overhead cover would make your position easy to detect, build flank overhead cover. That method gives both you and your buddy your own overhead cover. However, neither of you can observe or fire into your sectors of fire while under it.

When flank overhead cover is used, dig only one grenade sump. Dig it in the center of the floor against the back wall and slope the floor toward it.

FLANK OVERHEAD COVER



Dig out an area for flank overhead cover at each end of the position:

- About 30 cm (12 in) deep.
- Long enough to extend about 45 cm (18 in) beyond both sides of the hole.
- About 1 meter (3 ft) wide.

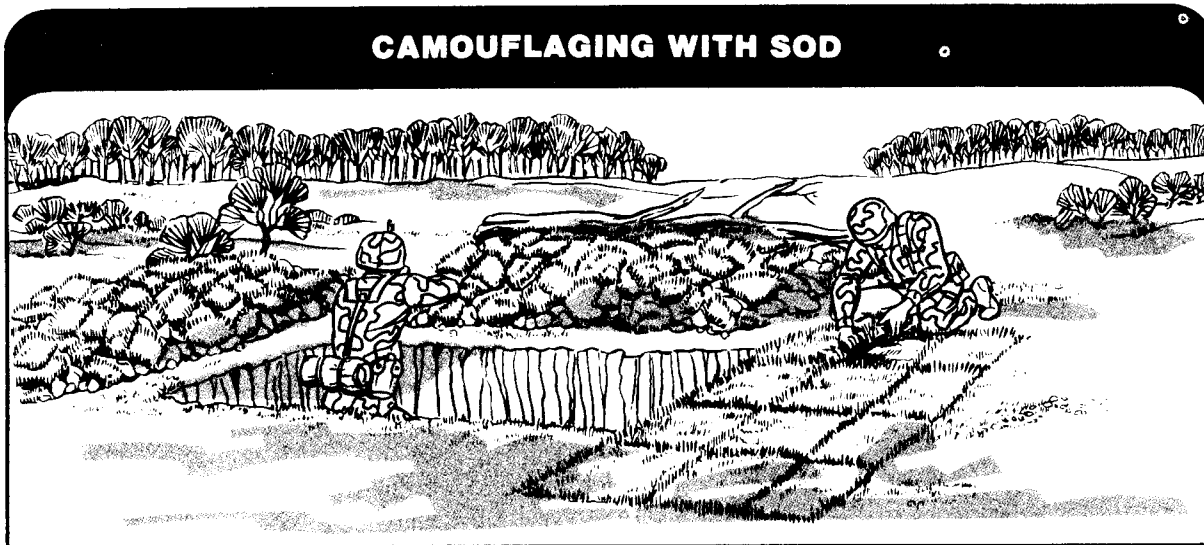
Save the sod for camouflage.



Next, place support logs, about 10 to 15 cm (4 to 6 in) in diameter, across the dug-out holes. This will support the rest of the overhead cover material. Put a water-repellent layer, such as C-ration boxes or a poncho, over the support logs. This helps keep water from leaking through the overhead cover.



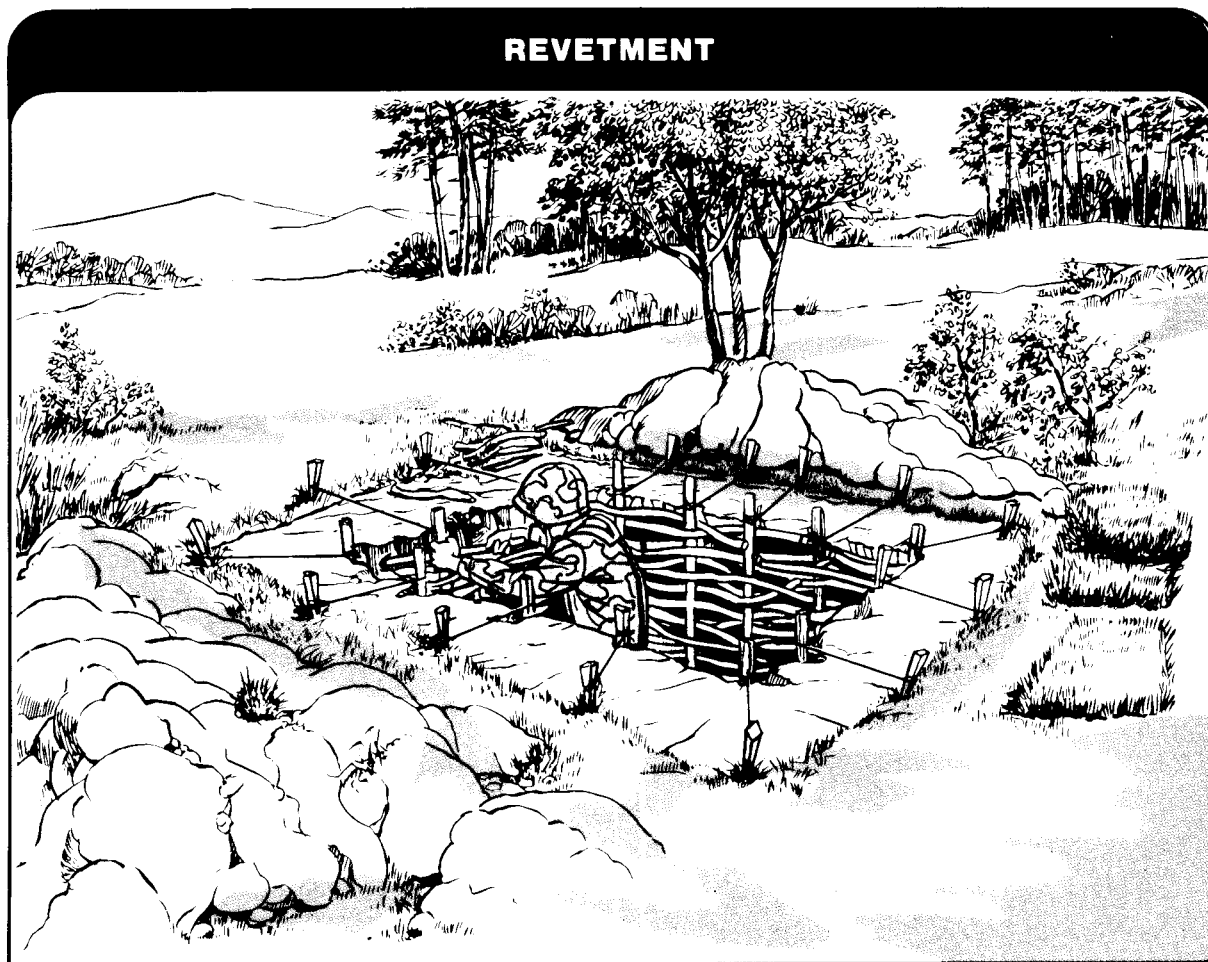
Then put 15 to 20 cm (6 to 8 in) of dirt on top of the waterproofing material. Cover the dirt with the sod and camouflage it.



