## **Guide to Plotting 6-Figure Grid References**

6-Figure Grid References are given in the format AB 123 456. The AB are called the Grid Letters and define a 100km x 100km square on the UK National Grid. Our event ALL takes place in TG, so we don't need to worry about that any more.

The first three NUMBERS (123 in the example above) are called the EASTINGS. These numbers identify the VERTICAL lines on the grid. The way to remember the name is that the numbers INCREASE to the EAST.

The next three numbers (456 in the example above) are called the NORTHINGS. These numbers identify the HORIZONTAL lines on the grid. The way to remember the name is that the numbers INCREASE to the NORTH.

We ALWAYS give EASTINGS first, followed by the NORTHINGS. An easy way to remember this is the expression "ALONG the hall, then UP the stairs"

The first two digits of both the Eastings and Northings are actually marked on the map against the light blue grid lines. The distance between the gridlines is 1000m, so each grid square is one square kilometre. You can use these two Eastings and two Northings together to give a 4-figure grid reference.

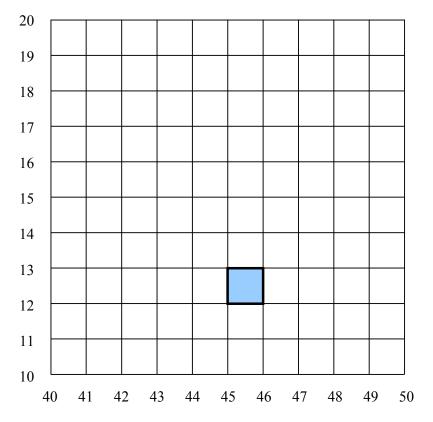
In a 6-figure grid reference, the  $3^{rd}$  and  $6^{th}$  figures are used to divide the 1000m x 1000m square into 100 (i.e. 10 x 10) squares, EACH of 100m x 100m area. These figures are not marked on the map – you can either estimate or measure them.

This next bit is VITAL information about grid references: A 4-figure grid reference identifies an AREA, 1000m x 1000m in size. It does NOT identify a point. This fundamental principle applies as you go to 6, 8 and 10-figure grid references, i.e.

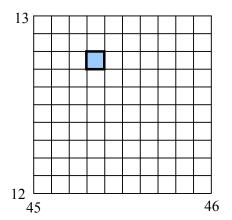
- a 6-figure grid reference identifies an AREA 100m x 100m in size
- an 8-figure grid reference identifies an AREA 10m x 10m in size
- a 10-figure grid reference identifies an AREA 1m x 1m in size

In each case the point at which the two lines cross denotes the bottom-left corner of the square area.

For example, if the diagram below represents the blue, 1km-spaced grid lines on a map, the 4-figure grid reference TG 4512 represents the shaded area shown.



To get a 6-figure grid reference, we then sub-divide each side of the square into 10, creating a smaller grid of 100 squares, each 100m x 100m in size. The drawing below shows grid square TG 4512 from the above diagram divided in this way. The 100m x 100m shaded area is represented by the 6-figure grid reference TG 453 127



Remember, ALONG the hall, then and UP the stairs.

## How to plot Turnpoints from the Turnpoint List

- 1. Use the 6-figure grid reference to identify the 100m x 100m area in which the turnpoint lies.
- 2. Look for the map symbol representing the turnpoint and draw a small circle around it. See Legend of map if necessary.
- 3. By convention, the centre of the base of the symbols for churches, masts, lighthouses & windmills mark the centre of the feature on the ground.
- 4. Towers sit centrally on the symbols. Phone boxes are indicated by a line, at the end of which sits the box itself.
- 5. In the cases of woods, reservoirs, and buildings, I've specified which corner is the turnpoint.
- 6. For small 'area' features such as ponds and islands, the centre is the turnpoint.
- 7. In the case of Road Junctions, the point where the centre-lines of the roads intersect is the turnpoint.
- 8. The same principle applies to bridges over roads, canals, railways or rivers and level crossings.
- 9. There are very few turnpoints which are not marked on the map. In these cases, you should mark a small circle on your map, centred on the 100m x 100m square identified by the grid reference. These turnpoints will be easily identified from the air.
- 10. This is not a 5-minute job, but if you can come to the event with a marked map, you'll be well-prepared when the first Nav task hits the table and won't lose valuable social time at the event!
- 11. For NFZs, use a ruler (or a romer) to accurately plot the centre-point from the 8figure grid reference and then use a precisely-set compass to draw the circles. Alternatively, use a piece of card with a pin at the centre and a small hole for a pen at the appropriate radius.