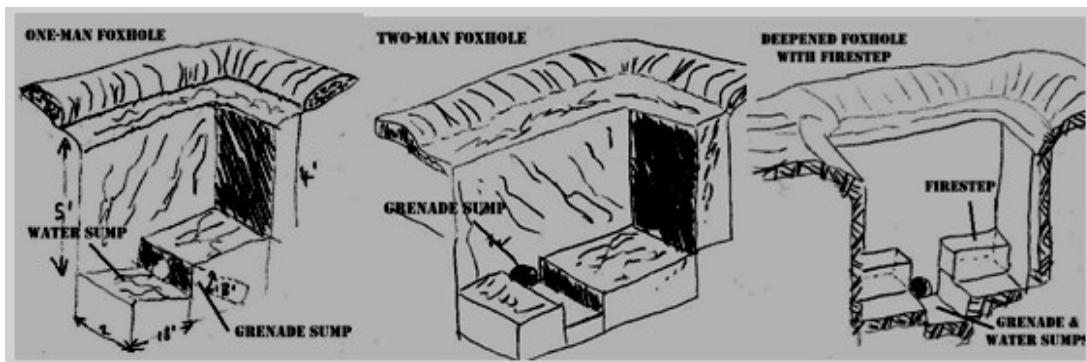


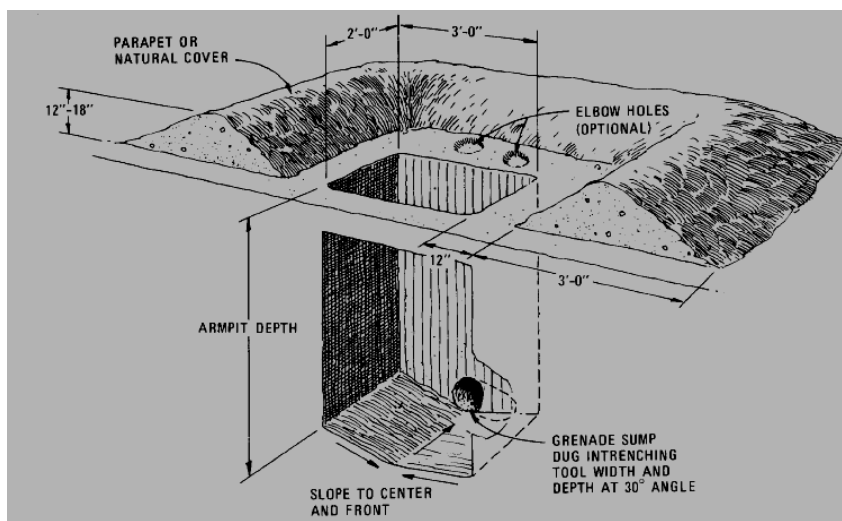
A Long-Term Survival Guide - Types Of Combat Shelters:

In any long-term disaster or survival situation, you must plan on defending yourself. There are lots of people who refuse to store any supplies, but who plan to take what they want by force, when things get bad. If you have built yourself a retreat and stocked it with supplies, there is a very good chance that some of these types will eventually discover your location, and try to take what you have. To prepare a defense against such an attack, you need a supply of guns and ammo, but you also need tactics which will put the odds in your favor, even if you are badly outnumbered.



Basic fighting positions, showing the parapets, water sumps, grenade sumps, and fire steps.

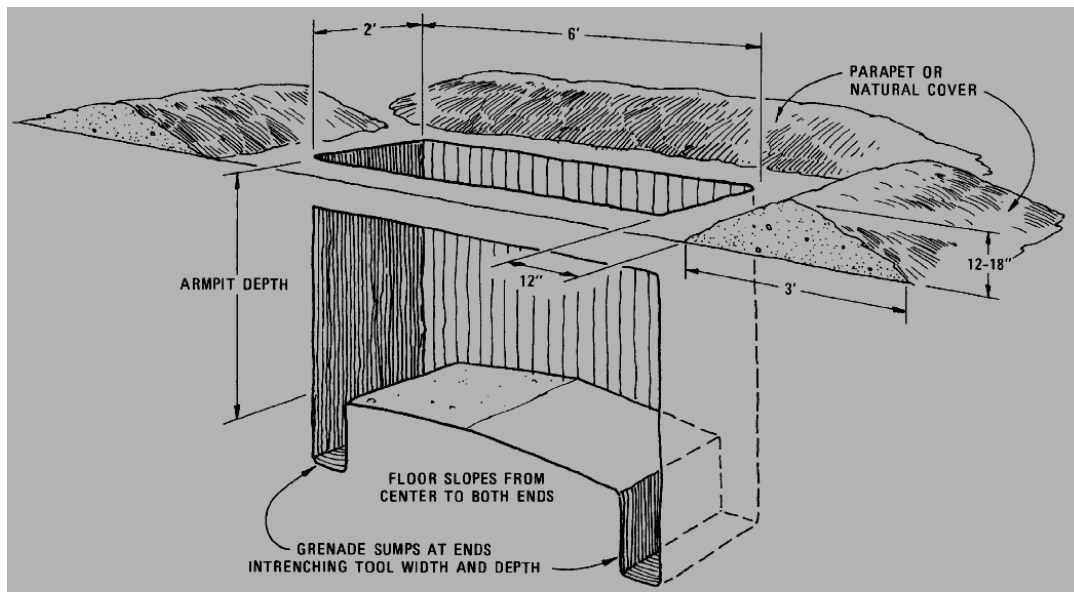
Forget about the gunfights you see on TV, where both sides stand in the open and shoot wildly at each other. Your job is to inflict fatal damage on the enemy, while staying completely protected.