Then get in the hole and dig out a cave-like compartment under the overhead cover. Dig your compartment large enough for you and your equipment. Dig your buddy's compartment large enough for him and his equipment.



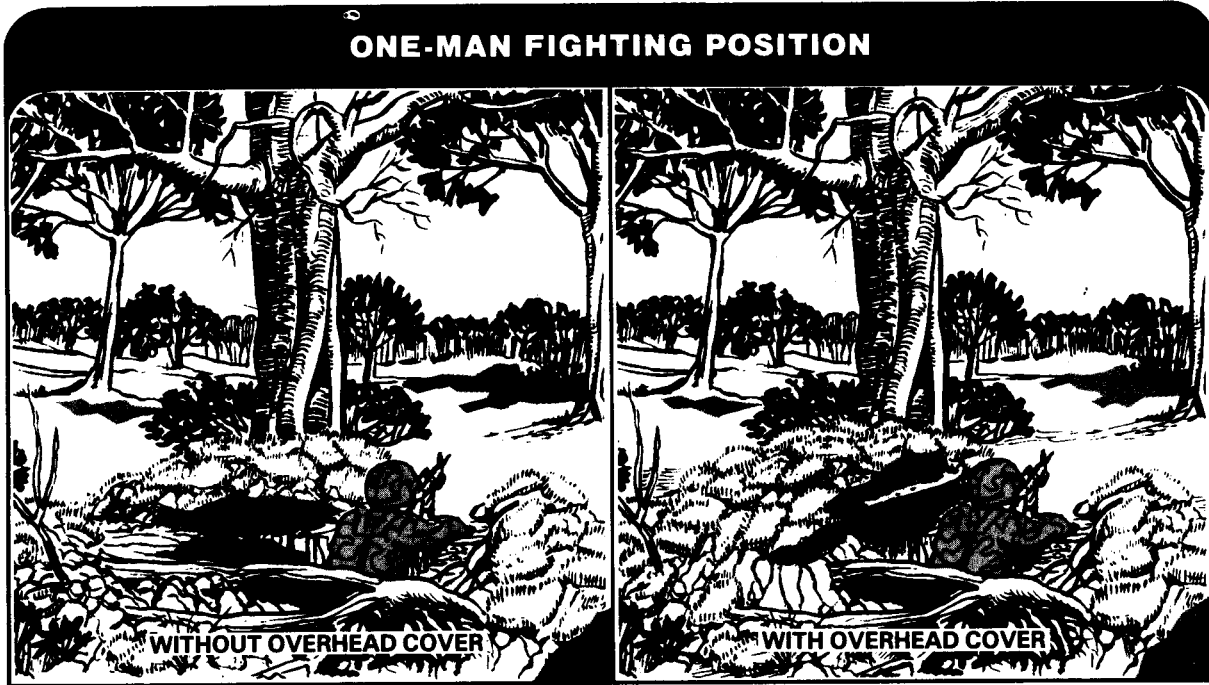
In sandy or loose soil, the sides of your position may require **revetments** to keep them from collapsing. Use such things as mesh wire, boards, or logs for revetting. Tie anchor string, rope, or wire to the revetting material and stake them down. Drive the stakes into the ground. This hides them and keeps them from being mistaken for aiming stakes or sector stakes.



ONE-MAN FIGHTING POSITION

Sometimes you may have to build and occupy a one-man fighting position. Except for its size, a one-man position is built the same way as a two-man fighting position. The hole

of a one-man position is only large enough for you and your equipment.



MACHINE GUN FIGHTING POSITION

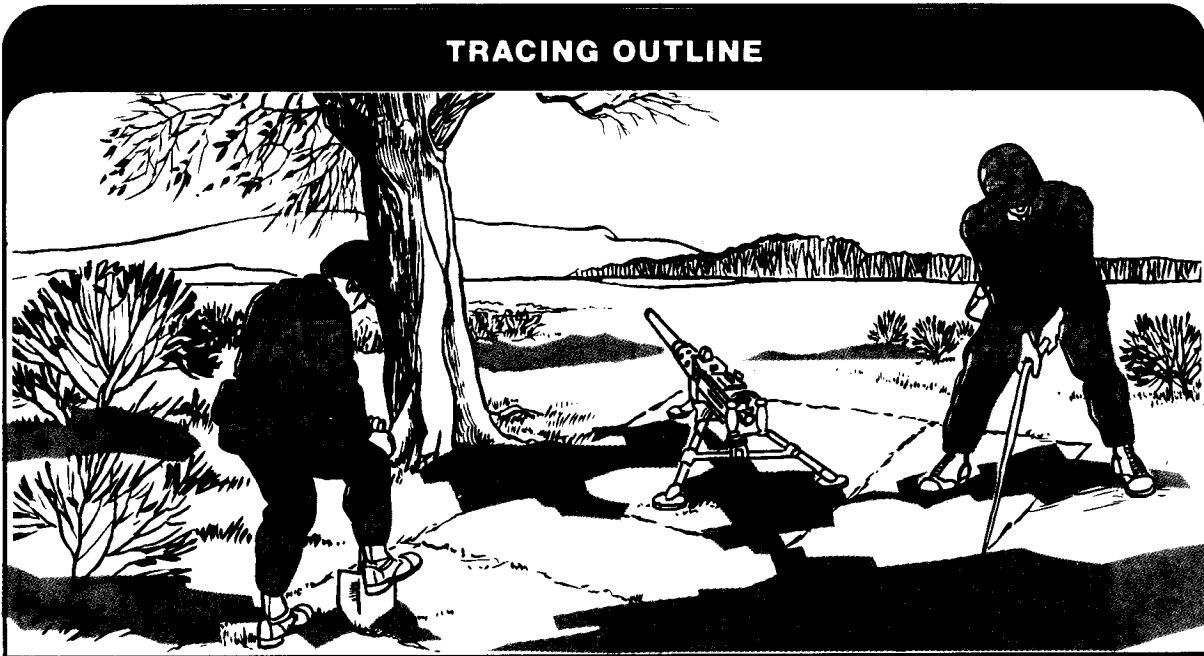
If you are in a machine gun crew, you and the other members must build a machine gun fighting position. However, before you can start work on the position, your leader must:

- Position the machine gun.
- Assign it a primary (and a secondary, if required) sector of fire.
- Assign it a principal direction of fire (PDF) or final protective line (FPL).

