

*This article has been cleared by the School of Infantry, RMC-A and SODLOs for related doctrine.*

*The information in this article provides individual camouflage historical lessons and tips from World War II, sourced from the Australian War Memorial research centre. The information provided in this article is dated as soldiers back then were less concerned by the electro-magnetic spectrum. However, it contains useful considerations on the matter of camouflage.*

Camouflage is about every possible trick, device and strategy that will mislead the enemy by hiding your position, strength, weakness and intentions. It includes making decoys to attract the enemy elsewhere. Paint, netting and other materials may be used, but common-sense and the ability to use anything handy are equally important. Concealment is a matter for every soldier, even in the largest things. One soldier's carelessness can spoil an important surprise attack or disclose a position.

It is impossible to count every instance of camouflage in this article, but common sense exercised with these general principles should give the desired result, as long as you heed a final warning:  
DO NOT OVERDO A COMOUFLAGE SCHEME; LET IT BE SIMPLE.

*When the patrol got to within 50 yards of the enemy wire they were detected, and attacked by machine gun fire, bombs and trench mortars, assisted by enemy searchlights... Owing to the heavy snow on the ground, the members of the patrol wore white calico overalls, which did not prove satisfactory especially when they were moving among the stunted tree trunks in no-man's land.*

*The Forty First, compiled by members of the Intelligence Staff, World War I*

## **Individual concealment**

Personal camouflage is based on the four principles:

- tone and colour resemblance to background
- shadow
- disruption
- counter-shading

**Tone and colour resemblance to background.** If possible, choose a position where the natural surroundings match the tone and colour of the uniform.

The darkening of the face and hands is of great importance. The quality of the human skin makes it very obvious from either ground or aerial observation. The danger of looking up at aircraft should be stressed – the white spot of the face stands out like a sore thumb. Mud, ashes, burnt cork or other handy material should be rubbed on face and hands – and on knees and legs if shorts are worn. [Soldiers obviously use camouflage cream today.]

All leather or metal surfaces should be covered – wrist watches, buttons, buckles, boots, leather straps etc. – these will shine or glint in the sun and will call attention to the position.

**Shadows reveal – and also conceal.** If you want to hide something which is smaller than things which are casting shadows (trees, rocks, big buildings and so on) then get on the shadow side.

If you want to do your best to hide something which is bigger than the bushes or rocks, then take a position so that your shadow falls on the bushes or rocks. It won't be seen so easily.

The shadow may be the only thing that gives your truck away. If you cannot park in the shadow of a tree or other object, then park with the rear to the sun and use a net over the bonnet.

**Disruption.** The silhouette of the human figure is always very obvious, particularly the head and shoulders. Add a 'tin hat' and you have a combination which is pretty hard to miss. The definite angles made by the arms and legs with the body are further giveaways. Experiments have shown that, even with pieces added to disrupt or break the mass of the body and the silhouette of head and shoulders, unless the arms are kept close to the side they are apt to make the soldier obvious.

A small net fastened over the hat is of great value. Scrim, vegetation etc may be tucked into it, thus killing the shine, which is particularly bad from the 'tin hat'. Small pieces allowed to hang down in front of the brim will also serve to break the hard line caused by contrast between the shadowed face and the illuminated brim.

**Counter-shading.** The upper surface of an object reflects a good deal of light and the under surface is usually in shadow. Counter-shading is the darkening of the upper surface to reduce light reflection and lightening of the under surface to reduce shadow, thus helping to make the object appear as a uniform tone and to flatten it.

Individual concealment is definitely a case for *individual* initiative, and many other schemes and methods can also be used. However, the four principles provide a foundation from which to start. The means and methods of camouflage are almost inexhaustible, but all will be rendered almost useless unless the user remembers to KEEP STILL.

*The 9<sup>th</sup> Battalion was tasked to undertake an attack on enemy lines by 'peaceful penetration', getting a platoon behind the German posts near Meteren Becque... No 1 Platoon divided into four fighting patrols, moved out through the crops in no-man's land... The men had green wheat stalks fastened to their steel helmets and their shoulders, so as to be less easily seen among the wheat, which was in ear, and just turning yellow. Some of the Germans saw that they were being surrounded and fled. "The Australians could not catch up with their quarry, to whom fear had lent wings..." The whole action was over within an hour... and surprise was the key to the success.*

*Campaigning with the Fighting 9<sup>th</sup>, C. Wrench MC, World War I*

## **Movement**

Soldiers have to train themselves to move about unobserved. The following tips are suggested:

- Even though soldiers may not be silhouetted against the sky, they may be reflected in water or pools which give them away as easily.
- The top of a hill is not the only skyline. Soldiers can just as easily be silhouetted on the slopes of a ridge.
- Soldiers should keep away from barren ground. They can be easily seen against it. In ground broken with grass, stones and bushes soldiers are much harder to see.
- Silhouettes can never be hidden. Soldiers can be a silhouette against the sky, or a silhouette against a light sunlit field or even against a moonlit field when they think they are in shadow.

