

## **NIGHT NAVIGATION TIPS** - Peter Milnes

**Night time can be the best part of a rogaine - to me, rogaining at night is the most enjoyable part of any event. Watching a huge golden full moon rise, navigating under its light all night, then watching it slowly set again is awesome. Everyone should experience this at least once.**

### **KNOW WHERE YOU ARE AT DUSK**

Knowing exactly where you are at dusk can be a confidence booster. This is often a good time to take a break, change into your night clothing and put on head torches etc. If you easily locate the first couple of controls after dark it can lift your confidence for the rest of the night.

### **PROCEDE WITH CAUTION**

Navigation at night requires extra care. This can involve pace counting, compass bearings, or concentrating on matching the limited features visible around you with the map. Look for features between controls that can be used as attack points, or “catching” features that will confirm your position. Some teams have one member pace counting, another walking on a compass bearing and the other closely following the map. It is wise to slow down and proceed with caution to avoid mistakes. Being misplaced wastes valuable time to relocate.

### **PACE COUNTING**

You will need to know how many left or right steps you take to cover 100 metres. (Usually around 60) You can do this at home by measuring a distance of 100 metres with a bike or car and then walking it several times to get an average. The number of paces will vary when travelling up and down hills or around obstacles that prevent straight line walking. Allowances need to be made for this. Stones can be useful to count multiples of 100 metres.

### **TIMING**

Some people prefer to time themselves to estimate the distance travelled. You need to know what your average speed is to do this. A brisk walk of 5km per hour equates to a kilometre every 12 minutes. Timing can be practised over a set distance at home.

### **COMPASS BEARINGS**

Some people at night take compass bearings in a straight line from control to control. When they deviate from this line they make corrections to get back on line. This is a good method in flat country where a straight line between controls is often the best route. It is advisable for two team members to take bearings and compare every time as errors are easily made. Heading off at 90 degrees in the wrong direction because you haven't orientated your map correctly can be disastrous. Practice taking compass bearings at home with an old map.

### **WALKING ON A BEARING**

Once a bearing is taken you need to sight the direction of travel. Hold the compass in front of you and line it up with a distant object in the exact direction of travel. When the object is reached repeat the process. The distant object can be anything from a tree 20 metres away in thick scrub, to the peak of a mountain range on the horizon, or a bright star in the sky. (Be aware that stars move approx 15 degrees an hour) Another alternative in thick scrub is to have a team member walk in front and direct them to the line of the bearing. Noticing if you are walking downhill or up can help to locate your position on the map.

### **HOW TO RECOVER AFTER BEING MISPLACED**

If you find yourself lost, stay calm, think positive and remain alert. Orientate your map. You will need to relocate to a prominent feature and confirm that feature on the map before you can recommence your route. Try and recall an obvious feature you recently passed that you could return to, or another shown on the map close by that you could hopefully locate. If nothing appears obvious look again at the map for a large “catching” feature eg a watercourse, road, track, boundary, or fence line that crosses your direction of travel. Take an approximate compass bearing, calculate the distance to this feature and then locate it. Once located you may need to move along it till you recognise another intersecting feature. You can then resume your route.

**With practice, you will get to trust your compass and pace counting,  
and become competent at night navigation**