NOTE: The FPL is a line on which the gun fires grazing fire across the unit's front. Grazing fire is fired 1 meter above the ground. When an FPL is not assigned, a PDF is. A PDF is a direction toward which the gun must be pointed when not firing at targets in other parts of its sector.

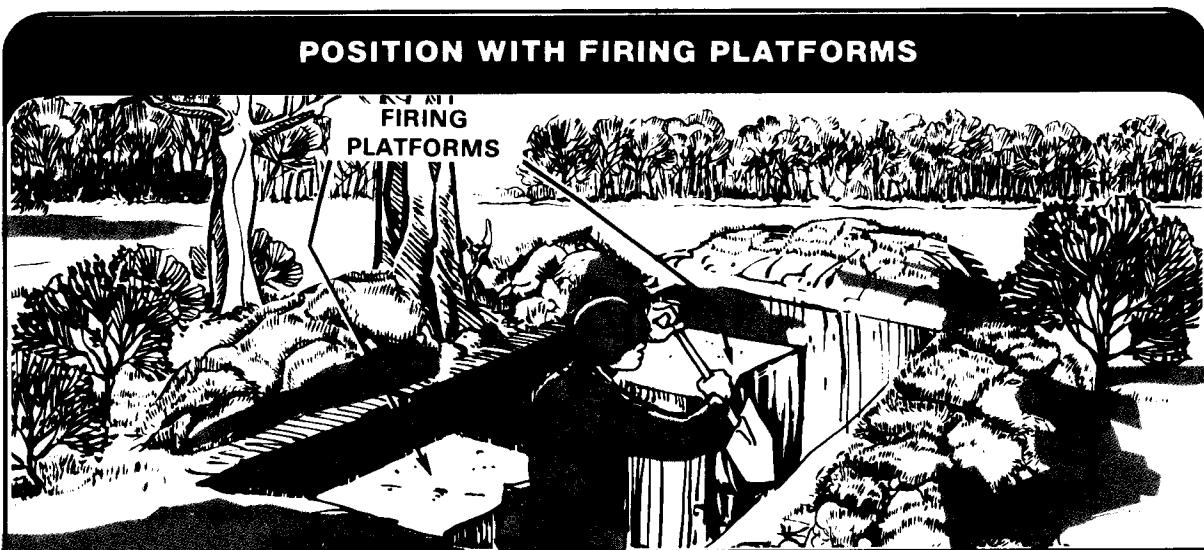
The first thing to do when building a machine gun position is to mark the position of the tripod legs. Then mark the sectors of fire

with sector stakes, and trace the outline of the hole and its frontal cover on the ground.



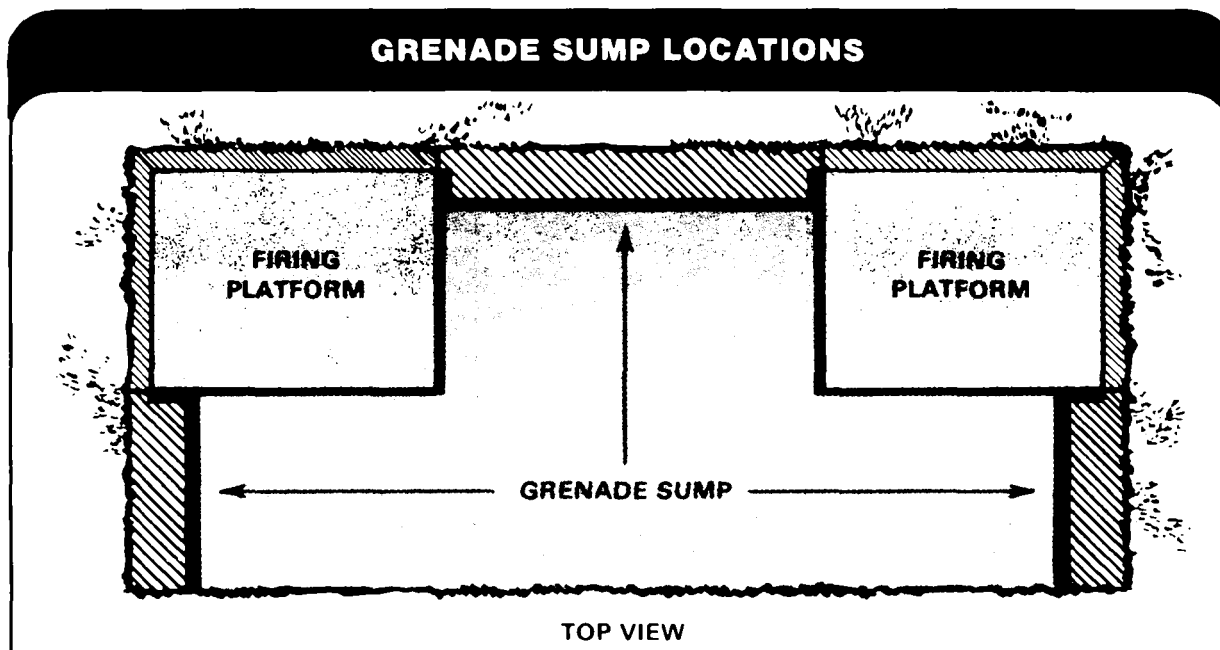
For an M60 machine gun position, dig two firing platforms for the gun. One platform is on the primary sector of fire side of the position, and the machine gun tripod is used on this platform. The other platform is on the

secondary sector of fire side of the position, and the machine gun bipod is used when firing on this platform. A trench must be dug for the



The firing platforms reduce the profile of the gunner. They also reduce the height of the frontal cover needed. The firing platforms must not, however, be so low that the gun cannot be traversed across its sector of fire.