One-man foxhole. The basic foxhole is improved by adding overhead cover, and camouflage.

The best way to do this is by building combat shelters. It is much easier to conduct an effective defense from inside a well-made combat shelter, than when outside, or inside any normal building (because normal buildings are not designed to protect you from enemy gunfire). The physics of combat with firearms make it vital to build these shelters, to help you survive and win, when your retreat is attacked by superior numbers. The simplest type of combat shelter is the foxhole.

The foxhole, or fighting position, is the basic defensive position for the individual rifleman. They can be either one, two, or three-man fighting positions. (If you have more than three fighters, you make more than one position.) The type, size, and camouflage method will vary, depending on the terrain, intended use, and the local vegetation. Your foxholes should be positioned where there is a good view and field of fire, covering the area where the enemy is most likely to approach from, and / or travel past. Concealment is a secondary, but still very important consideration, as you would prefer to be able to shoot the enemy without them being able to see where you are shooting from (so they don't know which area to shoot back at). Your fighting positions can (and should) be built with adjoining shelters, trenches, or tunnels, to allow you to change positions (or escape), without exposing yourself to the enemy.

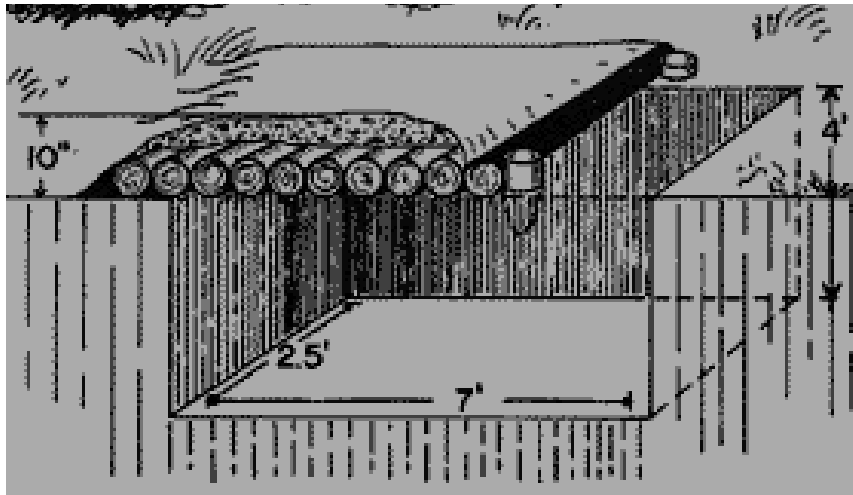


Two-man foxhole: Can be improved by adding overhead cover and camo. A sleeping trench with overhead cover can be constructed to the rear, so one man can sleep, while the other keeps watch.

The basic ways that an armed group are most likely to attack a fixed position, such as your retreat, may include sniper attacks from a distance, rushing your retreat in vehicles for a fast attack, trying to creep up close to your position for a sneak attack, trying to lure you into an ambush using harmless or wounded-looking people (or children) as decoys, or trying to get close to your position using hostages, or human shields. They may also try to infiltrate your retreat with an innocent-acting person who can then gather intel, attack you when you are off-guard, or open an access route for the enemy while you are asleep.

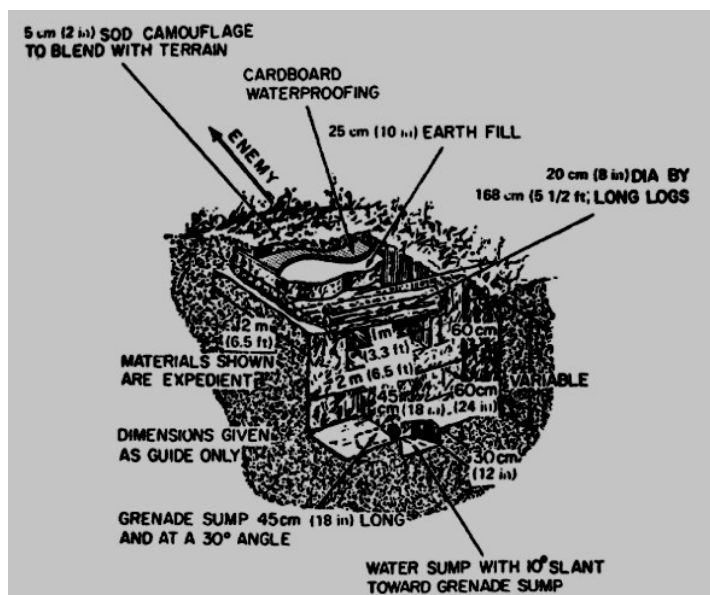
If the enemy has any military training, they may try a two-pronged assault, where they split into two groups. One group will shoot at your position to keep you occupied, as the other group advances toward your retreat, moving to a closer covered position. Then the second group attacks while the first group moves up. This way, they can get close enough to use grenades or fire-bombs, or rush your position all at once, for a fatal close-quarter attack. Less likely, but also possible, are attacks using stolen military grenade launchers or mortars. These are the kinds of dirty tactics you must be able to thwart.

You need to prepare yourself mentally and physically against the possibility of any of these types of attacks, so that you are not taken by surprise. People who are intent on killing you, so that they can steal your retreat and supplies, will not fight fairly, and they will not abide by the Geneva Code if you are defeated. If you aren't motivated to work up a defensive plan and build fighting positions, spend some time imagining your self, friends and family at the mercy of an armed gang of escaped convicts, who think you have hidden supplies, and want to torture the info out of you.