## **Points to remember...**

**Texture is more important than colour.** The things that look light from the air are smooth and level surfaces, roads, sunlit roofs, concrete surfaces, painted surfaces, close-cut grass, denuded patches of grass fields, places where grass has been flattened, rolled and harrowed ploughed land etc.

**Shadows are the darkest things on earth.** The shadows cast by vehicles, tents, trenches etc betray. Properly garnished nets, with the addition of local vegetation intelligently used, provide the most effective way of killing unwanted shadows. Use natural shadows to conceal works. Also, remember the sun moves round and so will your shadow.

**Ground pattern.** Study it carefully. Objects placed on, or beside, strongly marked parts of any pattern attract the eye less than the same objects farther removed from these strong features. Make military works and equipment become part of the ground design.

**Picture this.** Before breaking ground, make a mental picture of the ground to be disturbed. See that the completed camouflage is as like the original ground as possible to the air observer.

**Dig in.** The lower the object the smaller the shadow. The more you dig a tent, a gun, a pill box, or any other object, into the ground the easier it is to kill its shadow.

**Plan.** Remember that camouflage is something to be done before and not after. It should be preventative medicine and not plastic surgery.

*On the left-hand side of the most distant visible point of the track, I saw a 'bush' move towards me. While I was concentrating on that 'bush' another moving 'bush' came into sight. But this 'bush' crossed to the other side of the track. I immediately realised that those two 'bushes' were the first and second scout of a Jap patrol. They were well-camouflaged in their jungle-green uniforms with bits of shrubbery fixed to them, and when they paused they were very hard to detect against the background of vegetation bordering the track.*

*To Kokoda and Beyond, Austin, p. 134., World War II*

## Camouflage practices

Every human activity leaves a visible mark on the face of the earth. The marks made by an army differ entirely from those made by a civilian population. If these were not so, there would be no camouflage problem. Armies live, move and work differently from civilian populations so the marks they make are quite distinctive and are easily identified as being the 'spoor' of an army. The aim should be to hide the marks an army makes, or to find a way of making them less conspicuous or disguise them so that they will not disclose so much valuable information to the enemy.

**Tents.** Tents should be irregularly dispersed and fit in with the pattern of the ground. In order to avoid casting the characteristic shadows tents should, if possible, be sited on the shadowed side of objects which are higher than the tents or on the non-shadow side of objects which are lower than the tents. When the shadow of a suitably coloured tent falls on low bushes, it is surprising how difficult it is to pick it up from the air.

- Locate tents with common sense to achieve concealment and dispersion at the same time.
- If in the open, choose a site for the tent where it merges into the ground shapes or is sheltered by rough ground which will make shadows irregular. If on the sand, dig in and make the tent lower.

**Tracks.** From Germany's fields to the deserts of Egypt, the greatest giveaways to the enemy have been careless tracks. Soldiers learnt the hard way when they inadvertently repeated mistakes by leaving obvious tracks and lives were wasted.

- Don't make tracks and scars unnecessarily – do not let other soldiers make them.
- Chose a line for necessary tracks where they will not point to the object.
- Make your tracks where there are lots of other tracks if the location is already like that, and never let a track stop at a concealed object – just let it go on somewhere else.
- Hiding a track is difficult. You can cover it with twigs, branches or gravel.

**Points on siting a vehicle and camouflage net.** Where there is no cover under which you can hide, or alongside which you can hope to escape notice, then dispersal is the best answer. Also, the proper use of your net will add enormously to your chance of escaping notice.

If open ground has clearly distinguishable patches either of roughness or of different colour, then it is a good thing to park right on the edges of such patches where one colour or formation begins and the other ends. But use your net. A 'blob' or vague shape on an 'edge' like this is naturally harder to see than the same vague shape or 'blob' in the centre of a patch.

*Camouflage and concealment in the German Army is rated of the utmost importance. During operations in France it was found that special emphasis was placed on personal concealment and dress. Colour of field grey uniform was used to advantage. Steel helmets were garnished with leaves and twigs – a rubber band being used to keep these in position. Freshly occupied positions were camouflage immediately no matter how far troops had moved or the hour when the new positions were taken. No rest was permitted until positions were camouflaged.*

*HQ 7 Aust Div Concealment Instruction dated 12 May 1942, World War II*

## Camouflage in specific environments

**Jungle camouflage.** In the plantations, green paint is invaluable for painting tents. Coconut palm leaves are quite effective when green, but will soon dry off and turn brown.

Slit trenches should be situated at the base of trees.

Painted equipment and clothing, blackened hands and faces, mud-daubed arms, etc, are all useless if you move carelessly. Avoid skylines, sunlight, moonlight and obvious points when emerging from cover. Do not help yourself over difficult going by clutching hold of bushes and trees, thereby causing them to move unnecessarily. Remember spectacles, binoculars and watches all appear shiny to air and ground observers alike. A mess tin of tea or water in the sunlight will often give your position away from the air.

