# Navigation - by Andy Hodges

In any team it is advisable to have two fully competent navigators - the second to act as navigation checker and to be ready to take over if the main navigator has to fall out.

However, all your walkers need to be able to read a map and be able to navigate. This is particularly important should the group be split due to getting lost from each other or an emergency, to need to gain comms by accessing higher ground or need to exit via an escape route.

All walkers need to know how to use three basic tools:

- a map (1:25,000 for its detail despite having to re-fold it from time to time, (strong elastic band useful),
- a decent sized compass (a minimum base plate of 100 mm) and
- a stopwatch/old fashioned watch.

Orientating the map to the ground while walking, so that the navigator is looking along the direction of travel is much easier, especially when tired.

Get everyone involved by spreading the task around, have a navigation day in close country, question walkers while walking or check pointing, divide the group into pairs, put some micro-navigation into the route.

All your trainees need to be able to identify features on the map; in Dartmoor's case, high points, valleys, rivers and bogs. Upland Dartmoor, despite being featureless, isn't difficult to navigate but in poor weather conditions with low visibility, although it can challenge even good navigators.

#### **Planning**

Routes must be planned carefully in advance paying attention to water features, rivers, leats and bogs. River conditions can vary wildly during a day and alternative routes or escape options should be integral to the plan.

Met Office weather warnings must be heeded and routes adapted accordingly.

Ensure routes avoid road sections wherever possible and ensure hi vis is clearly visible front and rear. Consider supplementing this with lights.

Consideration should be given to dividing the route between check points into legs and thinking through the best option of following tracks, contouring or walking on a bearing either using time or pacing.

Ensure the DNPA Wild Camping map is referred to when planning campsites.

#### Camping Map | Dartmoor

#### Maps.

Use the Ten Tors map which has been issued to you, or a laminated OL 28 Dartmoor map, marked up with the current Out of Bounds (OOB) areas and road and river crossings. The OOB areas are to be adhered to throughout training, so starting on the right foot is the most sensible solution.

River State "Normal" OOB river sections are OOB throughout training, mark them up and plan routes accordingly.

From 1 Feb RBNA areas are OOB. Again, plan your routes accordingly.

OOB infringements will be taken seriously and will be considered in team allocation for the following year.

It is also vital that Live firing areas are marked and routes planned to avoid them during military training which can take place at weekends.

### Use of the Compass.

Confident use of a compass is vital. Key points are:

- NEVER take a compass reading while moving.
- ALWAYS stand still and hold the compass square on in front of the body so that
  one is looking down on it. Another way is to kneel on one leg and put the
  compass on the knee as a staple platform. NEVER hold the compass near metal
  objects or another compass.
- ALWAYS check before taking a second or subsequent reading that the compass has not accidentally been altered since it was set.

Trust your compass!

## Use of electronic navigation aids

Electronic navigation aids are not permitted on the Ten Tors Event, but it may be a useful safety back up for teams to carry one while training – switched off in an opaque container. Its use will also need to be taught. Most phones have a GPS function and a smart phone can have a suitable mapping app loaded. As a minimum, having the ability to gain an accurate location is recommended. Preferred location system for DRG is still OS grid reference, along with a word description, such as "East side of river". Briefing your teams that Mountain Rescue will used a SARLOC to locate a team. SARLOC uses a smartphone's signal to gain an accurate location but required it to be stationary and in signal, with data switched on.