

# Life in the Zone

## *A Guide for Microwavers wishing to contact Lightweight Mountain Operators (Radio-Mountaineers)*

Mountaineers refer to altitudes above 8000m as being in the Death Zone<sup>1</sup> (or just “The Zone”). Above 8000m the body is slowly dying. An extended stay in The Zone will result in deterioration of body functions, loss of consciousness and ultimately, death.[1]. Once a climber is in The Zone, time is running out.

Lightweight mountaineering radio operators (radio-mountaineers) have their own Zone. It is not above 8000m but is the Activation Zone (AZ). The AZ is defined by the rules of the SOTA award programme and is the area at the top of a hill or mountain which “counts” for a SOTA activation. Of course, radio-mountaineers are not putting their health at great risk but there are some similarities between The Death Zone and the Activation Zone.

### **Time is of the Essence**

Even in the UK it is rarely warm and calm enough to make an extended stay (i.e. over an hour) on a mountain-top truly comfortable. The need for the radio-mountaineer to carry not only radio equipment, but everything necessary for a safe trip to the hills severely limits what can be taken along. Lightweight or Alpine style mountaineering is about achieving safety through speed. Thus as soon as the mountaineer reaches the AZ, time is running out. They may already be cold and tired. The weather in the mountains can be dramatically different from that in lower lying areas (it is usually colder, wetter and windier). Keeping the elements at bay is inevitably a losing battle. Couple that with the desire to protect valuable and complex equipment and you can see why compromises must be made. But the weather is not the only problem...

As soon as the radio-mountaineer switches on his or her radio system, their batteries are going flat. Forget ideas of solar chargers or wind turbines, the radio-mountaineer can only carry so much! Batteries are heavy and the skilled radio-mountaineer will attempt to tailor their battery so that its capacity is just adequate for the operation that is planned. But batteries are not the only problem either...

Radio-mountaineers are often travelling alone. However, many times they will be travelling with friends and/or family – including children. For the non-radio person, watching radio-operating is rarely considered a good spectator sport. Children soon get bored and adults get colder far quicker if they have nothing much to do. Again time becomes critical.

### **So what?**

The radio-mountaineer has carried all that heavy gear up a hill for one single purpose, to make contacts. They want you to call them – they may even be desperate for your call! But they will want you to be prepared and organised; by doing that you can help the radio-mountaineer maximise their use of valuable mountain-top time. This not only makes their time more pleasant but it also means that more people will have the chance to contact them.

Several simple things will help:

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<sup>1</sup> [http://en.wikipedia.org/wiki/Death\\_zone](http://en.wikipedia.org/wiki/Death_zone)

The very first thing a radio-mountaineer is likely to want to know from you is probably not your name or QTH but your bearing. Most radio-mountaineering trips are announced in advance and callers who have already worked out the bearing will find themselves very popular. In a harsh, often wet and windy mountain environment, bits of paper with lists of bearings don't work so don't expect the radio-mountaineer to be able to tell YOU the bearing!

When giving a bearing, try to give just the information that the radio-mountaineer needs – that is the bearing from them to you. Subtracting 180 degrees from a bearing to get the back bearing can be hard when you are juggling with many other things on a mountain. A mistake can easily mean that you don't get a QSO.

Switching on your computer before you call is a great idea. Waiting for Windows to boot up is bad enough at home. On a mountain it is excruciatingly painful.

Roughly aligning your aerial before calling is also helpful. Those precision rotators are so very slow.

If you don't know where the radio-mountaineer is, listen in for the name of the mountain. Once you hear it, you can quickly find out the locator and even the bearing from the SOTA summit database<sup>2</sup>. A radio-mountaineer will certainly know the name of the mountain they are on, but may not have the locator to hand. They are more likely to know their OS Grid Reference so make sure that you know how to use that to work out the bearing.

A radio-mountaineer may not have full-duplex talkback. It makes sense to check this before starting alignment tests. One possible aerial alignment method for contacts with a non duplex r-m is for the fixed station to send numbers in Morse on different bearings i.e. send 1,1,1,1,1, move your dish a degree and send 2,2,2,2,2, move another degrees and send 3,3,3,3,3. This will allow the correct bearing to be noted quite quickly<sup>3</sup>. Asking for 5 minutes of dots or requests to use FM will use lots of scarce battery power up. Only do this if absolutely essential and make sure that the r-m is happy with doing it.

Once the contact is underway remember that short sharp contacts are often preferable. By all means chat if the radio-mountaineer wants to, but be sensitive to their operating conditions. If they have started by telling you how cold they are, a long over will probably not be appreciated!

Of course, advice is welcome but be aware that it gets a bit tedious for the r-m to be told for the 97<sup>th</sup> time that they need a dish (or a bigger dish), more power, a bigger talk-back system, access to KST and, of course, JT65. The r-m soon realises the desirability of all these things but has to balance what they carry with their overall enjoyment of a long walk in the mountains. They have to strike a compromise.

While the contact is in progress or as soon as possible afterwards, help the radio-mountaineer by spotting them on the DX cluster and trying to get them some more callers on KST.

Do these things and you will have free beer for life; maybe.

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<sup>2</sup> <http://new.sotawatch.org/summits.php>

<sup>3</sup> There is some debate about whether this will work although I have already used the technique successfully!