

Adventurer's MK

COMMUNICATIONS

The number one criteria for earning the communications badge is to learn your emergency contact telephone number and being able to correctly recite it to your leaders.

Communications in an emergency situation

Preparing for an emergency situation before you embark on an expedition can help in the event of a crisis. Becoming lost, injured or stranded in the great outdoors can quickly become life threatening, especially in extreme weather conditions. Having good communication skills and knowledge of different signals is vitally important, especially when you are exploring remote areas.

The ability to signal for help both within your group and for outside assistance is the number one priority in being rescued. While modern technology means help is often at your fingertips, you also need a reliable backup plan in case technology fails.

Signals can be visual or audible. Visual signals include building a fire and making smoke signals, flashing a torch, waving a flag or laying out symbols on the ground. Noise is another way of attracting attention and a whistle can be an essential piece of kit in a survival situation.

Check in times or locations

Before you begin on an expedition always agree on some check in times or locations. You could agree to meet leaders at a certain location or to call or signal at a certain time to show that everything is fine. If the group does not arrive, or call or signal is not seen or heard, leaders will be alerted that something is wrong and can begin to search for the missing group or raise the alarm with rescue teams.

Signal Fires

Fire is an effective way of signalling for help as smoke can be seen by day and the flames will stand out at night.

Find a clear location that is high up and well away from nearby trees and bushes so it can be seen from a distance. Assess what natural resources are available to you. If you are within an area with lots of dry wood and foliage you can keep your signal fire lit for a long time. If you don't have a lot of fuel, build the fire and only light it when you see or hear help coming on the ground or a rescue helicopter.

Build up your fire with plenty of dry tinder and small wood kindling so it would be easier to light. To keep it dry and make sure it can be lit straight away, build an A frame with a shelf. Find three long straight thick sticks and lean them together in a triangle shape, binding the tops together with cord or vine. Create a shelf half way down the supporting sticks by tying branches to them.

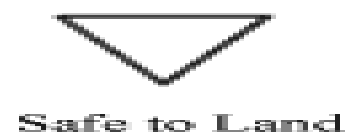
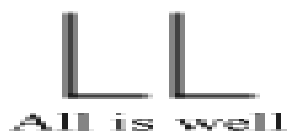
If you are signalling during the day, have plenty of green leafy foliage, this will create thick white smoke which can be seen for miles. At night, remove the foliage as you want large visible flames instead. Have both dry wood and green foliage ready to make sure you have plenty of fuel to hand that can feed your signal fire when rescue has been spotted.

SIGNAL FIRE/SMOKE TRIPOD TOWERS



Ground to air signals

There are a series of symbols for communicating with the emergency air crews and it's worth learning these before walking or climbing in a remote location. You will need to mark out the symbols on the ground, making them as large as possible so they can be seen from the air. The recommended size is 3m wide by 10m long with about 3m between symbols (if you need to use more than one).



Body signals

These are commonly used body signals that will be understood by airmen. Make sure that all signals are made clearly, exaggerate the movements and use a cloth to make the yes and no signals clear.

A pilot receiving messages from the ground will acknowledge receipt of these messages by:
Message received and understood

- In daylight: flying the plane and tipping the wings in a rocking motion from side to side
- At night: flashing green lights

Message received but NOT understood

- In daylight: flying the plane in a right-handed circle
- At night: flashing red lights



Using a mirror or torch

On a sunny day a torch or mirror can be used to attract attention by reflecting the sunlight. You can use other objects such as a piece of tin foil or emergency blanket, a metallic bottle or a piece of reflective clothing. If you see a rescue aircraft, aim the reflective surface so you can capture the sun's rays and reflect them towards it.

At night a torch can be used to signal but make sure you have fully charged batteries that will provide the brightest beam of light and avoid the issue of running out.

