ROYAL CANADIAN AIR CADETS

PROFICIENCY LEVEL THREE

INSTRUCTIONAL GUIDE

SECTION 4

EO C337.02 – PRACTICE AIR NAVIGATION SKILLS

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.

Develop a list of points and coordinates for airports to be used in TP 1.

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

A practical activity was chosen for this lesson so that the cadets may further develop skills learned in EO M337.01 (Measure Distance Along a Route, Section 1) and EO M337.02 (Determine a Position on a Visual Flight Rules [VFR] Navigational Chart [VNC], Section 2).

INTRODUCTION

REVIEW

N/A.

OBJECTIVES

By the end of this lesson the cadet shall have practiced air navigation skills.

IMPORTANCE

It is important for cadets to practice air navigation skills as each cadet may find an opportunity to use these skills in any trip planning, whether aviation based or not.

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Teaching point 1 **Practice Air Navigation Skills**

Time: 25 min Method: Practical Activity



The following activities are designed to be conducted concurrently. Some cadets may need to practice measuring distance along a route, while others may need to practice determining position on a Visual Flight Rules (VFR) Navigation Chart (VNC). Determine which cadets need practice with which skill, and then divide the cadets accordingly. Cadets working on different activities may share the same map to lessen the strain on resources.

ACTIVITY

OBJECTIVE

The objective of this activity is to practice measuring distance along a route.

RESOURCES

- Predetermined points,
- VNC,
- International Civil Aviation Organization (ICAO) Ruler,
- Pencil, and
- Eraser.

ACTIVITY LAYOUT

The classroom should be arranged to facilitate individual and group work, depending on the skill level of each cadet.

ACTIVITY INSTRUCTIONS

1. Divide the cadets into pairs based on the activity that they will participate in. Two cadets working on different activities may be paired up to use the same map if needed.

2. Distribute one VNC and one ICAO ruler to each pair of cadets.

3. Using two predetermined points, demonstrate to the cadets how to use the ICAO ruler.

4. Provide the cadets with a second set of predetermined points.

5. Have the cadets measure the distance between these two points using the ICAO ruler.

6. Provide the cadets with two more sets of points and allow them to practice.

7. If time permits, demonstrate to the cadets how to measure the distance using the scale of the map.

8. Have the cadets use the scale of the map to determine the distances of the previously used sets of points. Cross-check with the results of the ICAO ruler.

SAFETY

N/A.

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ACTIVITY

OBJECTIVE

The objective of this activity is to practice determining position on a VNC.

RESOURCES

- Paper,
- Tape or adhesive putty,
- VNC, and
- Predetermined sets of coordinates for airports.

ACTIVITY LAYOUT

The classroom should be arranged to facilitate individual and group work, depending on the skill level of each cadet.

ACTIVITY INSTRUCTIONS

1. Write three sets of coordinates on the whiteboard and cover with paper.
2. Divide the cadets into pairs based on the activity that they will participate in. Two cadets working on different activities may be paired up to use the same map if needed.
3. Distribute one VNC to each pair of cadets. Cadets who wish to work independently may still share a map.
4. Uncover the first set of coordinates.
5. Have the cadets find the airport at those coordinates. Assist as necessary.
6. Uncover the second set of coordinates and repeat step four.
7. Uncover the third set of coordinates and repeat step four.

SAFETY

N/A.

CONFIRMATION OF TEACHING POINT 1

The cadets' participation in the activities in TP 1 will serve as confirmation of this TP.

END OF LESSON CONFIRMATION

The cadets' practicing measuring distance along a route and determining position on a VNC will serve as confirmation of this lesson.

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

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METHOD OF EVALUATION

N/A.

CLOSING STATEMENT

Measuring distance and determining position on a map are transferable skills to any other method of travel.

INSTRUCTOR NOTES/REMARKS

This EO is designed to complement EO M337.01 (Measure Distance Along a Route, Section 1) and EO M337.02 (Determine a Position on a Visual Flight Rules [VFR] Navigational Chart [VNC], Section 2) as extra time to practice the skills.

REFERENCES

N/A.

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