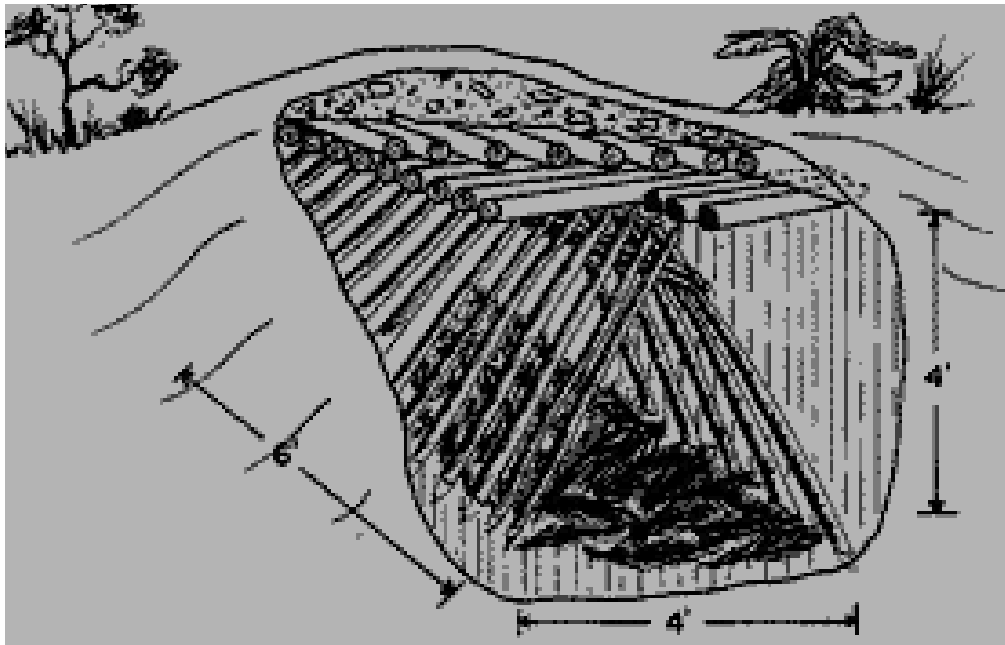
Here is how logs, dirt, and waterproofing are used to make overhead cover. Add vegetation, for camo.

Which tactics are used against you will mainly depend on the size and experience level of the attacking group. You should have a plan in place for dealing with each type of attack, and build your fighting positions well in advance, so that your group can practice responding to these situations. The more you do in advance, the better off you will be when the time comes to fight.



This diagram shows how a sleeping trench with overhead cover can be added to a foxhole.

The good news here is that well-designed fighting positions can help thwart most attacks, by keeping you protected from enemy gunfire or sniper fire, while leaving the bad guys exposed to your shots. Of course you will also want to keep a regular watch for intruders, clear your fields of fire to deny cover to the enemy, be alert and cautious against any of the possible decoy or ambush ploys, make barriers and obstacles (to slow down an enemy advance, and channel them into your fire zones), and protect your position against fast attacks in vehicles, by making anti-vehicle trenches, obstacles, and roadblocks. If you were wise enough to build your retreat in a remote, secluded area, it will be an easy task to block roads or take out bridges, at the best strategic points, to keep people from getting close to your location in vehicles.

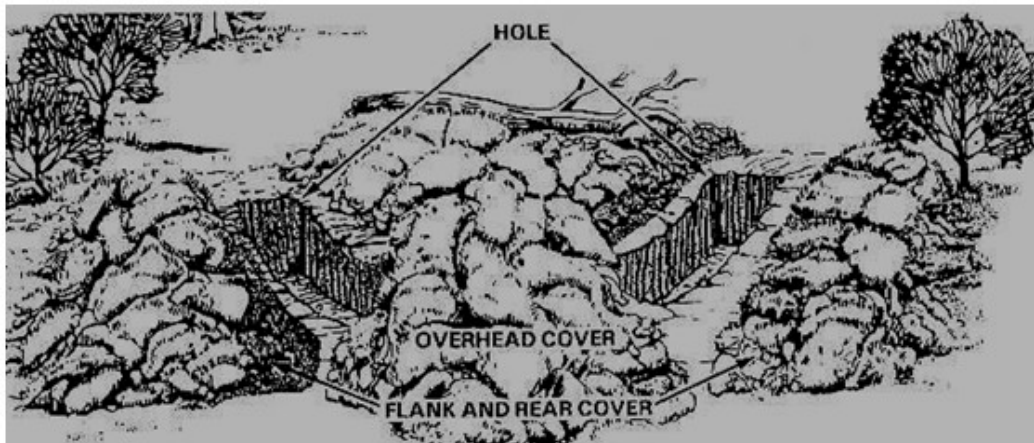


This is another sleeping trench, with heavy overhead cover. The triangle shape is very sturdy.

If you should wind up facing a large group of trained ex-military types, or an actual military force, your best chance for survival will probably be to leave. Even in this worst-case situation, you should have a plan for an orderly retreat to other fighting positions, rather than just running away. Having most of your equipment and supplies cached in safe locations, rather than stashed at your retreat, will also protect you against losing everything, if you have to fall back.

Foxhole construction details: All foxholes share similar characteristics in their construction. They are:
Firestep: This is the step the individual soldier stands on when in firing position. When he is off the step, there should be sufficient room for him to stand and still receive some head-level protection.
Water sump: The water sump, or drain pit, is usually located at one end of the emplacement, to collect water.
Grenade sump: This is located at the lowest level away from the firing position, usually at the bottom of the water sump. It is a small tunnel dug to about 18 inches long, sloped downward at an angle of about 30 degrees. If any hand grenades are thrown into the foxhole, they can be kicked into this sump. Their fragments should be absorbed by the surrounding soil in the sump.