Morse Code

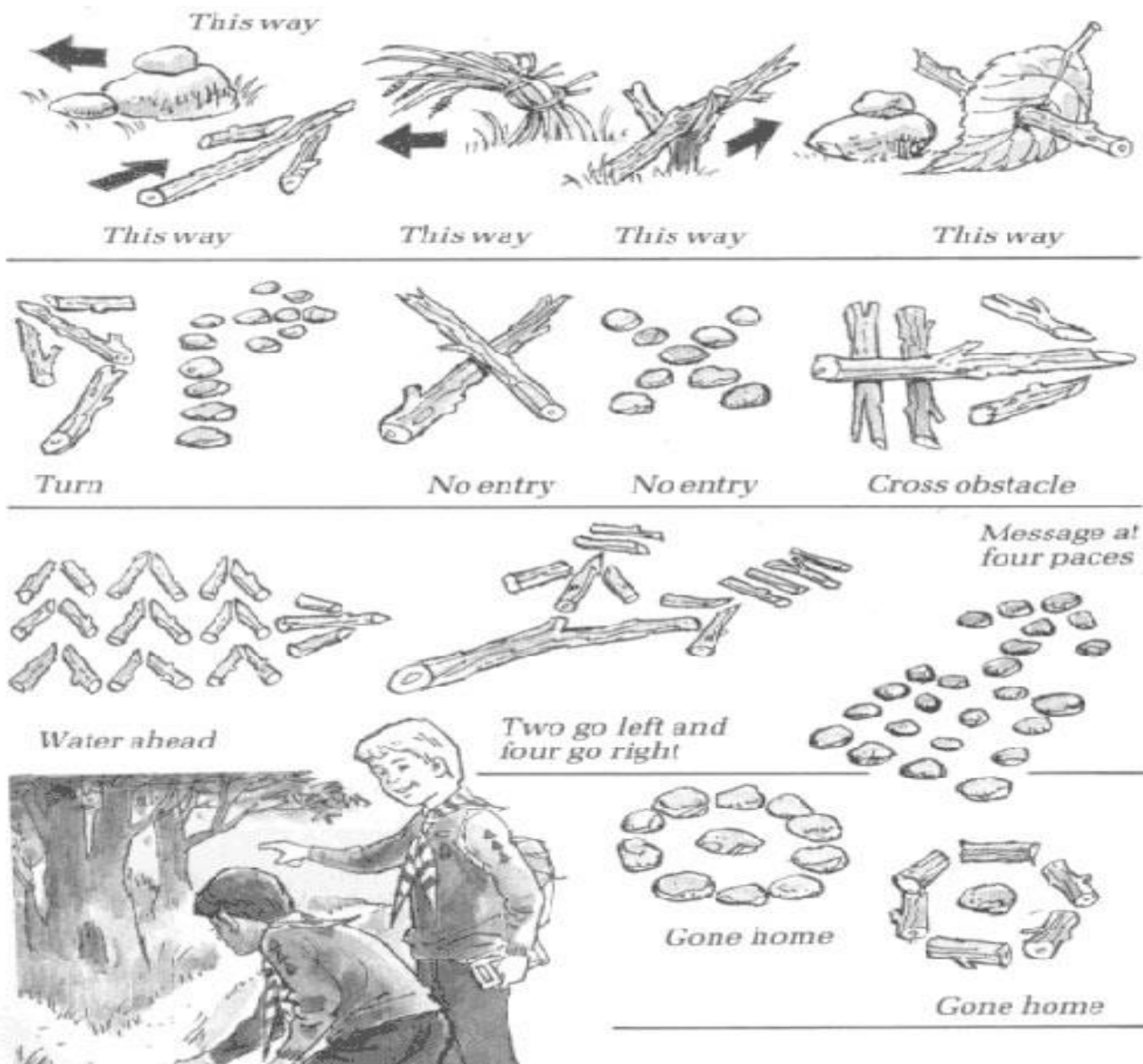
SOS is the most well-known signal in Morse code and is easy to learn. Dot-Dot-Dot-Dash-Dash-Dash-Dot-Dot-Dot

