



Getting your Bearings *Ordnance Survey Maps*

Narrator (Judy Ekins)

You may well have seen people taking measurements around the countryside with equipment similar to this. But what are they doing? Well, these surveyors are from the Ordnance Survey, and they're plotting the position of this reflector in relation to a fixed point.

Andy Thorpe

Measurements completed. Thank you.

Narrator

Three or four readings are sufficient to define the shape of a new feature, such as the bend in the road on this housing estate.

Frank Robertson

OS2 to OS1. End approach feature.

Narrator

Each measurement consists of a distance plus a horizontal angle and a vertical angle. It's a painstaking job, which has to be undertaken regularly. This ensures that maps are based on information which is as up to date as possible.

Andy Thorpe

OK, move on.

Narrator

In fact, this is a training exercise at the Ordnance Survey in Southampton. In this building all the data gathered by the survey teams gets processed to be incorporated into highly detailed large-scale maps. In turn, this information forms the basis for the production of all the smaller-scale maps.

This is the desktop publishing department of the Ordnance Survey.

John Miles

The highly accurate measurements of the field surveyor are processed and can be incorporated into a paper plot such as this one. Now this is a scale of one to 1250, which is 500 metres square. The map depicts at great detail all features that you see in an ordinary street: back gardens, the house numbers, the garages at the back, administrative boundaries running down the centre, Post Office on the corner and even the letter box shown right on the corner of the street.

The large-scale information is used as the basis for smaller-scale mapping. At the moment I'm using the surveyors' information – here shown in pink – to update the layout of a small estate. Dragging out the handles produces the curve, which matches the curve that the surveyors so accurately drew.

Narrator

In a town, the Ordnance Survey tries to record any new building work within six months.

There's a range of smaller-scale maps produced by the Ordnance Survey. The smaller the scale, the larger the area of land that's covered.

Tracey Parker

This is a Pathfinder map, at a scale of one to 25 000. It covers an area of twenty by ten kilometres, and there're over 1300 sheets in the series. These maps clearly show the footpath network and the rights of way for England and Wales. Also at a scale of one to 25 000 we produce the Outdoor Leisure maps. They cover the areas of outstanding natural beauty and the National Parks, such as the Peak District. They contain exactly the same information as the Pathfinder but with added tourist information such as picnic sites and youth hostels.

Narrator

In fact, the map that's included with the course text is an extract of the one to 25 000 Outdoor Leisure series. But mapping data can be displayed in more ways than one. For example, the computer programmes can manipulate all the mapping data to produce a profile view. In this case the height data is used to represent the shape of the hillsides. If you wish, you can combine two different representations in one image. We'll be using some of the versatility of the Ordnance Survey graphics system in the rest of this video to help you experience some of the features covered by this map.