Parapet: The excavated soil can be placed around the foxhole at 3 feet wide and 6 inches high. This provides a rifle rest, and some extra protection from small arms fire. Camouflage: A foxhole can be camouflaged with branches and foliage. Simple frames can be made to create overhead cover. Shelter halves or ponchos can be used to provide weather protection. Local vegetation can be planted in the dirt of the parapets and overhead cover.



Typical two-man fighting position, with overhead cover in the center, frontal cover, and flank cover.

The most important aspect of a fighting position is that it must be well-positioned, to allow you to fire on the enemy, while staying concealed from view. You must be able to engage the intended enemy, and you should be able to fire out to the maximum effective range of your weapon with maximum view of the enemy, and minimal cover for them. Traps or grenades should be used in those areas you can't cover with your weapon. Multiple fighting positions should provide mutually supporting, interlocking fire. This allows you to move to a different position, and still engage the enemy if they haven't moved, as well as allowing fighters in two or more positions to shoot at the enemy at the same time.



Here sector stakes and aiming stakes are added, to help direct fire at the enemy during night combat.

When possible, site your positions behind natural cover, and in easily camouflaged locations. The enemy must not be able to identify your positions until it is too late and he has been effectively engaged. To improve the effectiveness of your fighting positions, emplace sector stakes, stake the primary sector, position grazing fire logs or sandbags between the sector stakes, place the aiming stake(s), if required, to allow limited visibility firing (shooting at night, or in smoke or fog) at a specific target zone, scoop out elbow holes, and clear the fields of fire for both the primary and secondary sectors of fire.



Two Fighting Positions, connected by covered trench. Can be improved with overhead cover.

No matter how well your position is constructed, it is also important in building a fighting position is to be sure that it *cannot be seen*, and that includes *from the air*. You camouflage the position after you finish building it.

Step back and look at your position in relation to the surrounding terrain and vegetation (or lack of vegetation). The key is to work hard to blend in with the surrounding terrain. There may be instances where the terrain will not allow you to *dig in*. Instead, you'll have to *build up* a position. This involves using sandbags in conjunction with natural materials. Again, the key is to camouflage the position so that it blends in with the surrounding terrain.

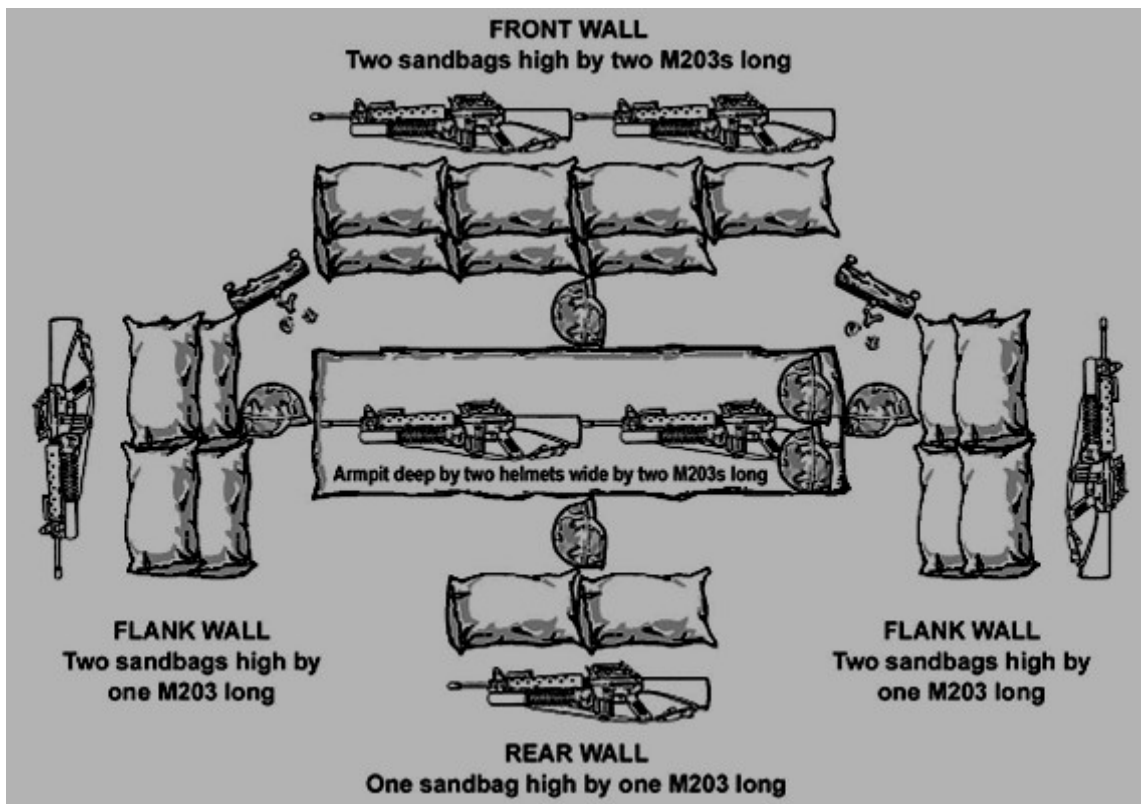
If you build a position using natural vegetation and foliage for your camouflage, remember that you must replace that stuff before it dries and turns brown (if everything else around is still green for example). It is better to transplant small bushes, and use existing trees and deadwood, when you can.