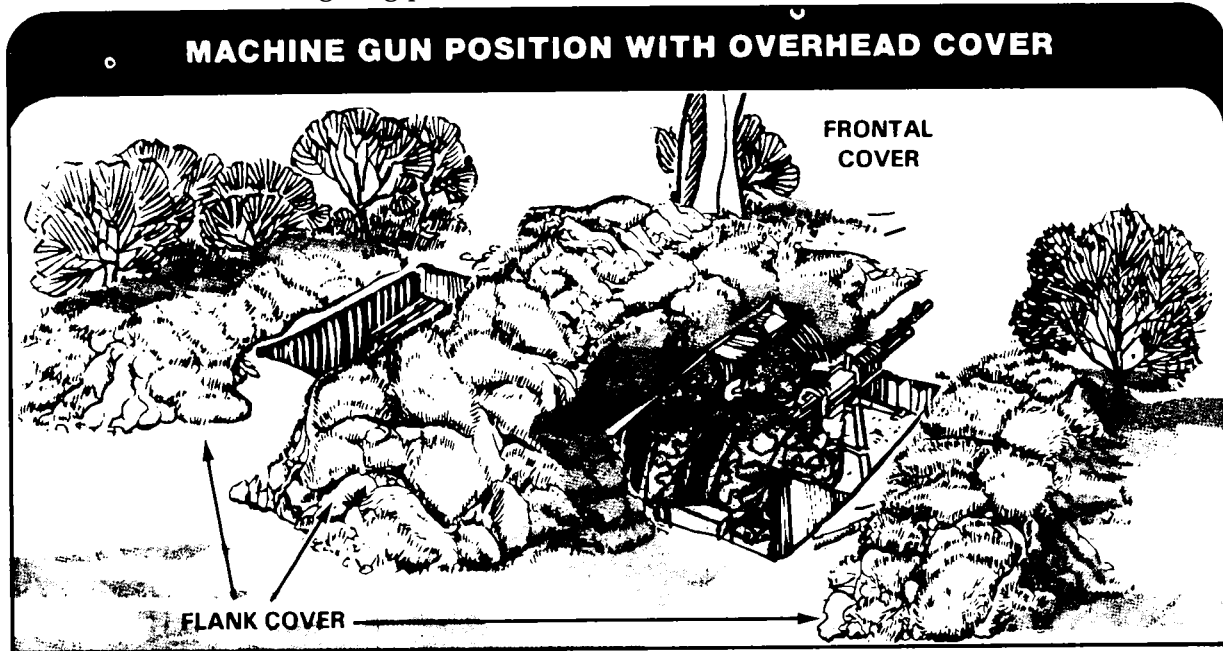
In some cases, the floor of the platforms may need to be lined with sandbags. Also, sandbags may be needed on each tripod leg to keep it from moving.



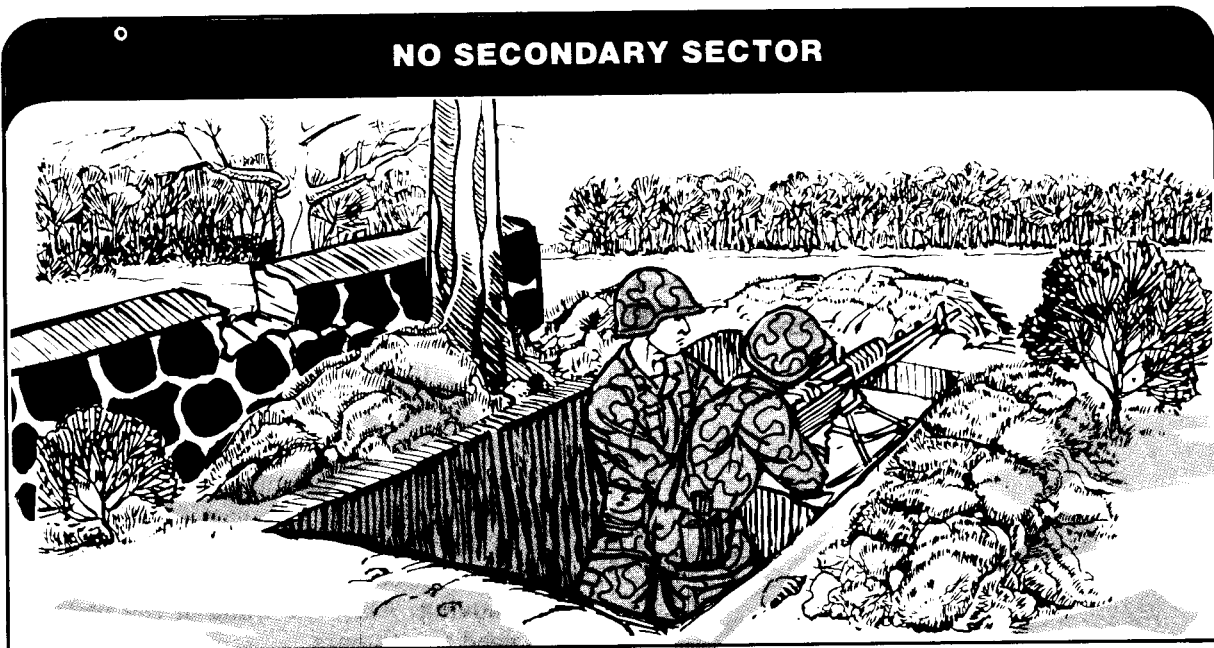
After the firing platforms have been dug, prepare your range card (app I) and then dig your hole. Dig the hole in the shape of an inverted T. The top of the T, however, must be longer than the shaft of the T. Dig the hole deep enough to, protect the crew and still let the gunner fire the machine gun (usually about armpit deep). Use the dirt from the hole to build frontal, flank, and rear cover. The frontal cover is built first. When the frontal cover is high and thick enough, use the rest of the dirt to build flank and rear cover.

Dig three grenade sumps, one at each end of the T. Dig the grenade sumps like those in a two-man fighting position.

