COMBAT SKILLS OF THE SOLDIER

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Preface

This manual is dedicated to the soldier — the key to success on the battlefield. Wars are not won by machines and weapons but by the soldiers who use them. Even the best equipped army cannot win without motivated and well-trained soldiers. If the US Army is to win the next war, its soldiers must be motivated by inspired leadership, and they must know how to do their jobs and survive on the battlefield.

This is the soldier’s field manual. It tells the soldier how to perform the combat skills needed to survive on the battlefield. These are basic skills that must be learned by soldiers in all military occupational specialties (MOS).

Users of this manual may submit recommended changes or comments, referring to the page and line(s) of the text. Reasons should be provided to insure understanding and complete evaluation. Comments should be forwarded on DA Form 2028 (Recommended Changes to Publications) addressed to the Commandant, US Army Infantry School, ATTN: ATSH-I-V-PD, Fort Benning, GA 31905.

The words “he,” “him,” “his,” “man,” and “men,” when used in this publication, represent both the masculine and feminine genders, unless otherwise specifically stated.

* This manual supersedes FM 21-75, 10 July 1967.
CHAPTER 1

Cover, Concealment, and Camouflage

GENERAL

If the enemy can see you, he can hit you with his fire. So you must be concealed from enemy observation and have cover from enemy fire.

When the terrain does not provide natural cover and concealment, you must prepare your cover and use natural and man-made materials to camouflage yourself, your equipment, and your position. This chapter provides guidance on the preparation and use of cover, concealment, and camouflage.

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COVER

Cover gives protection from bullets, fragments of exploding rounds, flame, nuclear effects, and biological and chemical agents. Cover can also conceal you from enemy observation. Cover can be natural or man-made.

Natural cover includes such things as logs, trees, stumps, ravines, and hollows. Man-made cover includes such things as fighting positions, trenches, walls, rubble, and craters. Even the smallest depression or fold in the ground can give some cover. Look for and use every bit of cover the terrain offers.

In combat, you need protection from enemy direct and indirect fire.

To get this protection in the defense, build a fighting position (man-made cover) to add to the natural cover afforded by the terrain.

To get protection from enemy fire in the offense or when moving, use routes that put cover between you and the places where the enemy is known or thought to be. Use ravines, gullies, hills, wooded areas, walls, and other cover to keep the enemy from seeing and firing at you. Avoid open areas, and do not skyline yourself on hilltops and ridges.
CONCEALMENT

Concealment is anything that hides you from enemy observation. Concealment does not protect you from enemy fire. Do not think that you are protected from the enemy’s fire just because you are concealed. Concealment, like cover, can also be natural or man-made.

Natural concealment includes such things as bushes, grass, trees, and shadows. If possible, natural concealment should not be disturbed. Man-made concealment includes such things as battle-dress uniforms, camouflage nets, face paint, and natural material that has been moved from its original location. Man-made concealment must blend into the natural concealment provided by the terrain.

Light discipline, noise discipline, movement discipline, and the use of camouflage contribute to concealment. Light discipline is controlling the use of lights at night by such things as not smoking in the open, not walking around with a flashlight on, and not using vehicle headlights. Noise discipline is taking action to deflect sounds generated by your unit (such as operating equipment) away from the enemy and, when possible, using methods to communicate that do not generate sounds (arm-and-hand signals). Movement discipline is such things as not moving about fighting positions unless necessary, and not moving on routes that lack cover and concealment. In the defense, build a well-camouflaged fighting position and avoid moving about. In the offense, conceal yourself and your equipment with camouflage and move in woods or on terrain that gives concealment. Darkness cannot hide you from enemy observation in either offense or defense. The enemy’s night vision devices and other detection means let them find you in both daylight and darkness.

CAMOUFLAGE

Camouflage is anything you use to keep yourself, your equipment, and your position from looking like what they are. Both natural and man-made material can be used for camouflage.

Change and improve your camouflage often. The time between changes and improvements depends on the weather and on the material used. Natural camouflage will often die, fade, or otherwise lose its effectiveness. Likewise, man-made camouflage may wear off or fade. When those things happen, you and your equipment or position may not blend with the surroundings. That may make it easy for the enemy to spot you.

CAMOUFLAGE CONSIDERATIONS

Movement draws attention. When you give arm-and-hand signals or walk about your position, your movement can be seen by the naked eye at long ranges. In the defense, stay low and move only when necessary. In the offense, move only on covered and concealed routes.

Positions must not be where the enemy expects to find them. Build positions on the side of a hill, away from road junctions or lone buildings, and in covered and concealed places. Avoid open areas.
Outlines and shadows may reveal your position or equipment to air or ground observers. Outlines and shadows can be broken up with camouflage. When moving, stay in the shadows when possible.

Shine may also attract the enemy’s attention. In the dark, it may be a light such as a burning cigarette or flashlight. In daylight, it can be reflected light from polished surfaces such as shiny mess gear, a worn helmet, a windshield, a watch crystal and band, or exposed skin. A light, or its reflection, from a position may help the enemy detect the position. To reduce shine, cover your skin with clothing and face paint. However, in a nuclear attack, darkly painted skin can absorb more thermal energy and may burn more readily than bare skin. Also, dull the surfaces of equipment and vehicles with paint, mud, or some type of camouflage material.
**Shape** is outline or form. The shape of a helmet is easily recognized. A human body is also easily recognized. Use camouflage and concealment to breakup shapes and blend them with their surroundings. Be careful not to overdo it.