Dispose of the leftover dirt from your digging. There's nothing like a pile of freshly dug dirt to help give your position away. Cover your tracks. If you've been trudging back and forth getting camouflage material and disposing of soil, you're going to leave either tracks or a trail to your position. That can be seen from the air, so, get rid of the tracks. Step out front, and take a look at your work. Of course you've got to do that anyway, to remove enemy cover, and clear trees and brush that obstruct your fields of fire. There's no substitute for putting yourself in the place of your enemy. What can he see?

HOW TO PREPARE YOUR FIGHTING POSITION: Mark out the positions of the foxhole and parapets first, using stakes, or by scratching lines in the ground. Prepare retaining walls for the parapets out of logs, unless they will be made using sandbags.



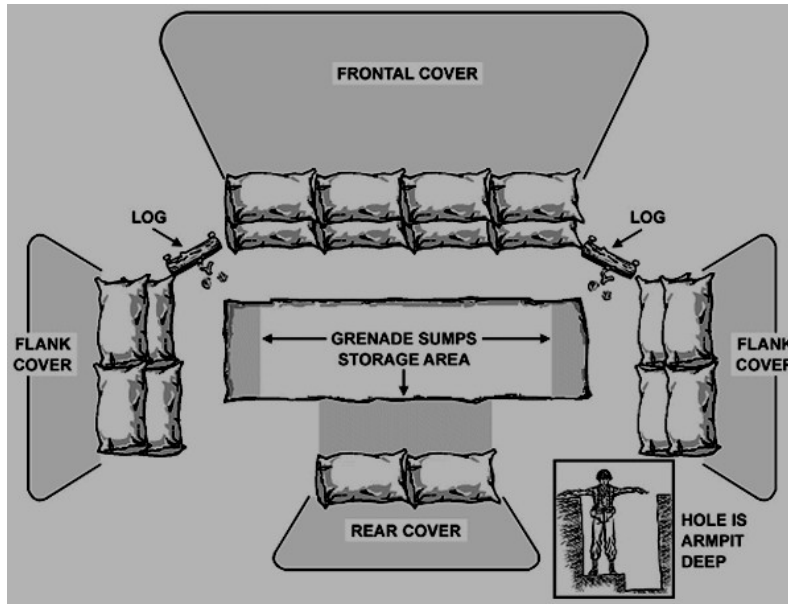
Ensure that there is a minimum distance of one foot (equal to the width of one kevlar helmet) from the edge of the hole to the beginning of the front, flank (side), and rear cover. The cover to the front will be made from sandbags (or logs), two to three layers high, and will have an earth ramp built up in front of it, using the soil taken from the foxhole. For a two-man position, the front cover will be about two rifle lengths long, or the same length as the foxhole will be.



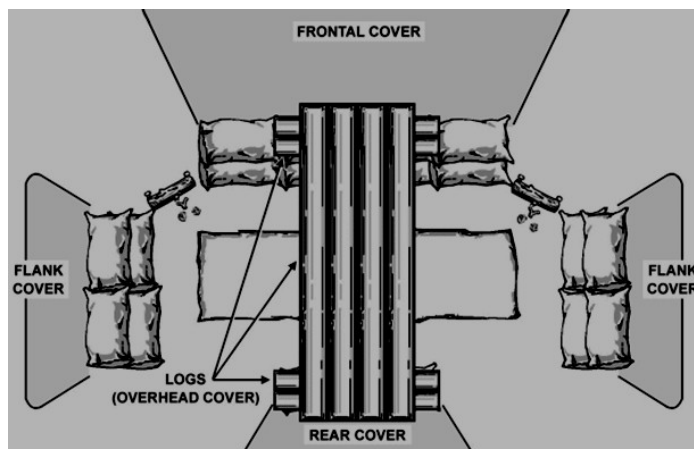
The cover to the flanks (sides) is the same height, but only one rifle long. The cover to the rear is one sandbag high and one rifle long. If logs are used, they must be held firmly in place with strong stakes, to keep them from shifting. Dig out the foxhole, throwing the dirt forward of the parapet retaining walls and packing it down hard, in the shape of sloping ramps, to form the parapets.

Dig the foxhole down to armpit deep (for the tallest person).

Fill in the parapets in order of front, flanks (sides), and rear. Camouflage the parapets, and the entire position. Dig grenade sumps, and slope the floor toward them. Dig storage areas for your backpacks into the rear wall. Dig an ammo can into the side of one wall, to hold extra ammo.



Prepare the overhead cover. Always provide solid support for overhead cover, to prevent cave-ins. Build the support using 4 to 6-inch logs on top of each other, running the full length of the front and rear cover. Place five or six logs 4 to 6 inches in diameter and two rifles long over the center of the position, resting them on the overhead cover support, not the sandbags. Place waterproofing (plastic bags, tarps, or ponchos) on top of these logs. Put a minimum of 18 inches of packed dirt or sandbags on top of the logs. Camouflage the overhead cover, and the edge of the position. Inspect the position, checking your camouflage from different angles.



Use revetments (reinforcing stakes and logs) to support soft walls, in sandy soil. Check stabilization of wall bases, looking for signs of walls crumbling. Inspect and test the position daily, after heavy rain, and after receiving fire. Maintain, repair, and improve positions constantly. Keep vehicles away from the position, and covered with camouflage netting, or brush.