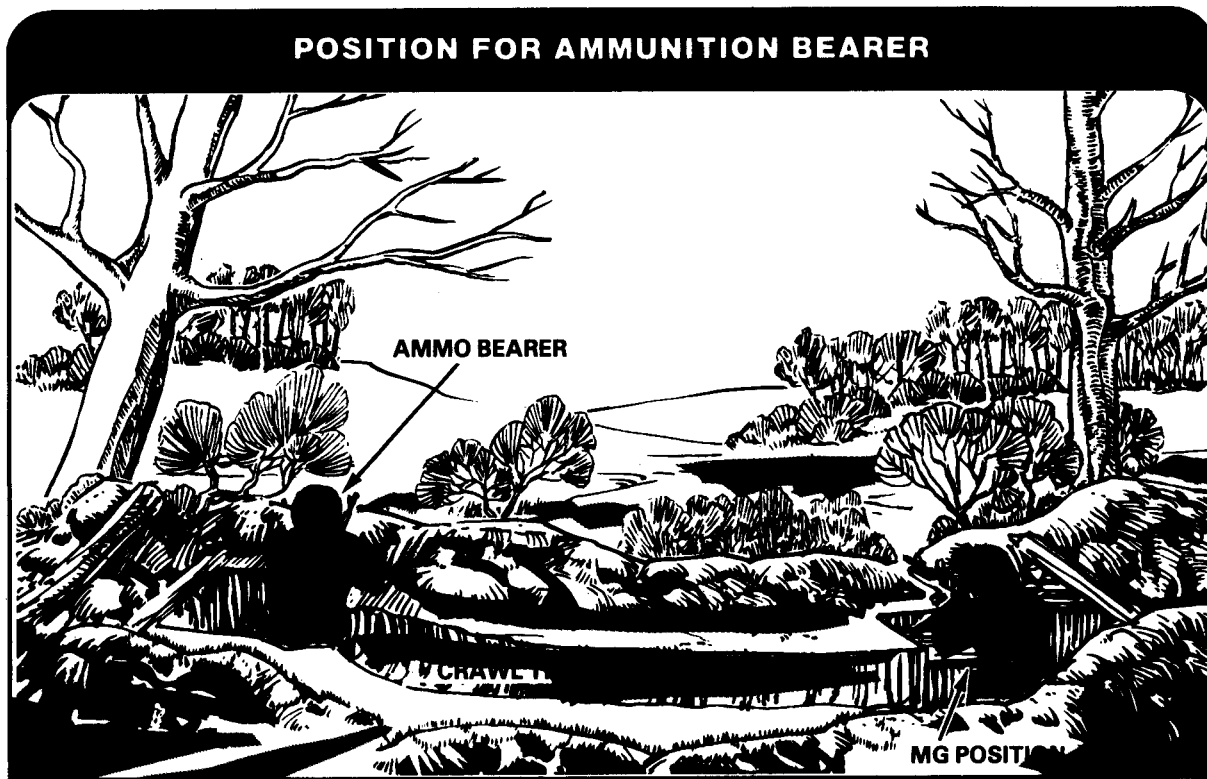
Build the overhead cover for the position like that for a two-man fighting position.



When an M60 machine gun has only one sector of fire, dig only half of the position (only one firing platform).



When there is a three-man crew for an M60 machine gun, the third man (the ammunition bearer) digs a one-man fighting position. Usually, his position is on the same side of the machine gun as its FPL or PDF. From that position, he can observe and fire into the machine gun's secondary sector and, at the same time, see the gunner and assistant gunner. The ammunition bearer's position is connected to the machine gun position by a crawl trench so that he can bring ammunition to the gun or replace the gunner or the assistant gunner.



In a caliber .50 machine gun position, dig only one firing platform for the gun. Dig the platform below ground level, like that for an M60 machine gun except deeper. Because of the gun's vibrations, you may have to line the floor of the platform with sandbags. Sandbags may also be needed on each tripod leg to keep it from moving. Also, the walls of the platform may need revetments.

After digging the platform, prepare your range card and then dig your hole. The hole should be the shape of an L, with the platform in the center of the L. Dig the hole deep enough to protect the crew and still let the gunner fire

the machine gun (usually about armpit deep). Use the dirt from the hole to build frontal, flank, and rear cover. Build the frontal cover first. When that is completed, use the rest of the dirt to build flank and rear cover.

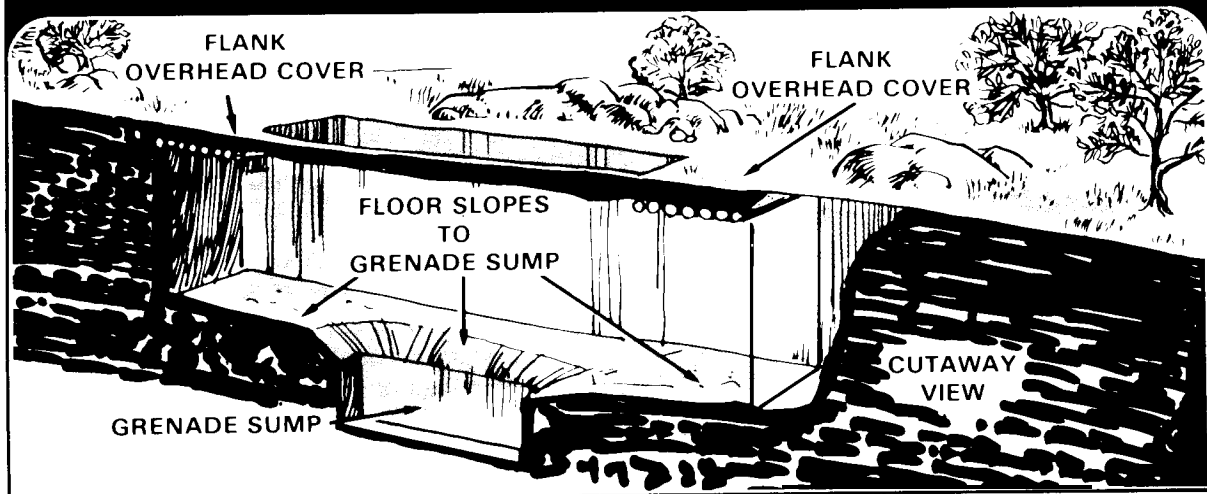
MODIFIED TWO-MAN FIGHTING POSITION



Dig two grenade sumps, one at both ends of the L, like those in a two-man fighting position.

Build the overhead cover like that for a two-man fighting position.

