**ROYAL CANADIAN AIR CADETS**

**PROFICIENCY LEVEL THREE**

**INSTRUCTIONAL GUIDE**

**SECTION 8**

**EO C390.03 – 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-803/PG-001, 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.

Photocopy Annex J. Cut the first page along the dotted lines and post the three locations around the training area (eg, on walls, trees, etc). Ensure that the locations match the demonstration map.

Ensure sufficient topographical maps of the exercise area are available.

A recce of the exercise area should be made to determine a site where the topographical map of the exercise area may be oriented by inspection. The site chosen should have a minimum of three distinctive features to be used as prominent objects by the cadets in order to orient their maps.

### PRE-LESSON ASSIGNMENT

N/A.

### APPROACH

An interactive lecture was chosen for TP 1 to give the cadets an overview of the purpose of orienting a map.

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

## INTRODUCTION

### REVIEW

N/A.

### OBJECTIVES

By the end of this lesson the cadet shall have oriented a map by inspection.



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Verify against the official publication.

**IMPORTANCE**

It is important for cadets to be able to orient a map by inspection in order to match the symbols on the map with the terrain it represents. It also allows the cadet to confirm or discover their approximate location on the map.

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**Teaching point 1** **Explain the Purpose of Orienting a Map**

Time: 5 min Method: Interactive Lecture

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**PURPOSE OF ORIENTING A MAP**

Orienting a map by inspection means to rotate the map so that the map directions and map detail correspond with those on the ground. This is a simple and quick way of orienting a map, if the person's approximate location is known. If the approximate location is unknown, orienting a map by inspection is much more difficult as similar features may confuse map readers and thereby they orient themselves incorrectly. If more unique features are visible and shown on the map, it will be easier to find one's approximate location.

Orienting the map does a number of things:

- it makes it easy to relate the map to the ground;
- it helps to confirm, or possibly find, a person's approximate location; and
- when moving over a complex route, or when travelling over long distances, it helps keep a hiker on the right track.

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**CONFIRMATION OF TEACHING POINT 1**

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**QUESTIONS**

Q1. What is physically done to the map when it is being oriented?

Q2. What key piece of information makes orienting a map by inspection simple and quick?

Q3. Orienting the map does a number of things. Describe one.

**ANTICIPATED ANSWERS**

A1. The map is rotated so that the map directions and map detail correspond with those on the ground.

A2. The person's approximate location.

A3. Three possible answers include:

- it makes it easy to relate the map to the ground;
- it helps to confirm, or possibly find, a person's approximate location; and
- when moving over a complex route, or when travelling over long distances, it helps keep a hiker on the right track.



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**Teaching point 2** **Explain and Demonstrate How to Orient a Map**

Time: 20 min Method: Demonstration and Performance




After explaining each step, demonstrate using the training aids.

After the demonstration, have the cadets orient a topographical map of the exercise area using the prominent objects they observe.

To orient a map, complete the following steps:

Identify the approximate location on the map (the ‘You’).

Select three prominent objects around your current location and find them on the map (house, church and bridge).

Rotate the map until all identified objects on the map line up with the objects located on the ground.

Ensure that all features line up with the positions on the map.




Show page 18J-2.

**ACTIVITY**

Time: 15 min

**OBJECTIVE**

The objective of this activity is to have the cadets orient a map by inspection.

**RESOURCES**

- Topographical map of the exercise area, and
- The cadet’s location on the map.

**ACTIVITY LAYOUT**

N/A.

**ACTIVITY INSTRUCTIONS**

1. Have cadets confirm their location on the map.

2. Have cadets select three prominent objects around their current location and find them on the map.

3. Have cadets rotate the map until all identified objects on the map line up with the objects located on the ground.

4. Ensure all features line up with the positions on the map.



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**SAFETY**

N/A.

## CONFIRMATION OF TEACHING POINT 2

The cadets' participation in the activity will serve as the confirmation of this TP.

## END OF LESSON CONFIRMATION

The cadets' participation in orienting a map by inspection will serve as the confirmation of this lesson.

## CONCLUSION

**HOMEWORK/READING/PRACTICE**

N/A.

**METHOD OF EVALUATION**

N/A.

**CLOSING STATEMENT**

It is important for cadets to be able to orient a map by inspection in order to match the symbols on the map with the terrain it represents. It also allows the cadet to confirm or discover their approximate location on the map.

**INSTRUCTOR NOTES/REMARKS**

N/A.

## REFERENCES

A2-041 B-GL-382-005/PT-001 Canadian Forces. (2006). *Maps, Field Sketching, Compasses and the Global Positioning System*. Ottawa, ON: Department of National Defence.



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