The **colors** of your skin, uniform, and equipment may help the enemy detect you if the colors contrast with the background. For example, a green uniform will contrast with snow-covered terrain. Camouflage yourself and your equipment to blend with the surroundings.
Dispersion is the spreading of men, vehicles, and equipment over a wide area. It is usually easier for the enemy to detect soldiers when they are bunched. So, spread out. The distance between you and your fellow soldier will vary with the terrain, degree of visibility, and enemy situation. Distances will normally be set by unit leaders or by a unit’s standing operating procedure (SOP).
HOW TO CAMOUFLAGE

Before camouflaging, study the terrain and vegetation of the area in which you are operating. Then pick and use the camouflage material that best blends with that area. When moving from one area to another, change camouflage as needed to blend with the surroundings. Take grass, leaves, brush, and other material from your location and apply it to your uniform and equipment and put face paint on your skin.
**Fighting Positions.** When building a fighting position, camouflage it and the dirt taken from it. Camouflage the dirt used as frontal, flank, rear, and overhead cover. Also camouflage the bottom of the hole to prevent detection from the air. If necessary, take excess dirt away from the position (to the rear).

Do not overcamouflage. Too much camouflage material may actually disclose a position. Get your camouflage material from a wide area. An area stripped of all or most of its vegetation may draw attention. Do not wait until the position is complete to camouflage it. Camouflage the position as you build.

Do not leave shiny or light-colored objects lying about. Hide mess kits, mirrors, food containers, and white underwear and towels. Do not remove your shirt in the open. Your skin may shine and be seen. Never use fires where there is a chance that the flame will be seen or the smoke will be smelled by the enemy. Also, cover up tracks and other signs of movement.
When camouflage is complete, inspect the position from the enemy's side. This should be done from about 35 meters forward of the position. Then check the camouflage periodically to see that it stays natural-looking and conceals the position. When the camouflage becomes ineffective, change and improve it.

**Helmets.** Camouflage your helmet with the issue helmet cover or make a cover of cloth or burlap that is colored to blend with the terrain. The cover should fit loosely with the flaps folded under the helmet or left hanging. The hanging flaps may break up the helmet outline. Leaves, grass, or sticks can also be attached to the cover. Use camouflage bands, strings, burlap strips, or rubber bands to hold those in place. If there is no material for a helmet cover, disguise and dull helmet surface with irregular patterns of paint or mud.

**Uniforms.** Most uniforms come already camouflaged. However, it may be necessary to add more camouflage to make the uniform blend better with the surroundings. To do this, put mud on the uniform or attach leaves, grass, or small branches to it. Too much camouflage, however, may draw attention.
When operating on snow-covered ground, wear overwhites (if issued) to help blend with the snow. If overwhites are not issued, use white cloth, such as white bedsheets, to get the same effect.

**Skin.** Exposed skin reflects light and may draw the enemy’s attention. Even very dark skin, because of its natural oil, will reflect light. Use the following methods when applying camouflage face paint to camouflage the skin.

### COLORS USED IN CAMOUFLAGE

- **Sand and light green for desert and dry areas**
- **Loam and white for snow-covered terrain**
- **Loam and light green for vegetated areas**

#### COLORS

**SKIN COLOR**

- Light or Dark

**SHINE AREAS**

- Forehead, cheekbones, ears, nose and chin

**SHADOW AREAS**

- Around eyes, under nose, and under chin

<table>
<thead>
<tr>
<th>CAMOUFLAGE MATERIAL</th>
<th>SKIN COLOR</th>
<th>SHINE AREAS</th>
<th>SHADOW AREAS</th>
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<tbody>
<tr>
<td>Loam and Light Green Stick</td>
<td>All troops use in areas with green vegetation</td>
<td>Use loam</td>
<td>Use light green</td>
</tr>
<tr>
<td>Sand and Light Green Stick</td>
<td>All troops use in areas lacking green vegetation</td>
<td>Use light green</td>
<td>Use sand</td>
</tr>
<tr>
<td>Loam and White</td>
<td>All troops use only in snow-covered terrain</td>
<td>Use loam</td>
<td>Use white</td>
</tr>
<tr>
<td>Burnt Cork, Bark, Charcoal, or Lamp Black</td>
<td>All troops, if camouflage sticks not available</td>
<td>Use</td>
<td>Do not use</td>
</tr>
<tr>
<td>Light-Color Mud</td>
<td>All troops, if camouflage sticks not available</td>
<td>Do not use</td>
<td>Use</td>
</tr>
</tbody>
</table>

When applying camouflage stick to your skin, work with a buddy (in pairs) and help each other. Apply a two-color combination of camouflage stick in an irregular pattern. Paint shiny areas (forehead, cheekbones, nose, ears, and chin) with a dark color. Paint shadow areas (around the eyes, under the nose, and under the chin) with a light color. In addition to the face, paint the exposed skin on the back of the neck, arms, and hands. Palms of hands are not normally camouflaged if arm-and-hand signals are to be used. Remove all jewelry to further reduce shine or reflection.

When camouflage sticks are not issued, use burnt cork, bark, charcoal, lamp black, or light-colored mud.

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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.
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](image-url)
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.

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.

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.

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.