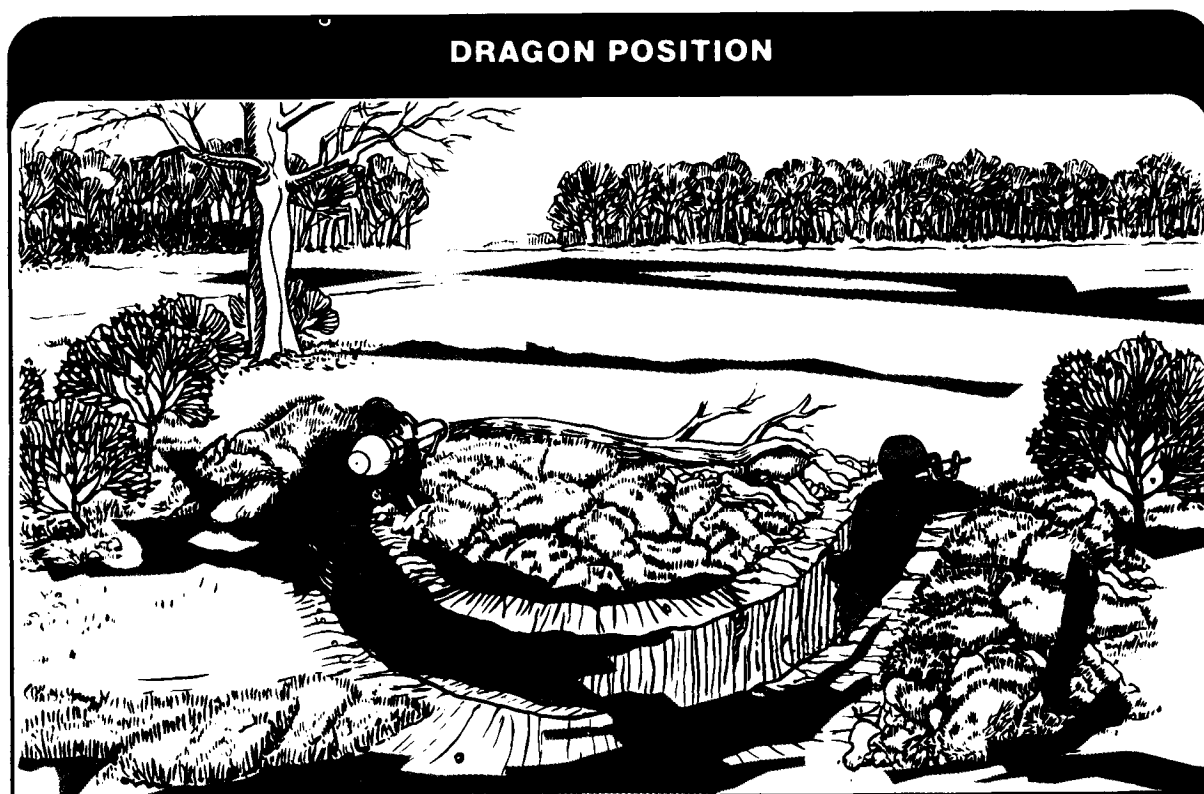
MODIFIED TWO-MAN FIGHTING POSITION WITH OVERHEAD COVER



DRAGON FIGHTING POSITION

The Dragon can be fired from either a **one-man** or a **two-man** fighting position. However, you must make some changes in the positions. Like the machine gun, a Dragon needs a range card. Prepare it before digging your hole.

Dig the hole wide enough to let the muzzle end of the launcher extend 15 cm (6 in) beyond the front of the hole and the rear of the launcher extend out over the rear of the hole. This is to keep the backblast out of the hole.



Dig the hole only **waist deep** on the side the Dragon will be fired from. This lets you move while tracking. Dig the other side of the hole armpit deep. Also, dig a small hole for the biped legs in front of the hole. Because of your height above the ground when firing the Dragon, build frontal cover high enough to hide you and, if feasible, the backblast.

Build **overhead cover** on the flanks of the position. Build it large enough for you, your equipment, and the Dragon. Overhead cover is not usually built across the center of the hole in a Dragon position. The center overhead cover would have to be so high that it would be easy for the enemy to spot.