**Desert camouflage.** The desert has a light texture due to rocks and pebbles, but this has a darker appearance from the air than would be expected. It is, however, in violent contrast to any shadow. Natural shadows are few in the desert.

Regularity of layout, both in construction and digging, is a sure sign of personnel. In the desert, civilians are less prevalent, so it is extremely important that regularity should be avoided and shadows broken up.

The objective of using netting and garnish instead of solid cover in desert or open country is to disrupt the shadow of regular outlines into more natural irregular ones.

## Deception

Remember that there is another aspect of camouflage other than concealment, namely the active deception of the enemy. In many cases it may be most difficult to conceal a position or it may be impossible to conceal the presence of troops in an area. Dummies can be of real value in these cases, but they will be of no value whatsoever unless given the appearance and atmosphere of life and occupation.

Points to remember include:

- Don't forget to partially camouflage the dummies.
- When possible, use dummy flashes and reports (noise is important).
- Tracks must be maintained to retain the appearance of use. Signs of activity such as smoke, flashing mirrors, laundry and rubbish should be arranged.
- Sandbags excite suspicion. Use freely.

*The following German report on the assault on Tobruk by the 5th (German) Tank Regiment, 11th – 14th April, 1941, demonstrates the extent to which the intelligent use of concealment will assist the attainment of surprise in defence.*

*"At 0800 hours the regiment reached the gap, now held by the enemy. On our approach the enemy opened fire with his anti-tank guns and from well camouflaged M.G. posts. All these concentrated their fire on the tanks passing through the narrow opening.*

*"Before beginning the three attacks, the regiment had not the slightest information about the excellently constructed enemy positions, his various artillery positions, and his enormous quantity of anti-tank guns; nor had the presence of heavy tanks been revealed."*

*Army Training Memorandum (War) (Australia) No 8 March 1942, World War II*

## Conclusion

Camouflage is not a method of hiding from the enemy. That creates a feeling of inferiority. There is no feeling of inferiority in an army that turns up at unexpected places and strikes hard at an unprepared opponent. Camouflage is aggressive; it must be so to confuse and bewilder the enemy, trap him by ambush, and keep him guessing all the time.

All personnel are responsible for camouflage! It is the duty of every soldier to play their part in this war of deception. It is no good for any individual unit to have a wonderfully concealed position and just around the corner another unit paying no attention to camouflage, spoiling the natural cover with their tracks, slit trenches, smoke and all the signs of military activity. The responsibility is yours, no matter what rank you hold.

*Due to limited space in this publication a significant amount of the article has been left out. A full historical camouflage article can be provided on request to [CAL.RFI@defence.gov.au](mailto:CAL.RFI@defence.gov.au).*

*For contemporary information on camouflage, go to Doctrine Online. Two publications that provide information on camouflage are LWP-G 7-7-1, All Corps Individual Soldier Skills, 2009 and LWP-G 4-3-1, Driver Training Handbook, 2011 AL1. For a list of other doctrine publications with camouflage content email [CAL.RFI@defence.gov.au](mailto:CAL.RFI@defence.gov.au).*

<http://intranet.defence.gov.au/armyweb/sites/Doctrine-Online/>

## The sorrowful sniper (poem)

I'm un'appy, so I am. Don't enjoy me beef nor jam,  
An' I'm an' as 'umpy and as a camel.

Bin an' stopped me leave? Oh no! That was fixed up long ago;  
 But the trouble is, I've got it, an' I feel afeared to go,  
 An' it's all alonger tin o' green enamel.

Fancy spendin' New Year's Eve, when you oughter be on leave,  
 In a dugout where the damp is slowly tricklin',  
 All alonger tin o' green an' a sniper lank an' lean  
 'Oo was swearing an' a-straftin' an a-snipin' in between,  
 Till a sergeant told me off to stop his tickling.

So I trimmed meself with straw, an' a grass an' hay coiffure,  
 An' I clothed meself with faggots that a pal 'ad;  
 Then the sergeant got a brush an' some green an' sticky slush,  
 An' 'e plastered me all over till I couldn't raise a blush,  
 And I looked just like a vegetable salad.

Then I crept out in the night, an' I waited for the light,  
 But the sniper saw me first an' scored an inner.  
 I could 'ear the twigs divide, but I signalled 'im a "wide",  
 Then I squinted down me barrel, an' I let me fingers glide,  
 An' I pipped 'im where he used to put 'is dinner.

Yus, I busted up the Bosch, but I found out at the wash,  
 That enamel was a fast an' lasting colour,  
 An' the soap I used to clean made me shine a brighter green;  
 I'm a cabbage, I'm a lettuce, I'm a walkin' kidney bean,  
 An' I ain't a-leaving Flanders till it's duller.

*Published in Punch, Vol 150 January 1916*