TYPES OF FIGHTING POSITIONS:



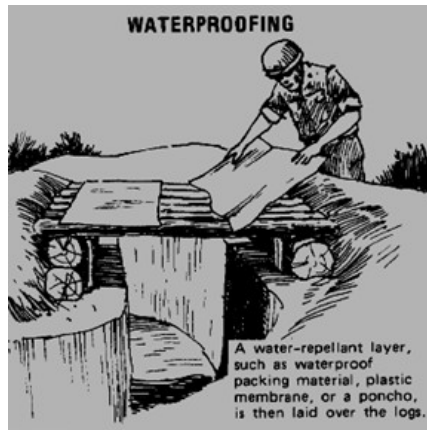
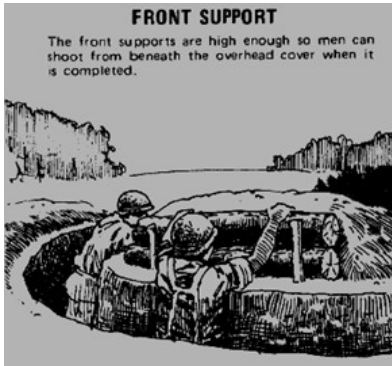
Hasty Fighting Position: Hasty fighting positions are made when there is little or no time before combat is expected. Locate them behind whatever cover is available, and positioned so that they can be used to fire upon the enemy. The position should give frontal protection from enemy fire, while still allowing you to fire to the front, and off to the sides. Occupying a hasty position does not mean there is no digging. You can dig hasty positions in only a few minutes. A hasty fighting position just 18 inches deep will provide a significant amount of protection from direct enemy fire and even fragmentation grenades. Hasty positions may be improved into more elaborate positions, when time and circumstances permit.



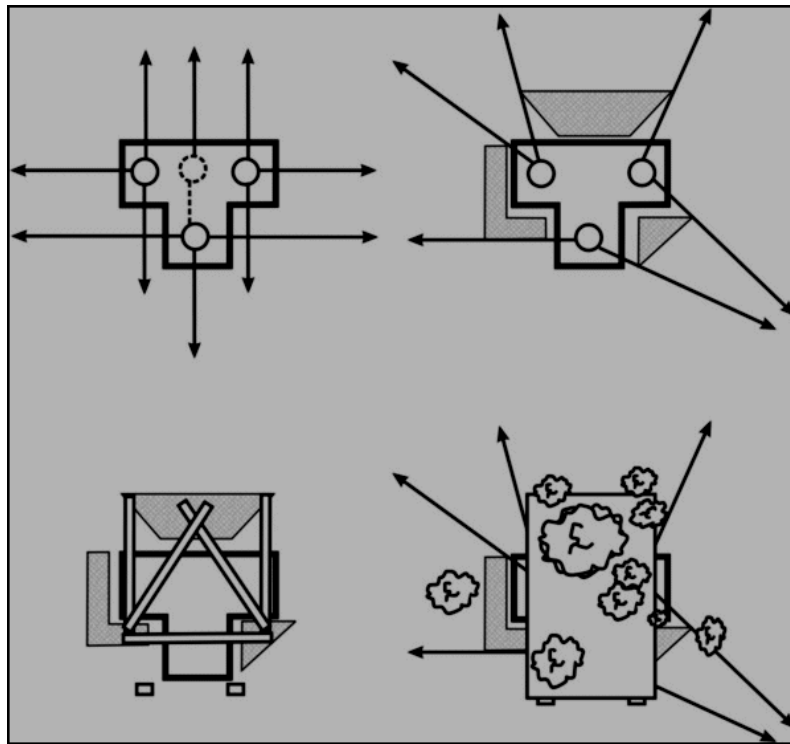
One-Man Fighting Position. Positions that contain only a single man are the least desirable, but they are useful in some situations. They may be required to cover exceptionally wide frontages. They should never be positioned out of sight of adjacent positions. The one-man position allows choices in the use of cover. The hole only needs to be large enough for one man, and his rifle and gear. It does not have the security of a two-man position. The one-man fighting position should allow you to fire to the front or off to the side, from behind frontal cover.



U-Shaped, Two-Man Fighting Position. A two-man fighting position is normally more effective than a one-man position. It can be used to provide mutual support to adjacent positions on both flanks (sides), as well as cover dead space immediately in front of the position. One or both ends of the hole may extend around the sides of the frontal cover.



Modifying a position in this way allows both people to have better observation, and to have greater fields of fire to the front. Also, during rest or eating periods, one person can watch the entire sector, while the other sleeps or eats. If they receive fire from their front, they can move back to gain the protection of the frontal cover. By moving about 1 yard, they can continue to find and hit targets to the front, during lulls in enemy fire. This type of position requires more digging, and is harder to camouflage. Don't forget to make the standard drainage and grenade sumps.



Three-Man Fighting Position: The three-man position is T-shaped. This basic design can be changed by adding or deleting berms, changing the orientation of the T, or shifting the position of the third man, to form an L instead of a T. The layout of the position can be oriented to fire on expected enemy avenues of approach from any direction. Berms must not block observation or fire into assigned primary or alternate sectors. Care must be taken to properly support overhead cover.