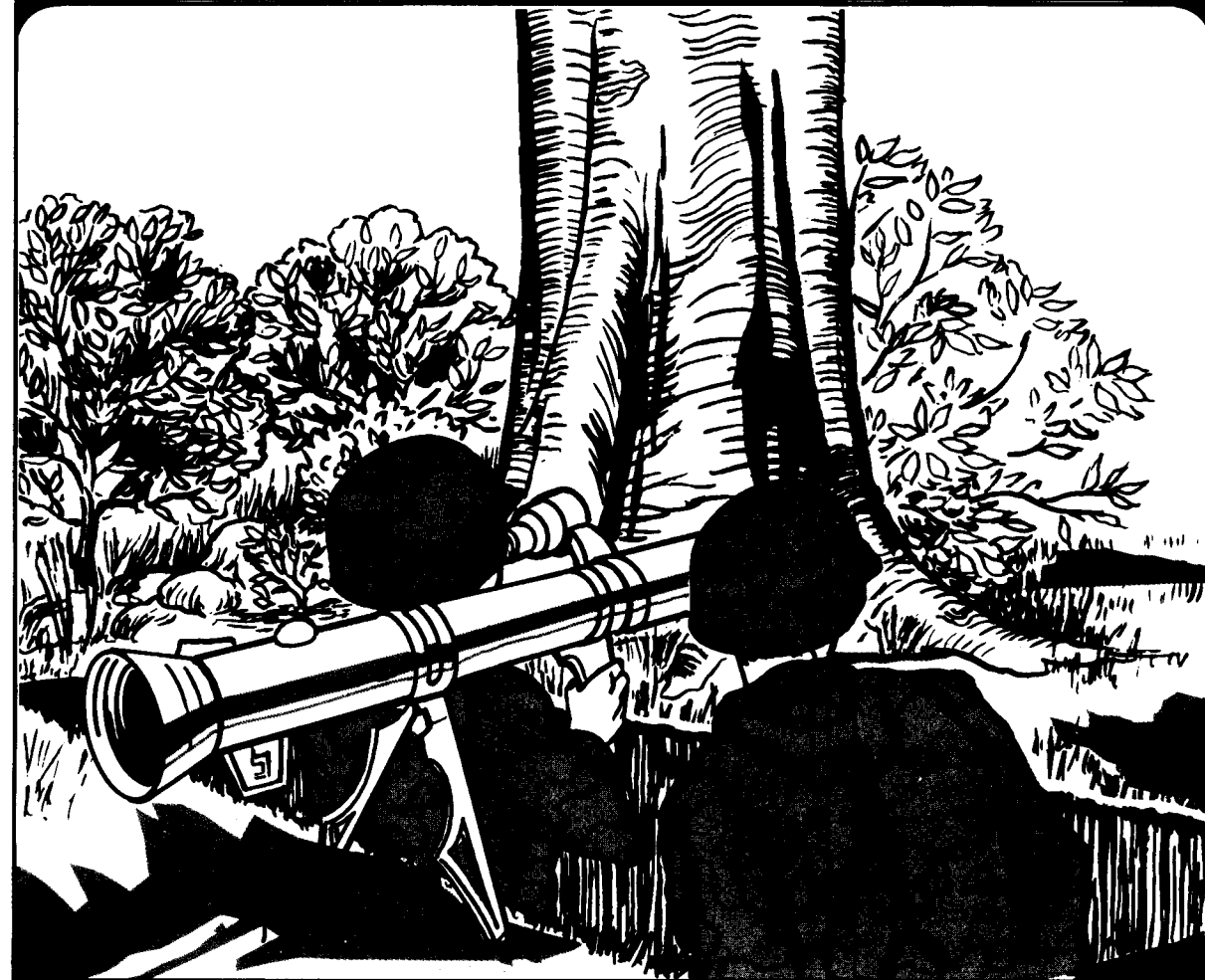


Clear the backblast area before firing the weapon. That means checking to see if any soldiers are in the backblast area or if any walls, large trees, or other things are in a position to deflect the backblast. If the weapon is to be fired from a two-man fighting position, make sure that the other soldier in the hole is not in the backblast area.

90-MM RECOILLESS RIFLE FIGHTING POSITION

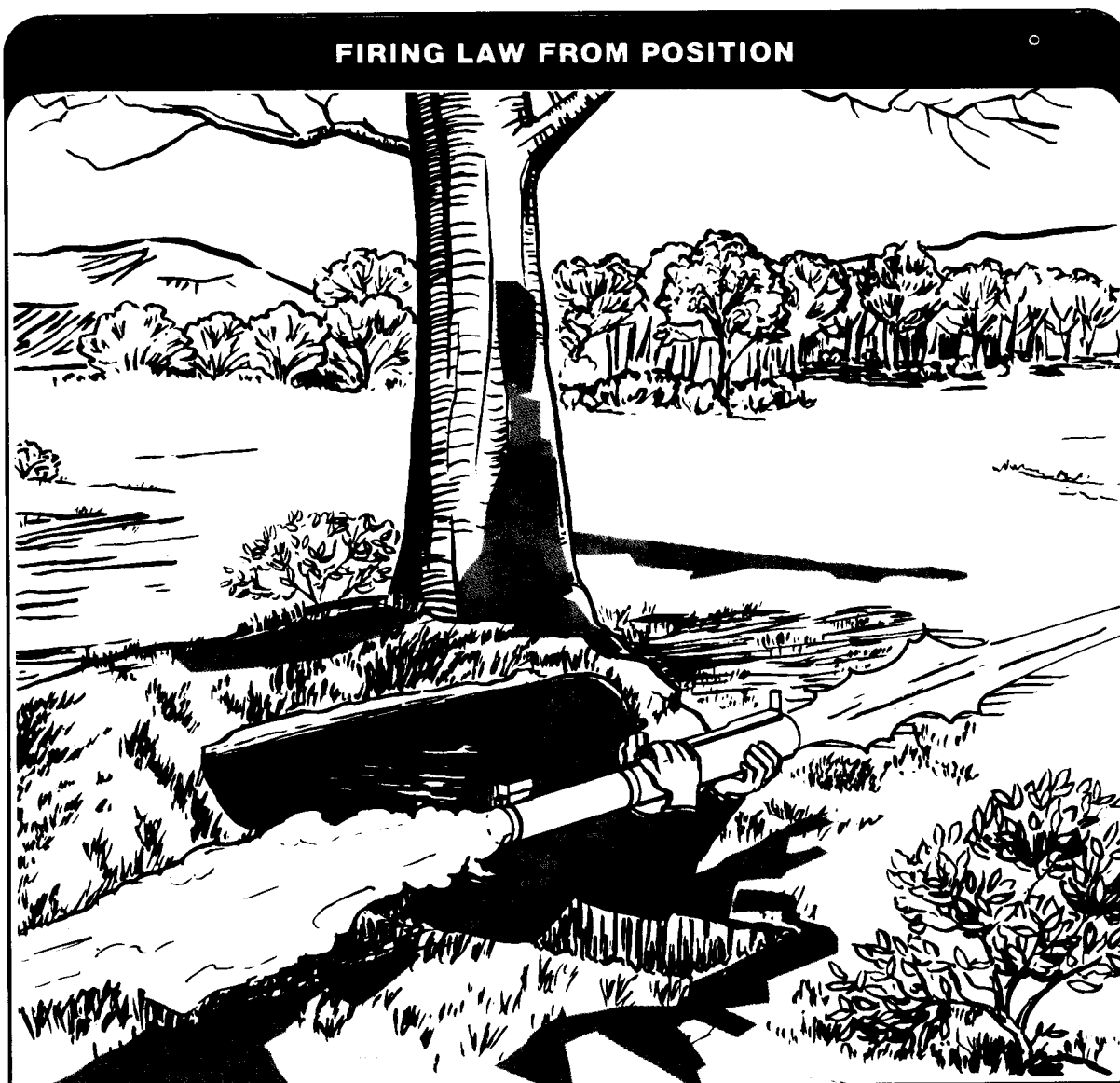
Build a 90-mm recoilless rifle (RCLR) position like a Dragon position, but dig the hole a little longer when firing to the right side of the frontal cover. That lets the assistant gunner work from the right side of the RCLR. Prepare your range card before digging the hole. Also, clear the backblast area before firing the RCLR.

