



ROYAL CANADIAN ARMY CADETS

GREEN STAR

INSTRUCTIONAL GUIDE



SECTION 4

EO M122.04 – ORIENT A MAP BY INSPECTION

Total Time:

30 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-701/PG-001, *Green Star Qualification Standard and Plan*, Chapter 4. Specific uses for said resources are identified throughout the instructional guide within the TP for which they are required.

Review the lesson content and become familiar with the material prior to delivering the lesson.

PRE-LESSON ASSIGNMENT

Nil.

APPROACH

An interactive lecture was chosen for TP 1 to orient the cadets to the purpose of orienting a map by inspection.

A demonstration and performance was chosen for TP 2 as it allows the instructor to explain and demonstrate the procedure for orienting a map by inspection while providing an opportunity for the cadets to practice this skill.

INTRODUCTION

REVIEW

The pertinent review for this lesson from EO M122.03 (Section 3) will include:

QUESTIONS

- Q1. The relief on a map represents what two elements above mean sea level?
- Q2. What is the difference in height between contour lines called?

ANTICIPATED ANSWERS

- A1. The height and shape of the ground.
- A2. The contour interval.

OBJECTIVES

By the end of this lesson the cadet shall be expected to properly orient a map by inspection.

IMPORTANCE

Orienting a map by inspection makes it easy to relate information on the map to features on the ground. It is important to have the map oriented when moving over a complex route in order to reach your destination.

Teaching Point 1**Explain the purpose of orienting a map by inspection.**

Time: 5 min

Method: Interactive Lecture

ORIENT A MAP BY INSPECTION

Orienting a map by inspection means to turn the map so that, visually, the map directions and map detail correspond with that which is on the ground. This is the simplest and quickest way of orienting a map, provided you have a general idea of your own position.

Orienting the map does a number of things:

- it makes it easy to relate the map to the ground when direction and distance on the map corresponds to the ground;
- it helps you find your location or direction if you are in doubt; and
- when moving over a complex route, or when traveling over long distances, orienting the map will keep you on the right track.

CONFIRMATION OF TEACHING POINT 1

QUESTIONS

Q1. What does “orienting a map” by inspection mean?

Q2. What three things does orienting a map do?

ANTICIPATED ANSWERS

A1. To turn the map so that visually the map directions and map detail corresponds with that which is on the ground.

A2. Three things are:

- it makes it easy to relate the map to the ground when direction and distance on the map corresponds to the ground;
- it helps you find your location or direction if you are in doubt; and
- when moving over a complex route, or when traveling over long distances, orienting the map will keep you on the right track.

Teaching Point 2**Explain and demonstrate how to orient a map.**

Time: 20 min

Method: Demonstration and Performance

ORIENT A MAP

In order to orient your map by inspection the following steps should be followed:

1. identify your approximate location on the map;
2. identify two or three prominent objects or landmarks on the ground and find them on the map. Try to use landmarks in different directions;

3. rotate your map until all identified objects on the map line-up with the direction in which objects are located on the ground; and
4. check visually to ensure that all features to your front are in front of your position on the map.

CONFIRMATION OF TEACHING POINT 2



The cadets shall practice orienting their maps by inspection. In the event of inclement weather, a mock field environment can be simulated to practice this skill (e.g. placing pictures depicting prominent objects on the walls corresponding to their location on the map).

END OF LESSON CONFIRMATION

QUESTIONS

Q1. What are the four steps to orienting a map by inspection?

ANTICIPATED ANSWERS

A1. In order to orient your map by inspection, you would:

- (1) identify your approximate location on the map;
- (2) identify two or three prominent objects or landmarks on the ground and find them on the map. Try to use landmarks in different directions;
- (3) rotate your map until all identified objects on the map line up with the direction in which objects are located on the ground; and
- (4) check visually to ensure that all features to your front are in front of your position on the map.

CONCLUSION

HOMEWORK/READING/PRACTICE

Nil.

METHOD OF EVALUATION

The cadet will be required to orient a map by inspection using a topographical map during a field navigation exercise.

CLOSING STATEMENT

Knowing how to visually set your map so that features on the map match those on the ground is important as it enables you to determine the location of an object, or oneself.

INSTRUCTOR NOTES/REMARKS

Nil.

REFERENCES

A2-004 B-GL-382-005-FP-001 Canadian Forces. (1976). *Maps, Fields, Sketching, and Compasses* (Vol. 8). Ottawa, ON: National Defence.