A	..-	J	.-.-.-	S	...	1	.-.-.-.-
B	....	K	.-.-	T	-	2	..-.-.-
C	....	L	....	U	..-	3	...-.-
D	...	M	.-	V	...-	4-
E	.	N	..	W	.-.-	5	.....
F	....	O	.-.-	X	.-.-.-	6	.....
G	.-.-	P	....	Y	.-.-.-	7	.-.-...
H	....	Q	.-.-.-	Z	.-.-.	8	.-.-.-.
I	..	R	.-.	0	.-.-.-.-	9	.-.-.-.

Tracking Signs

Placing tracking signs can help if a group get lost or separated from the main group. Leaving trail signs alerts the rescuers to your location and direction of travel.

Make sure the sign is clearly marked. You can use stones instead by placing a large stone with a small one on top, and then another small stone pointing in the direction of travel. You could use long grass by tying it in a knot and bending it into the direction of the trail. You could use a twig placed through a leaf on a tree pointing in the correct direction or even a simple stick to mark an arrow in the mud or ground.



Phonetic alphabet

Using the phonetic alphabet during radio and telephone communications is a vital way of getting the correct information understood. It is used by all emergency services and military personnel when describing single letters through communications.

Phonetic Alphabet

A - alpha
B - bravo
C - charlie
D - delta
E - echo
F - foxtrot
G - golf
H - hotel
I - india
J - juliet
K - kilo
L - lima
M - mike

N - november
O - oscar
P - papa
Q - quebec
R - romeo
S - sierra
T - tango
U - uniform
V - victor
W - whiskey
X - x-ray
Y - yankee
Z - zulu

Radio Communications

Radio communications has to be one of the most important skills to learn, knowing how to communicate over a radio could save your life and the lives of your team when emergency assistance is required.

While the mechanics of a radio, its range, type of antenna, etc. will vary, the way that you talk “on the air” is guided by national and international standards. The skill of talking on a radio is referred to as “voice procedure.”

The phonetic alphabet is a universally recognized radio communications aid, which assigns a common word to represent each letter of the alphabet. You use the phonetic alphabet when you have difficult words or groups in the text that you are communicating.

When you are going to spell a word you would say, "I SPELL" _____. Example: "Home base just to let you know the – I SPELL Charlie Alpha Kilo Echo is ready"

Numbers are often used to give a grid reference or numbers of items.

When you are about to tell numbers on the radio you would say

"FIGURES" _____. Example: "Home base we had chili last night, and we need FIGURES One Five Zero rolls of toilet paper quick!"

Operating Rules:

- a. emergency calls take priority over all other calls. If you are talking then stop and wait until the emergency is finished;
- b. do not chat;
- c. be brief – write down your message before talking; and
- d. profane, indecent or obscene language is forbidden.

To aid in security and keeping the message short, key people have been given appointment titles

I Say Again When you are saying the message again for clarification, don't use the word repeat for this.

I spell used before you spell a word phonetically No Duff (MayDay) emergency command or transmission

Message a message that you will have to record follows Negative no, or that is not correct

Out conversation ended, last word spoken

Over my transmission is ended and I'm waiting for a response

Radio Check what is my signal strength and readability

Send I'm ready for your message

Sitrep situation report

"This Is" lets you know who is sending the message

Wait I must pause briefly (up to 5 seconds)

Wait Out I must pause for longer than a few seconds, I will contact you when I'm ready to proceed.

Radio net

Each team with a radio has to have a number to distinguish themselves. It usually starts as home base is ZÉRO, team 1 is 'ONE,' team 2 is 'TWO' etc. When you start a transmission you say whom you want to talk to, then who you are. After they reply you start your message with who you are – then the message.

Example 1: ONE, this is ZÉRO over..

ZÉRO, this is ONE, SEND OVER..

ZÉRO, how is everything at your location OVER..

ONE, everything is good OVER..

ZÉRO, ROGER OUT