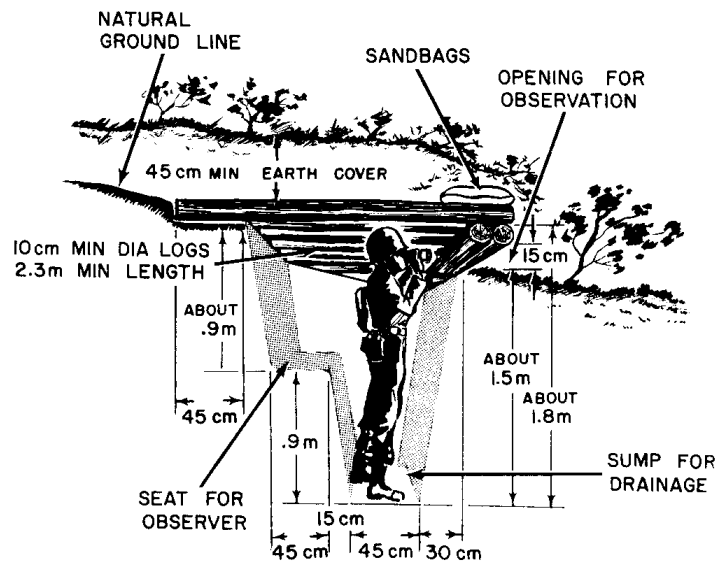
A three-man position has several advantages. A leader can be in each position, making command and control easier. It supports continuous security operations better than other positions. One person can provide security; one can do priority work; and one can rest, eat, or perform maintenance. This allows the priority of work to be completed more quickly than in a one- or two-man position. This position allows you to maintain combat power and security without shifting personnel, or leaving positions unmanned. It provides 360-degree observation and fire, and it is more difficult for the enemy to destroy, because he must kill or suppress three fighters.

When using three-man positions, the leader must consider several things. Either the distance between the larger fighting positions must be increased, or the size of the area covered by your riflemen must be reduced. The choice depends mainly on visibility, and fields of fire. Because the main leader is in a fighting position that will most likely be engaged during a battle, he cannot exert personal control over any other fighting positions.

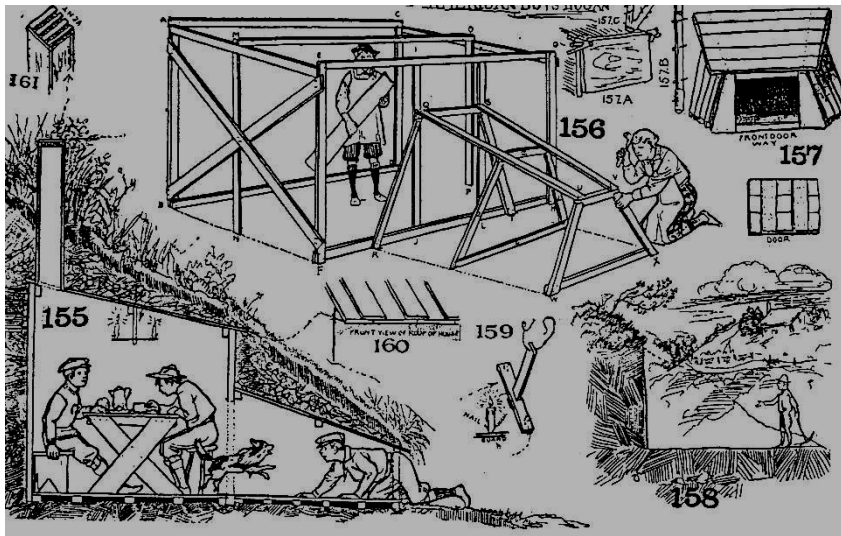
How the leader controls the battle: By clearly communicating his plans and intent to his men, including the combat plan, and what to do if things do not go as planned. Using prearranged signals like flares, whistles, or tracers. Positioning key weapons (machine gun, grenade launcher, or bazooka) in his fighting position. Placing his fighting position so that it covers key terrain. Placing his position where his team can act as a reserve, to help other positions in trouble.



Crawl Trenches: When there is time and help available, trenches should be dug to connect fighting positions, so you can move by covered routes. The depth of a trench depends on the type of help and equipment available. Without help, fighters dig crawl trenches (about 3 feet deep by 2 feet wide) With help, they dig standard trenches. The trench should zigzag, so the enemy cannot fire down a long section. You use crawl trenches to conceal your movement into and within positions, to provide protection. Dirt from digging is placed on parapets, normally on each side of the trench. If the trench runs across a forward slope, all the dirt is placed on the enemy side, to make the forward parapet higher. All dirt needs concealment, to help trenches and positions stay camouflaged. Crawl trenches are improved by adding overhead cover, as possible.



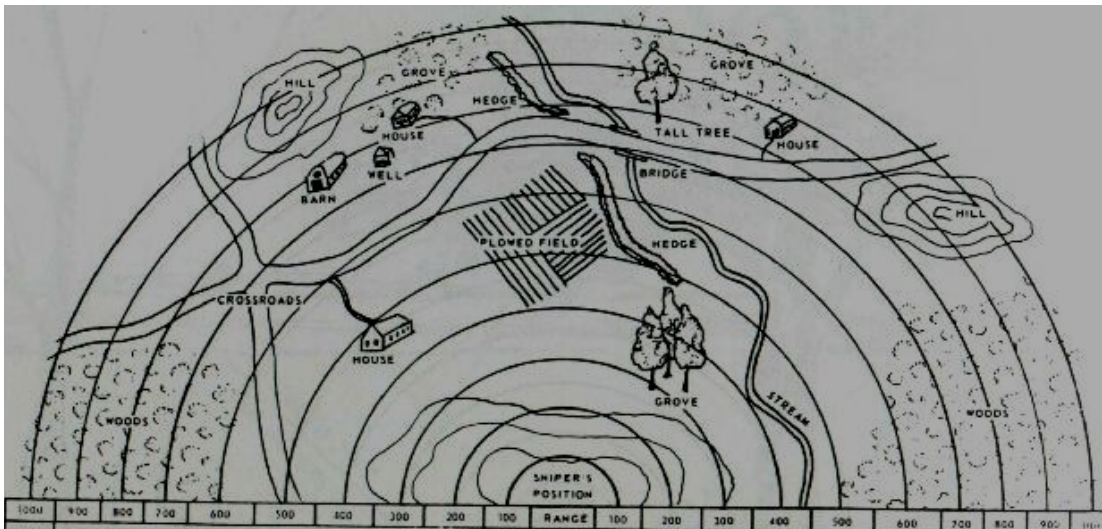
Observation Post / Sniper Position: This is the basic design for a concealed observation post with overhead cover. It also makes an ideal sniper, or counter-sniper position, with minimal modifications. Not shown are side entrance with covered crawl trench access, gear and ammo storage, and communication equipment. This post is located on high ground, and positioned so that it can be used to keep watch over your retreat. It should have the best possible views of approaches to your retreat, and of the retreat area itself, so that they can be covered with protective sniper fire. The observation post is improved by constructing it with a sleeping trench, and room for a portable toilet.



