

## Chapter 4

### USE OF MAP AND COMPASS

#### SECTION 23. — MAP READING EXERCISES

##### Introduction

0401. When the cadet has learnt the skills necessary to read a map, a great deal of practice is required if he is to become really proficient. The following exercises are designed either as revision periods or to be carried out in conjunction with other training when possible. They are in order of increasing difficulty.

##### Indoor Exercises

0402. A good way of teaching conventional signs is to run a relay race, with teams in files. Each cadet in turn runs forward and draws a slip of paper from a pile. Each slip contains the name of a simple feature (and it must be a simple feature). He then draws the appropriate sign with chalk on the blackboard and returns, to be followed by Nos 2, 3 etc. The winning team should be judged on correctness and speed.

0403. Each cadet should make his own romer. Suggest that they be made on the corner of a page or diary or something which the cadet invariably carries with him.

0404. Compare a map with the country. Let cadets pick out points at random, which they can recognize, and then show how much easier it is when the map is properly set.

0405. Simple problems can be set which have a definite connection with cadets' everyday life. Examples, using genuine map references, are as follows:

- a. A cadet living at the inn, GR654345, owns a bicycle on which his average speed is 10 mph. What time must he leave home to catch the 12.50 pm train from Oldhampton station GR632356, if he needs to arrive five minutes before the train leaves?
- b. The railway delivery van has parcels for houses at GR546345, GR523332 and GR538354. What route should the driver take to reach all these and return as soon as possible?
- c. The bridge over the river at GR326413 has been damaged by high water and is unsafe. A motorist arrives from the direction of Oldhampton and he wishes to go to Newhampton, which would normally mean using the bridge. You give him an alternative route. What would it be?

0406. Never use map references which do not exist.

0407. Cadets should draw a rough sketch map to guide a waiting stranger from the railway station to the cadet headquarters.

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0408. Cadets, working in pairs, should make a map of the interior of the drill hall, or similar small area. Give standard size sheets of paper and rely on their common sense to produce a scale without further instructions. Measurements should be as accurate as possible and it is best if each pair has a tape measure, but measurements may be done by pacing and hand spans. This practical map making will be of great value in helping to understand map reading.

0409. Cadets should prepare their own charts of conventional signs, using the correct colours. Those with talent can be encouraged to make larger charts for the walls which can be exhibited if suitable. But all cadets should, at some time, be made to draw the action symbols. There is no better way to learn them.

0410. To obtain a correct mental image of the ground from studying the map is the culmination of training in the use of map and compass. The following exercises are suitable for more advanced training:

- a. Produce a verbal or written description of a route.
- b. A cadet to describe from the map what can be seen from a vantage point well known to another cadet, who checks the former, and vice versa.
- c. Description by cadets of ground from the map to be compared with air photos whenever available.

0411. Encourage cadets to make models of the ground where they are accustomed to doing their outdoor training. They must be based on the map and may be anything from simple cloth models, requiring the minimum of time and equipment, to more complicated and time consuming cloth or sand models of the same area, showing features with contours and other objects with conventional signs.

### Outdoor Exercises

0412. During a physical training period, order cadets on receipt of directions to spring lightly into the air and land facing a direction named, then give a series of directions, gradually increasing the pace.

0413. Treasure hunts are good ways of teaching map references.

0414. Take the cadets, with maps, to a good view point. Set the maps, settle down comfortably and ask cadets questions such as:

- a. "What is the church on the ridge?"
- b. "How many miles, and in what compass direction, is that factory?"
- c. "Can you see the mill at Oldhampton?"
- d. "That section of road that can be seen between the trees; where does it go to? Where does it come from?"
- e. "What is the height of the edge of that wood above sea level?"
- f. "What type of slope are we sitting on? — check the contours on your maps." Any aspect of map reading can be introduced in the form of question and answer in this way.

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0415. Show cadets how to select ground which will allow an approach to be made with cover. Visit suitable ground and invite cadets to select a covered route for a patrol from A to B supposing the enemy to be at C. When the route has been selected, pencil it lightly on the map and then actually follow the route to check the result. Later, select the route first from the map before going out to visit the ground.

0416. Take cadets, when feasible, in a closed vehicle; drop them in unknown country and tell them to reach a rendezvous (where a good meal should be ready).

0417. Cadets should work in pairs and make a reasonably accurate map of a small area. Lay out a base line of say, 100 metres, (any reasonably open space will do), and from one end take bearings on four or five nearby features, not more than 400 to 500 hundred metres away. Then move to the other end of the base line and take new bearings on the same features. On a sheet of paper draw the base line, at the proper scale, and plot the bearings from each end with the compass as a protractor. This fixes the position of all objects sighted. In the early stages, objects on one side only of the base line should be used. This is excellent practice for the use of a compass, both as a compass and as a protractor.

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