90-MM RECOILLESS RIFLE POSITION



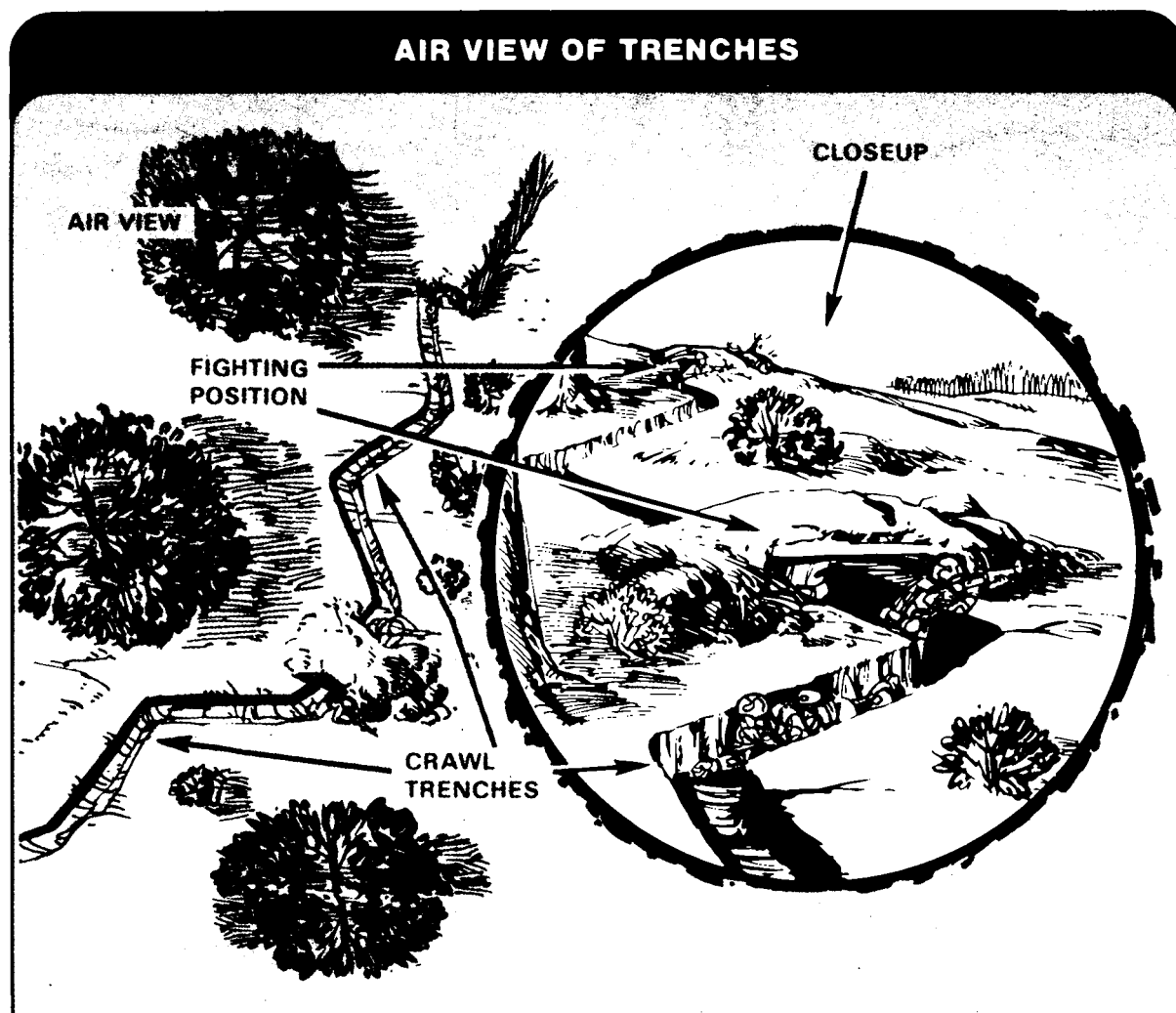
**LIGHT ANTITANK WEAPON (M72A2)
AND FLAME ASSAULT
SHOULDER WEAPON (FLASH)
FIGHTING POSITION**

There is no special fighting position for the M72A2 or FLASH. They can be fired from any fighting position. Before firing any of these weapons, clear the backblast area.



TRENCHES

When there is time, dig trenches to connect fighting positions. Trenches provide covered routes between positions. The depth of the trenches depends on the time and type of help and equipment available to dig them. Without engineer help, crawl trenches about 1 meter (3 feet) deep and two thirds of a meter (2 feet) wide are probably all that can be dug. Dig the trenches zigzagged so that the enemy will not be able to fire down a long section if he gets into the trench, and so that shrapnel from shell bursts will lose some of its effectiveness.



STORAGE COMPARTMENTS

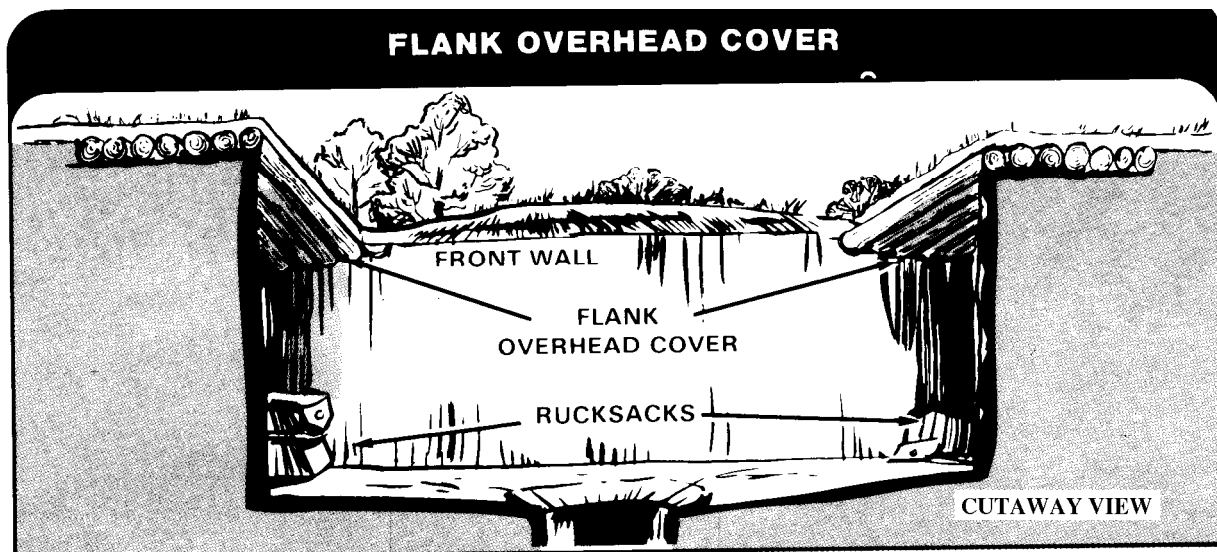
A fighting position should have a place for storing equipment and ammunition. When your position has overhead cover across its center, dig a storage compartment in the bottom of

the back wall. The size of the compartment depends on the amount of equipment and ammunition to be stored.



When your position has flanked overhead cover, use the compartments dug for the over-

head cover as storage compartments.



If you dig your storage compartment large enough, it may provide extra space in which

you can stretch out while sleeping. This lets you sleep inside the position and under cover.