Underground Shelter: This design for an underground fort, dug into the side of a slope or hillside, makes an excellent hidden shelter, and can be used as a sniper's hide with very little modification. It can be made completely out of natural materials, using tree limbs and poles in place of the lumber framework shown in the sketches, or a similar shelter can be made using a notched log-cabin type of construction, if desired. A window (or firing port) can be installed above where the entrance tunnel meets the front wall of the shelter, and screened from view. An alternate entrance can be made by enlarging the ventilation chimney shown into a trapdoor entryway with a ladder, and the entrance tunnel shown can be used as a prone sniping position, by adding the standard parapets used in making foxholes and fighting positions, clearing a field of fire to cover the area you want to defend, and using vegetation to camouflage the position. Sandbags can be added to the roof and exterior as needed, for protection from return fire (also covered with forest debris and vegetation for concealment).

Any furnishings for the shelter should be made and placed inside before the roof is finished, or they may be too large to fit through the crawlway entrances. For combat applications, the shelter should be constructed with grenade sumps, drainage sumps, and possibly a reinforced shelter and / or escape tunnel dug into the back wall. The shelter can be made as large or small as desired, but should be long enough to sleep in, tall enough to stand upright (at least at the highest end), and roomy enough to hold a reasonable amount of equipment and supplies. Extra storage space can be made by digging storage pits in the floor, as long as there is a well-made drainage sump at the bottom of each storage pit, preferably filled with sand or gravel. A shelter like this is a useful place to store supplies you don't want to bury in a cache, and you can occupy this shelter without being subject to discovery. I also recommend taking the trouble to make a second exit, or escape tunnel.

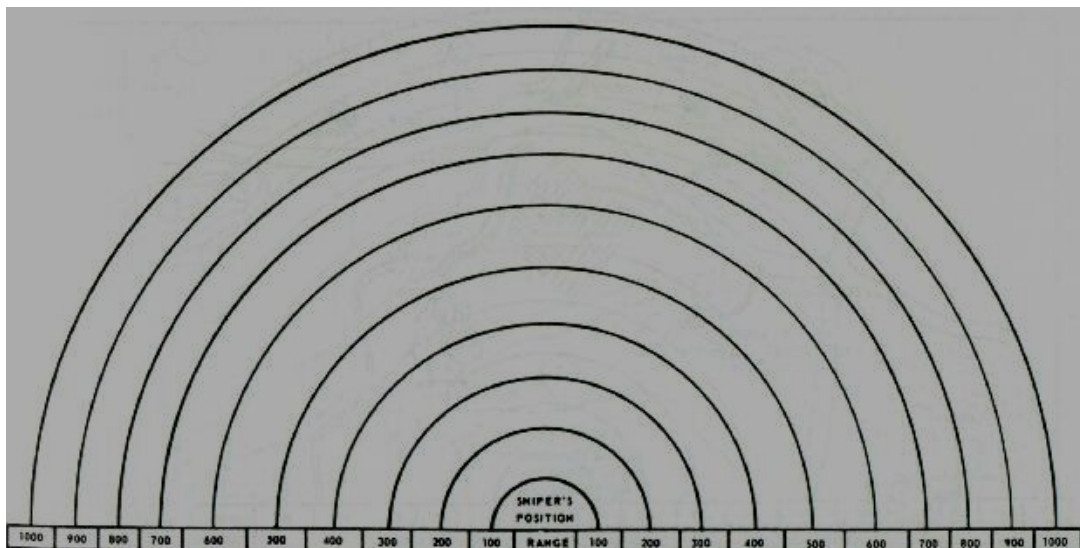
A hidden shelter of this type, carefully built in a desirable location, can fit into a number of survival scenarios. It is always wise to invest some time and effort to have a safe place where you can go to hide out, or just resupply. Needless to say, the entrance tunnel area should have native bushes and vegetation planted around it, for maximum concealment. I prefer to make mine with a strong locking door, and I cover my doorway with a large flat rock, slab of wood, or old corrugated roofing, which is in turn concealed by leaves and forest debris.



A completed range card, showing the view from the firing port, with each terrain feature mapped out.

Range Cards: When professional soldiers construct a fighting position, the job is not finished until a range card has been made, showing all the important features visible from the firing port. The card is drawn on a half-circle pattern, which is divided into 100 yard increments. With a glance at the completed card, you can know the range to any target in your field of fire.

Making one of these cards for each of your positions is an important part of your defense plan, and will improve your targeting accuracy, especially in the heat of battle. The card can also be made into a sketch or painting, and mounted on a piece of plywood, or on the wall below each firing port, for easy reference.



Copy this blank range card, and use these to sketch the field of fire from each of your fighting positions.